PUBLIC REVIEW DRAFT
ENVIRONMENTAL IMPACT REPORT

FOR THE

LAGUNA NIGUEL GENERAL PLAN UPDATE

(SCH#: 2025050495)

AUGUST 2025

Lead Agency:

City of Laguna Niguel
Community Development Department
30111 Crown Valley Parkway
Laguna Niguel, California 92677

Prepared with Assistance by:

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Tustin, CA 92780

De Novo Planning Group

A Land Use Planning, Design, and Environmental Firm

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EXECUTIVE SUMMARY

PROJECT LOCATION

Laguna Niguel is located in the San Joaquin Hills in the southeastern corner of Orange County (refer to Figure 2-1, *Regional Location Map*). The City is approximately 14.7 square miles in land area and surrounded by several local jurisdictions including the City of Dana Point to the south; the City of San Juan Capistrano to the east; the County of Orange (Aliso and Woods Canyon Regional Park) and the City of Laguna Beach to the west; and the cities of Aliso Viejo, Laguna Hills, and Mission Viejo to the north. Interstate 5 and State Route 73 provide regional access to Laguna Niguel.

State law requires cities to adopt a comprehensive, long-term general plan for their geographic area known as the "Planning Area." This area includes a city's incorporated boundaries and potentially surrounding territories deemed relevant to its planning efforts, referred to as the "Sphere of Influence." The City of Laguna Niguel does not have any Sphere of Influence areas beyond its corporate boundaries, its Planning Area, as shown in Figure 2-2, *General Plan Planning Area*, encompasses only the City limits (approximately 9,464 acres).

PROJECT BACKGROUND

California Government Code Section 65300 et seq. requires all counties and cities to adopt a comprehensive, long-term general plan for the physical development of its planning area. The General Plan acts as a "constitution" for development and is the jurisdiction's lead legal document in relation to growth, development, and resource management issues. The General Plan must include land use, circulation, housing, conservation, open space, noise, safety, and environmental justice elements or topics, as specified in Government Code Section 65302, to the extent that the issues identified by State law exist in a city's planning area.

The City of Laguna Niguel proposes a comprehensive update to its General Plan to address the requirements of State law and the relevant items addressed in Government Code Section 65300 et seq. The General Plan Update (Project) will incorporate the necessary State-mandated elements. The City of Laguna Niguel is not required to include an environmental justice element because there are no identified disadvantaged communities within the City, and the City's 2021-2029 Housing Element was certified by the Department of Housing and Community Development (HCD) on February 22, 2024, and is not part of this update. The City's General Plan will also include the following optional elements: Economic Development and Public Facilities and Services.

PROJECT OBJECTIVES

The following objectives have been identified for the update to the General Plan:

1. Preserve, protect, and enhance Laguna Niguel's existing residential neighborhoods;

2. Promote residential growth that includes a diverse range of housing development options and densities, ensuring that residents across income levels, age groups, and those with special needs can live within the community;
3. Promote redevelopment in Opportunity Areas that provide economic and community benefits through job creation, enhanced retail and restaurant spaces, and the incorporation of public gathering spaces;
4. Advance economic development policies that support existing local businesses, attract new businesses, promote job growth, and avoid vacant buildings or underutilized commercial sites;
5. Ensure new developments incorporate well-designed site planning, high-quality architecture, and functional outdoor spaces, while ensuring they are compatible with the surrounding setting in terms of land uses, scale, and aesthetics;
6. Ensure new development provides positive fiscal benefit to the City and contributes to new and existing infrastructure;
7. Preserve, protect, and enhance an integrated network of natural and man-made parks and open spaces that supports conservation of natural resources and recreational opportunities;
8. Maintain adequate, reliable, and essential public infrastructure and facilities, including transportation and utilities to support both existing and future development;
9. Maintain a Circulation Plan that fosters a safe and efficient roadway network by minimizing congestion and providing acceptable operation and level of service for vehicles at intersections and roadways; and
10. Maintain and enhance the City's active transportation network to facilitate walking, bicycling, and public transit, improving multimodal connectivity throughout the City.

PROJECT CHARACTERISTICS

The City of Laguna Niguel's comprehensive update to its existing General Plan (herein referred to as the "General Plan Update," "Project" or "proposed Project"), addresses State law requirements and relevant items addressed in Government Code Section 65300 et seq. The General Plan Update will guide the City's development and conservation through land use objectives and policy guidance. The General Plan is intended to be an expression of the community's vision for the City and constitutes the policy and regulatory framework by which future development projects will be reviewed and public improvements will be implemented. The Guiding Principles for the General Plan Update include:

- Thriving Community
- Strong and Resilient Economy
- Environmental Stewardship
- Connecting People and Places
- Innovation for a Better Future

The General Plan Update includes a comprehensive set of goals and policies, organized into seven new elements (plus the Housing Element), including a revised Land Use Map (refer to Figure 2-5, *General Plan Update Land Use Map*). The goals and policies provide guidance to the City on how to direct change and manage growth, infrastructure, and natural resources over a 20-year planning horizon. The General Plan Update also addresses additional elements related to the physical development of the City. The degree of specificity and level of detail of the discussion of each General Plan element need only reflect local conditions and circumstances.

GENERAL PLAN BUILDOUT ANALYSIS

The General Plan EIR evaluates the maximum development that could occur within the Planning Area, which includes complete buildout of the Maximum Development Intensities (MDIs) including the two Hospitality Overlay sites and complete implementation of the Opportunity Area Overlays.[1] While no specific development projects are proposed as part of the Laguna Niguel General Plan Update, except for the assumption that the CHFB will be demolished as part of a future redevelopment effort, the General Plan will accommodate future growth in Laguna Niguel, including but not limited to new businesses, expansion of existing businesses, and new residential uses. The buildout analysis assumes a 20-year planning horizon, with 2045 as the theoretical full buildout year of the General Plan (the point at which all parcels in the City are developed according to their General Plan land use designation and buildout limit, described above).

Table 1, *General Plan Update Growth Assumptions*, provide a statistical summary of the buildout potential associated with the General Plan Update's Community Profile Areas and future implementation of all three Opportunity Area Overlays (which, as described earlier, would require approval of multiple project-specific legislative actions) compared to existing, on-the-ground conditions.

[1] While the General Plan Update Land Use Element introduces the concept of three Opportunity Area Overlays, the General Plan Update does not adopt any of the potential Opportunity Area Overlays, which are subject to subsequent legislative discretionary actions. However, to be conservative, this EIR analyzes the maximum potential future development, including full implementation of the Opportunity Area Overlays as if all three become adopted and implemented in the future.

Table 1
General Plan Update Growth Assumptions

	Existing Conditions	Total Growth Potential			Net Change (Proposed Community Profile Areas and Opportunity Areas compared to Existing Conditions)
		Proposed Community Profile Areas	Proposed Opportunity Areas	Proposed Community Profile Areas and Opportunity Areas	
Residential Units	27,660	29,624	1,500	31,124	3,464
Managed Care Facility Units	520	520	0	520	0
Population	67,734	72,506	3,645	76,151	8,418
Commercial Square Footage	5,762,761[1]	6,804,895[2]	2,012,321[3]	6,862,257	1,099,496
Public Institutional Square Footage	401,658	401,658	0	401,658	0
Hotel Rooms	33	470	120	590	557
Jobs[4]	13,800[1]	19,036[2]	5,336[3]	19,267	5,467

Notes:
1. The "Existing Conditions" jobs total reflects partial occupancy of CHFB at 200,000 square feet of building area consistent with historic usage.
2. The "Proposed Community Profile Areas" assumes full occupancy of CHFB at 1,050,580 square feet of building area and corresponding jobs.
3. The "Proposed Opportunity Areas" assumes 910,000 square feet of commercial space for CHFB and corresponding jobs.
4. Jobs account for citywide MDIs for hospitality (e.g., hotels), public institutional, and managed care uses.

ENVIRONMENTAL IMPACTS

The City determined that a Program Environmental Impact Report (EIR) should be prepared pursuant to the California Environmental Quality Act Guidelines ("CEQA Guidelines"). The environmental issues identified by the City for assessment in the Program EIR are:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population and Housing
- Public Services and Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

Section 4.0, *Environmental Analysis*, of this EIR provides a description of potential environmental impacts of the General Plan Update. After implementation of the General Plan Update goals and policies, most of the potentially significant impacts associated with the proposed General Plan Update would be reduced to a less than significant level. However, the impacts listed below could not be feasibly mitigated and would result in a significant and unavoidable impact from implementation of the General Plan Update.

Air Quality

- General Plan implementation would conflict with or obstruct implementation of the applicable air quality plan for construction and operation at the project level.
- General Plan implementation would result in a cumulatively considerable net increase of criteria pollutants for which the project region is non-attainment under an applicable federal or state ambient air quality standard for construction and operation at the project level.
- General Plan implementation would potentially expose sensitive receptors to substantial pollutant concentrations for construction and operation at the project level.
- General Plan implementation combined with other related cumulative projects would conflict with or obstruct implementation of the applicable air quality plan for construction and operation.
- General Plan implementation combined with other related cumulative projects would result in cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under the applicable federal or state ambient air quality standard for construction and operation.
- General Plan implementation combined with other related cumulative projects would result in a cumulatively considerable contribution to significant cumulative air quality impacts with the potential to expose sensitive receptors to substantial pollutant concentrations for construction and operation.

Cultural Resources

- General Plan implementation would result in a significant and unavoidable impact to historic resources specific to the Chet Holifield Federal Building (CHFB) (Project).

Greenhouse Gas Emissions

- General Plan implementation would generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment at the project level for construction and operation.
- General Plan implementation would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases at the project level.
- General Plan implementation, combined with other related cumulative projects, would generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment for construction and operation.

- General Plan implementation, combined with other related cumulative projects, would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Transportation

- General Plan implementation would conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b) at the Project level.
- General Plan implementation combined with other related cumulative projects would conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).

AREAS OF CONTROVERSY

Pursuant to CEQA Guidelines Section 15123(b), a summary section must address areas of controversy known to the lead agency, including issues raised by agencies and the public, and it must also address issues to be resolved, including the choice among alternatives and whether or how to mitigate significant effects.

In accordance with CEQA Guidelines Section 15082, the City of Laguna Niguel circulated a Notice of Preparation ("NOP") of an EIR for The General Plan Update Project on May 13, 2025, to trustee and responsible agencies, the State Clearinghouse ("SCH"), and the public. The 30-day public review period for the NOP then ended on July 11, 2025. A scoping meeting was held on May 21, 2025. The NOP and all comment letters received on the NOP are presented in Appendix A. Generally, the issue that concerned most of the commenters was land use, followed by transportation, geology/soils, and then aesthetics.

The NOP identified potential for significant impacts on the environment related to the following topical areas:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population and Housing
- Public Services and Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

The NOP also identified certain topical areas where impacts were found to be less than significant, because implementation of the proposed Project would not result in such impacts. These topical areas include agricultural and forestry resources, and mineral resources, as discussed in Section 7.0, *Effects Found Not To Be Significant*, of this EIR.

SUMMARY OF PROJECT ALTERNATIVES

Pursuant to Section 15126.6 of the CEQA Guidelines, "an EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives." This EIR includes two alternatives, as discussed below.

- Alternative 1 – "No Project/Existing General Plan" Alternative
- Alternative 2 – "Reduced Growth" Alternative

Alternative 1: No Project/Existing General Plan Alternative

Under Alternative 1, the existing Laguna Niguel General Plan would continue to be in effect and no changes to the General Plan, including the Land Use Map, Circulation Plan, Community Profile Areas and Sub-profile Areas, or the goals and policies would occur. The existing General Plan would continue to provide outdated information regarding several issues, including projections and policy direction identified in the 1990s that are not reflective of the existing socioeconomic data and anticipated development patterns. No changes would be made to address updated Land Use and Climate Innovation General Plan Guidelines, or the requirements of State law since the adoption of the existing General Plan. Under Alternative 1, the existing Opportunity Areas (e.g., Country Village/Narland Business Center, Camino Capistrano/Cabot Road Business Area, and Town Center) would remain, and the CHFB would not be demolished.

The development anticipated by the No Project/Existing General Plan Alternative would result in the following when compared to the General Plan Update:

- 1,643 fewer housing units;
- 4,512 fewer residents;
- 1,369,186 more commercial square feet of development;
- 90 fewer hotel rooms; and
- 3,053 more jobs.

Alternative 2: Reduced Growth Alternative

Alternative 2 assumes the updated General Plan would be adopted; however, the Land Use Element, including the Land Use Map, would not include the Opportunity Area Overlays and the Hospitality Overlay. With Alternative 2, the maximum development that could occur within the Planning Area would consist of complete buildout of the Maximum Development Intensities (MDIs). Thus, residential development potential, commercial square footage, hotel rooms, and anticipated job growth would be less when

compared to the proposed General Plan Update. With Alternative 2, it is assumed that the CHFB would not be demolished as part of a future redevelopment effort. This alternative continues to allow for development and redevelopment opportunities throughout the City but would not allow for increased development beyond the MDIs. The purpose of this alternative is to potentially reduce the severity of potential impacts related to air quality, cultural resources, greenhouse gas emissions, noise and total VMT, as overall development of residential, commercial, and hotel uses would be less than what could developed with the proposed Project.

The development anticipated by the Reduced Growth Alternative would result in the following when compared to the General Plan Update:

- 1,500 fewer housing units;
- 3,645 fewer residents;
- 57,362 less commercial square feet of development;
- 240 fewer hotel rooms; and
- 644 less jobs.

SUMMARY OF ENVIRONMENTAL IMPACTS

In accordance with the CEQA Guidelines, this EIR focuses on the Project's significant effects on the environment. The CEQA Guidelines define a significant effect as a substantial adverse change in the physical conditions which exist in the area affected by the proposed project. A less than significant effect is one in which there is no long- or short-term significant adverse effect to environmental conditions. Some impacts are reduced to a less than significant level with the implementation of General Plan Update policies and actions, and/or compliance with regulations.

Table 2, *Summary of Environmental Impacts and Mitigation Measures*, summarizes the environmental impacts of the proposed Project, mitigation measures, if relevant, and the impact level of significance after mitigation identified and analyzed in this Draft EIR. Refer to the appropriate section for detailed information.

Table 2
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
4.1 Aesthetics		
AES-1: Would the project have a substantial adverse effect on a scenic vista?	No mitigation measures are required.	Less Than Significant Impact.
AES-2: Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	No mitigation measures are required.	Less Than Significant Impact.
AES-3: In non-urbanized areas, would the project 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?	No mitigation measures are required.	Less Than Significant Impact.
AES-4: Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	No mitigation measures are required.	Less Than Significant Impact.
Would the project, combined with other related cumulative projects, have a substantial adverse effect on a scenic vista?	No mitigation measures are required.	Less Than Significant Impact.
Would the project, combined with other related cumulative projects, substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	No mitigation measures are required.	Less Than Significant Impact.

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
Would the project, combined with other related cumulative projects, conflict with applicable zoning and other regulations governing scenic quality?	No mitigation measures are required.	Less Than Significant Impact.
Would the project, combined with other related cumulative projects, create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	No mitigation measures are required.	Less Than Significant Impact.
4.2 Air Quality		
AQ-1: Would the project conflict with or obstruct implementation of the applicable air quality plan?	**AQ-1:** As part of the development review process for qualifying projects, the Laguna Niguel Community Development Department shall determine if an air quality technical analysis is required, based on the screening criteria provided in the City of Laguna Niguel CEQA Manual. Applicants of individual development projects with the potential to result in a significant air quality impact shall have an air quality technical analysis prepared by a qualified environmental professional. This analysis shall be prepared in accordance with the methodologies and significance thresholds in the City's CEQA Manual and submitted for review and approval by the Laguna Niguel Community Development Department. If construction or operation related criteria pollutants for any individual development project are determined to exceed the City's adopted thresholds of significance, appropriate mitigation measures shall be identified and implemented to reduce air quality emissions to below the applicable thresholds. These measures shall be	Buildout of the General Plan Update Land Use Element could conflict with or obstruct implementation of the applicable air quality plan, resulting in a significant and unavoidable impact. Demolition of the CHFB site would be less than significant.

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
	incorporated as conditions of approval for the project. Measures may include, but are not limited to the following: *Construction* • Tier 4 offroad engine exhaust standards or the most stringent exhaust standards for equipment available at the time of project approval. • Use of commercially available electric on-road and offroad equipment. • Use local construction contractors. • Incorporate Best Available Control Technology for engines which may include diesel particulate filters and oxidation catalysts. • Haul trucks that comply with truck and bus regulation established by California Air Resources Board (CARB). These will include trucks with a gross vehicle weight rating over 26,000 pounds are required to have 2010 or newer engines. • Super-Compliant Architectural Coatings with VOC content of 10 grams/liter. The South Coast Air Quality Management District (SCAQMD) has a list of manufacturers that provide these coatings. • Additional fugitive dust control measures detailed under SCAQMD Rule 403. These may include limiting speeds on unpaved surfaces, additional watering or use of chemical soil	

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
	binders for unpaved roadways, pre- and post-watering of graded areas, truck clean-up measures (e.g., rumbling plates, wash stations), replanting, and other measures. • Installation or use of on-site power to avoid use of portable electrical generators. • Distribute construction equipment across large construction sites to allow for air pollutant dispersal if localized concentrations of emissions were found to exceed significance thresholds at receptors. *Operations* <u>Building Energy</u> • Exceed the energy efficiency requirements found within CALGreen and the Title 24 requirements. • Develop alternative energy generation in excess of Title 24 requirements. • Include energy efficient lighting, appliances, and heat pumps/boilers. • Develop all electric or zero net energy buildings. • Install whole-house fans. <u>Transportation</u> • Increase residential and job density to reduce air pollutant emissions associated with Vehicle Miles Traveled (VMT).	

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
	• Integrate affordable and below market rate housing to facilitate local employment opportunities which would reduce VMT and transportation emissions. • For warehousing uses provide electric power at loading docks to avoid the use Transport Refrigeration Units needed for cold storage. • Promote transit-oriented development, bicycle and pedestrian friendly environments to minimize VMT. • Implement commute trip reduction programs. • Promote the use of alternatively fueled vehicles through the development of fueling stations and infrastructure for alternatively fueled self-driving vehicles. • Promote telecommute opportunities to minimize transportation related emissions and congestion. <u>Water</u> • Plant drought tolerant and California native plants. • Use water efficient irrigation systems and timers. • Use reclaimed non-potable or grey water. • Require low flow water fixtures. • Design water efficient landscapes.	

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
	• Reduce turf in landscapes and lawns. • Adopt a water conservation strategy. <u>Waste</u> • Provide separate recycling and waste receptacles within each unit to promote waste diversion and recycling. • • Recycle demolished construction materials in exceedance of the requirements established in AB 939.	
AQ-2: Would the project result in a cumulative 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?	Refer to Mitigation Measure AQ-1.	Buildout of the General Plan Update Land Use Element could result in cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under the applicable federal or State ambient air quality standard under both construction and operations, resulting in a significant and unavoidable impact. Demolition of the CHFB site would be less than significant.
AQ-3: Would the project expose sensitive receptors to substantial pollutant concentrations?	Refer to Mitigation Measure AQ-1. **AQ-2:** Prior to issuance of a demolition permit for the CHFB site, the project applicant shall provide a construction plan identifying the specific location of on-site rock crushing activities and documenting the location is greater than 1,000 feet from sensitive receptors for review and approval by the Laguna Niguel	Buildout of the General Plan Update Land Use Element could expose sensitive receptors to substantial pollutant concentrations resulting in a significant and unavoidable impact. Demolition of the CHFB

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
	Community Development Department. The location of the approved on-site crushing activities shall be maintained throughout the duration of rock crushing activities unless an updated construction plan is reviewed and approved by the Laguna Niguel Community Development Department.	site would be less than significant.
AQ-4: Would the project result in other emissions such as those leading to odors adversely affecting a substantial number of people?	No mitigation measures are required.	Less Than Significant Impact.
Would the project, combined with other related projects, conflict with or obstruct implementation of the applicable air quality plan?	Refer to Mitigation Measure AQ-1.	Buildout of the General Plan Update Land Use Element and related cumulative development could conflict with or obstruct implementation of the applicable air quality plan, resulting in a significant and unavoidable cumulative impact for both construction and operations. Cumulative impacts associated with demolition of the CHFB site would be less than significant.
Would the project, combined with other related projects, 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?	Refer to Mitigation Measure AQ-1.	Buildout of the General Plan Update Land Use Element could result in cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under the applicable federal or state ambient air

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
		quality standard under both construction and operations, resulting in a significant and unavoidable cumulative impact. Cumulative impacts associated with demolition of the CHFB site would be less than significant.
Would the project, combined with other related projects, expose sensitive receptors to substantial pollutant concentrations?	Refer to Mitigation Measures AQ-1.	Buildout of the General Plan Update Land Use Element could combine with related cumulative development with the potential to expose sensitive receptors to substantial pollutant concentrations resulting in a significant and unavoidable cumulative impact. Cumulative impacts associated with demolition of the CHFB site would be less than significant.
Would the project, combined with other related projects, result in other emissions such as those leading to odors adversely affecting a substantial number of people?	No mitigation measures are required.	Less Than Significant Impact.
4.3 Biological Resources		
BIO-1: Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	**BIO-1:** As part of the development review process for qualifying projects, and/or prior to the issuance of grading permits, whichever occurs first, the Laguna Niguel Community Development Department shall determine if a Biological Resources Assessment is required, based on the screening criteria provided in the City of Laguna Niguel CEQA Manual. A project site that	Less Than Significant Impact with Mitigation Incorporated.

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
	has been previously developed and consists entirely of hardscape and limited ornamental planting shall be exempt from preparing an assessment. A project site with areas of vegetation (ornamental or native) and/or bare ground, but void of jurisdictional drainage features, sensitive or listed habitats and without any potential for sensitive of listed species may rely on a biological summary memo prepared by a qualified biologist. The memo shall document baseline conditions and provide justification for a determination of less than significant biological impacts. The summary memo is subject to the review and approval by the Laguna Niguel Community Development Department. If preparation of a Biological Resources Assessment is determined by the Community Development Department to be required, applicants of qualifying development projects shall provide a Biological Resources Assessment prepared by a qualified biologist for review and approval by the Community Development Department. The Biological Resources Assessment shall include: • Biological field survey(s) of the project site that characterize the occurrence, extent, and quality of habitat and/or species that would be impacted by development. • Focused survey(s) for special status species, following protocols established by State and federal Wildlife Agencies and conducted by a biologist with corresponding permits authorizing protocol surveys.	

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
	• A determination if any jurisdictional drainage features are present, and if so, a jurisdictional delineation shall be conducted to determine the presence of Waters of the United States and Waters of the State. • If the project requires a fuel modification plan, the applicant shall have a preliminary fuel modification plan approved by Orange County Fire Authority prior to the preparation of the Biological Resources Assessment. • Based on the results of the Biological Resources Assessment, if no sensitive habitat or species are observed during the field survey, and there is no potential for species identified as candidate, sensitive or special status to occur, then no further mitigation will be required. If sensitive species, or the potential for sensitive species, or habitats are identified on the project site, the Biological Resources Assessment shall document the extent of the impacts and identify project-specific mitigation measures to reduce the potential impacts. Identification of the required mitigation measures would be dependent upon the species impacted and the extent of the impact. Documentation of the project-specific mitigation measures shall be provided to the Community Development Department. The biological resources assessment shall document the mitigation measures identified to reduce the project-specific impact and be provided to the Community Development Department for review and approval.	

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
	Biological mitigation shall not occur within any required fuel modification zone. **BIO-2**: If vegetation, tree removal, and/or building demolition is proposed at a project site during bird nesting season (February 1 to August 31), the applicant shall retain a qualified biologist to conduct a pre-construction nesting bird survey of the project site and a 500-foot buffer no more than three days prior to the commencement of construction activities, building demolition and/or vegetation clearing. If no active bird nests are observed within the project site or buffer area during the pre-construction clearance survey, the biologist shall document the findings in a brief letter report, submitted to the Laguna Niguel Community Development Department prior to construction, building demolition, and/or vegetation clearing. If an active bird nest is observed within the project site or buffer area during the pre-construction clearance survey, the biologist shall: • Map the location and document the species, the status of the nest (e.g., incubation of eggs, feeding of young, near fledging), and surrounding conditions. • Prepare a Nesting Bird Plan to determine avoidance or minimization measures that shall be undertaken to avoid potential project-related impacts, as well as agency notification requirements and submitted to the Community Development Department for	

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
	review and approval. Measures may include establishment of an avoidance buffer until nesting has been completed and periodic nest monitoring by the biologist. The width of the avoidance buffer around each nest shall be determined by the biologist based on the species present, surrounding habitat, and type of construction activities proposed in the area. No construction or ground disturbance activities shall occur within the buffer area until the biologist has determined the nest is no longer active. • A biological monitor shall be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure the nesting behavior is not adversely affected by construction activity occurring outside of the established buffer area, pursuant to the Migratory Bird Treaty Act (MBTA).	
BIO-2: Would the project 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 US Fish and Wildlife Service?	Refer to Mitigation Measure BIO-1.	Less Than Significant Impact with Mitigation Incorporated.
BIO-3: Would the project 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?	Refer to Mitigation Measure BIO-1.	Less Than Significant Impact with Mitigation Incorporated.

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
BIO-4: Would the project 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?	Refer to Mitigation Measure BIO-1.	Less Than Significant Impact with Mitigation Incorporated.
BIO-5: Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	No mitigation measures are required.	Less Than Significant Impact.
Would the project, combined with other related cumulative projects, have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	Refer to Mitigation Measures BIO-1 and BIO-2.	Less Than Significant Impact with Mitigation Incorporated.
Would the project, combined with other related cumulative projects, a have 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 Wildlife or U.S. Fish and Wildlife Service?	Refer to Mitigation Measure BIO-1.	Less Than Significant Impact with Mitigation Incorporated.
Would the project, combined with other related cumulative projects, 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?	Refer to Mitigation Measure BIO-1.	Less Than Significant Impact with Mitigation Incorporated.
Would the project, combined with other related cumulative projects, interfere substantially with the movement of any native resident or migratory fish or	No mitigation measures are required.	Less Than Significant Impact.

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?		
Would the project, combined with other related cumulative projects, conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	No mitigation measures are required.	Less Than Significant Impact.
4.4 Cultural Resources		
CUL-1: Would the Project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	**CUL-1:** Prior to the commencement of any qualifying construction activities that may affect built environment historical resources (i.e., buildings, structures, or objects 45 years or older), the project applicant shall retain a qualified architectural historian meeting the Secretary of the Interior Standards to perform a historical resources assessment. The assessment shall include a records search to determine if any resources that may be potentially affected by a project have been previously recorded, evaluated, and/or designated in the National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), or other registers of historic resources. Based on results of the records search, a reconnaissance-level and/or intensive-level survey shall be conducted in accordance with the California Office of Historic Preservation (OHP) guidelines to identify any previously unrecorded potential historical resources that may meet the criteria for listing as historical resources under CEQA and may be affected by a proposed project.	Demolition of the CHFB would be significant and unavoidable. Potential impacts to other known historic resources would be less than significant. Potential impacts to unknown historic resources would be less than significant with mitigation incorporated.

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
	CUL-2: The Secretary of the Interior's Standards for the Treatments of Historic Properties shall be used for projects involving the relocation, rehabilitation, or alteration of a built environment historical resource. The application of the standards shall be overseen by a qualified architectural historian meeting the Secretary of the Interior Professional Qualification Standards for Architectural History. Prior to any construction activities that may affect a built environment historical resource, the applicant shall submit a report prepared by a qualified architectural historian to the Laguna Niguel Community Development Department for review and approval. The report shall identify and specify the treatment of character-defining features and construction activities, demonstrating consistency with the Secretary of the Interior's Standards for the Treatments of Historic Properties. The project shall follow the recommendations of the approved report or provide alternatives that are consistent with the Secretary of the Interior's Standards for the Treatments of Historic Properties. **CUL-3:** If a project includes the demolition of a built environment historical resource, such impacts cannot be mitigated to a less than significant level. To assist in minimizing the significant and unavoidable impact, the historical resource shall be documented prior to construction activities.	

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
	Documentation shall follow the standards of the Historic American Buildings Survey (HABS), Historic American Engineering Record (HAER), or Historic American Landscape Survey (HALS), as applicable, and shall be performed by an architectural historian or historian who meets the Secretary of the Interior Professional Qualification Standards for Architectural History. 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 historic photographs. Documentation shall be reproduced on archival paper and placed in appropriate local, State, or federal institutions. The specific scope and details of documentation (e.g., HABS, HAER, or HALS) shall be determined at the project level and provided to the Laguna Niguel Community Development Department for review and approval. **CUL-4:** Prior to issuance of building or demolition permits for the Chet Holifield Federal Building, the applicant shall provide written confirmation to the Laguna Niguel Community Development Department that the minimization and mitigation measures included in the Memorandum of Agreement Among the U.S. General Services Administration, the California Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding the Sale and Transfer	

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
	Out of Federal ownership of the Chet Holifield Federal Building, Laguna Niguel, California, dated November 2023, have been completed.	
CUL-2: Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	**CUL-5:** Prior to ground disturbance activities, applicants for projects in areas identified as having moderate to high sensitivity for archaeological resources, based on the City's Cultural Resources Sensitivity Maps (Appendix H of the Cultural and Paleontological Resources Assessment for the Laguna Niguel General Plan Update Project), shall have a technical cultural resources assessment prepared by a qualified archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for Archaeology and certified by the County of Orange. The assessment shall consist of a record search, field survey, background context, and project specific recommendations in accordance with the City of Laguna Niguel CEQA Manual. The assessment shall be submitted to the Laguna Niguel Community Development Department for review and approval. The requirement for a field survey may be waived if, in the judgement of the qualified archaeologist, and approved by the Laguna Niguel Community Development Department, the project site has been previously disturbed and developed to such an extent as documented through aerial photography review and site observations that archaeological resources could not be observed through a field survey. If cultural resources are known or reasonably anticipated to be present, the assessment shall provide a detailed monitoring and mitigation plan, which must	Less than Significant Impact with Mitigation Incorporated.

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
	be submitted to the Laguna Niguel Community Development Department for review and approval. The mitigation plan shall include, but not be limited to, the following actions: 1. Prior to issuance of a grading permit, the applicant shall provide written verification that a qualified archaeologist meeting the Secretary of the Professional Qualification Interior's Standards and certified by the County of Orange has been retained to implement the monitoring program. This verification shall be presented in a letter from the project archaeologist to the City of Laguna Niguel Community Development Department. 2. The certified archaeologist shall attend the pre-grading meeting with the contractors to explain and coordinate the requirements of the monitoring program. 3. During the initial grading of previously undisturbed deposits, the archaeological monitor(s) as determined by the qualified archaeologist, shall perform periodic inspections of the excavations. The frequency of inspections will depend upon the rate of excavation, the materials excavated, and the potential for presence of artifacts and features. The qualified archaeologist shall have the authority to modify the frequency and duration of the monitoring program, either more or less, if the potential for cultural resources if based on observations of the	

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
	grading operation is different than anticipated based on site conditions, soil material encountered, rate of grading, and the potential for presence of artifacts. 4. In the event that previously unidentified cultural resources are discovered, the archaeological monitors shall have the authority to divert or temporarily halt ground disturbance operation in the area of discovery to allow for the evaluation of potentially significant cultural resources. The qualified archaeologist shall contact the Laguna Niguel Community Development Department at the time of discovery. The qualified archaeologist, in consultation with the Laguna Niguel Community Development Department, shall determine the significance of the discovered resources in accordance with the City of Laguna Niguel CEQA Manual and archaeological professional standards. If the resource is determined to be significant, a Research Design and Data Recovery Program shall be prepared by the qualified archaeologist in accordance with the City of Laguna Niguel CEQA Manual and archaeological professional standards and approved by the Laguna Niguel Community Development Department before being carried out using professional archaeological methods. A Research Design and Data	

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
	Recovery Program typically includes, but is not limited to, the following components: • Research Objectives: Clearly defined goals to guide the research and data recovery efforts. • Methodologies: Detailed methods and techniques to be employed during the research and data recovery process. • Data Collection: Strategies for gathering data, including the types of information to be collected and the methods to collect it. • Data Analysis: Processes for analyzing the collected data to derive insights and conclusions. • Documentation: Procedures for documenting the research findings, including reports and presentations. • Public Engagement: Strategies for involving the public and stakeholders in the research and data recovery process. • Mitigation Plans: Recommendations for mitigating any potential impacts on cultural resources identified during the study. 5. Cultural isolates and clearly non-significant deposits as determined by the qualified archaeologist will be minimally documented in the field so the monitored grading can proceed.	

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
	6. Before construction activities are allowed to resume in the affected area, all significant cultural resources that cannot be avoided through project redesign (as the default option) shall be recovered and recorded using professional archaeological methods. The qualified archaeologist shall determine the amount of material to be recovered for an adequate artifact sample for analysis based on the protocol established in the Research Design and Data Recovery Program. 7. All significant cultural material collected during the grading monitoring program shall be processed and curated according to the current professional repository standards. The collections and associated records shall be transferred, including title, to an appropriate curation facility, to be accompanied by payment of the fees by the project proponent necessary for permanent curation. A final report documenting the fieldwork and analysis results, including interpretation of any artifact and research findings, shall be prepared by the qualified archaeologist. The report shall be submitted to the Laguna Niguel Community Development Department for review and approval prior to the issuance of any building permits. The report shall include all necessary Department of Parks and Recreation (DPR) 523 series Site Forms.	

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
	CUL-6: In the event of an unanticipated archaeological discovery at a project site, all work shall be suspended within 50 feet of the find until a qualified archaeologist meeting the Secretary of the Interior's Professional Qualification Standards can evaluate the resource. The evaluation may require preparation and implementation of a treatment plan in accordance with Mitigation Measure CUL-5.	
CUL-3: Would the Project disturb any human remains, including those interred outside of dedicated cemeteries?	**CUL-7:** In the event of unanticipated discoveries of human remains at a project site, all ground disturbance activities shall immediately be halted within 50 feet of the discovery. The County Coroner and the City of Laguna Niguel shall be immediately notified, and provisions of Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98 shall be followed. If the County Coroner determines that the human remains are Native American, the Native American Heritage Commission (NAHC) shall be contacted by phone within 24 hours to identify the Most Likely Descendant (MLD). The MLD shall be afforded the opportunity to make recommendations for the treatment and potential repatriation of the remains noting that under CEQA avoidance is the default option unless project redesign is impossible. The recommendations of the MLD shall be followed to the degree practicable, in accordance with Public Resources Code Section 5097.98.	Less than Significant Impact with Mitigation Incorporated.

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
Would the Project, combined with other related projects, cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	No mitigation measures are required.	Less Than Significant Impact.
Would the Project, combined with other related projects, cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	Refer to Mitigation Measures CUL-5 and CUL-6.	Less Than Significant Impact with Mitigation Incorporated.
Would the Project, combined with other related projects, disturb any human remains, including those interred outside of dedicated cemeteries?	Refer to Mitigation Measure CUL-7.	Less Than Significant Impact with Mitigation Incorporated.
4.5 Energy		
EN-1: Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	No mitigation measures are required.	Less Than Significant Impact.
EN-2: Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	No mitigation measures are required.	Less Than Significant Impact.
Would the project, combined with other related projects, result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	No mitigation measures are required.	Less Than Significant Impact.
Would the project, combined with other related projects, conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	No mitigation measures are required.	Less Than Significant Impact.
4.6 Geology & Soils		
GS-1: Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known	**GS-1:** Applicants of qualifying development projects shall have a Preliminary Geotechnical Study prepared by a qualified geotechnical engineer and/or engineering	Less Than Significant Impact with Mitigation Incorporated.

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, or landslides?	geologist. The study shall be prepared in accordance with the methodologies, standards, and significance thresholds in the City of Laguna Niguel Grading Code and the City's CEQA Manual and submitted for review and approval by the Laguna Niguel Community Development Department. This shall include an analysis of geologic hazards and recommendations to be included during grading for topics such as, but not limited to, faults and seismic safety, landslides and site stability, liquefaction, differential settlement, lateral spreading, subsidence, expansive soils, corrosivity, and/or overall geotechnical stability of the site. The Preliminary Geotechnical Study shall assess and determine the feasibility of developing the project site and provide recommendations for site preparation, such as remedial grading, subsurface drainage, subsurface structures such as caissons, etc. Prior to issuance of a grading permit, the applicant shall have a Final Geotechnical Report prepared by a qualified geotechnical engineer and/or engineering geologist that incorporates all of the recommendations from the Preliminary Geotechnical Report to ensure construction-level geotechnical recommendations and design parameters are integrated into the final grading design.	
GS-2: Would the project result in substantial soil erosion or the loss of topsoil?	No mitigation measures are required.	Less Than Significant Impact.
GS-3: Would the project 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	Refer to Mitigation Measure GS-1.	Less Than Significant Impact with Mitigation Incorporated.

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
landslide, lateral spreading, subsidence, liquefaction, or collapse?		
GS-4: Would the project be located on expansive soil, as defined in Tables 18-1-D of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	Refer to Mitigation Measure GS-1.	Less Than Significant Impact with Mitigation Incorporated.
GS-5: Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	**GS-2:** Prior to ground disturbance activities, applicants for qualifying development projects located within undisturbed sediments with a Bureau of Land Management (BLM) Potential Fossil Yield Classification (PFYC) ranking of moderate (PFYC 3) or above shall provide a combined paleontological assessment and mitigation plan to the Laguna Niguel Community Development Department for review and approval. The paleontological assessment and mitigation plan shall be prepared by a certified principal paleontologist meeting Orange County standards. The mitigation plan shall consist of a record search, field survey, background context, identification of monitoring levels for individual geological units, and project-specific mitigation, as applicable. Additionally, the plan shall include information on the services to be provided by the paleontological mitigation company, such as providing worker awareness training, construction monitoring, fossil recovery, data collection, preparation to a point of permanent preservation (which typically includes removal of the majority of matrix, hardening, washing and sorting of some or all of the matrix for microfossil specimens, and other treatments for specimens determined to be scientifically significant by the qualified principal	Less Than Significant Impact with Mitigation Incorporated.

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
	paleontologist), professional identification, and other special studies that may be appropriate to provide dates on the fossils recovered (e.g. optically stimulated luminescence [OSL], radiocarbon dating, pollen, foraminiferal studies, etc.). Upon completion of mitigation activities, a final mitigation compliance report shall be prepared and submitted to the Laguna Niguel Community Development Department. All mass grading in areas or sediments having moderate to very high paleontological sensitivity shall be monitored for paleontological resources. Exceptions may be made by a certified principal paleontologist for drilling, auguring, cast-in-drilled-hole (CIDH) piles, and similar activities where stratigraphic details would be lost and fossils would most likely be highly damaged. The Dr. John D. Cooper Laboratory shall be given first right of refusal to curate any scientifically significant fossils found. The final mitigation compliance report shall include documentation that this requirement has been met. **GS-3:** In the event that unanticipated fossil resources are discovered in areas that did not require prior paleontologist monitoring, the project applicant or designee (e.g., contractor) shall immediately cease all earth-disturbing activities within a 50-foot radius of the area of discovery. A certified principal paleontologist meeting Orange County standards shall be retained by the applicant to evaluate the find, and the Laguna Niguel Community Development Department shall be notified.	

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
	Should it be deemed necessary to proceed with paleontological mitigation by the paleontologist, the protocol established in Mitigation Measure GS-2 shall be implemented.	
Would the project, combined with other related cumulative projects, directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, or landslides?	Refer to Mitigation Measure GS-1.	Less Than Significant Impact with Mitigation Incorporated.
Would the project, combined with other related cumulative projects, result in substantial soil erosion or the loss of topsoil?	No mitigation measures are required.	Less Than Significant Impact.
Would the project, combined with other related cumulative projects 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 or be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	Refer to Mitigation Measure GS-1.	Less Than Significant Impact with Mitigation Incorporated.
Would the project, combined with other related cumulative projects directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Refer to Mitigation Measure GS-2 and GS-3.	Less Than Significant Impact with Mitigation Incorporated.
4.7 Greenhouse Gas Emissions		
GHG-1: Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	**GHG-1:** As part of the development review process, for individual development projects the Laguna Niguel Community Development Department shall determine if a greenhouse gas (GHG) emissions technical analysis	Buildout of the General Plan Update could generate greenhouse gas emissions, either directly or indirectly, that

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
	is required, based on the screening criteria provided in the City of Laguna Niguel CEQA Manual. Applicants of individual development projects with the potential to have a significant GHG impact shall have a GHG technical analysis prepared by a qualified environmental professional. This analysis shall be prepared in accordance with the methodologies and significance thresholds in the City's CEQA Manual and submitted for review and approval by the Laguna Niguel Community Development Department. If construction- or operational-related GHG emissions for an individual development project are determined to potentially exceed the City's adopted thresholds of significance, appropriate mitigation measures shall be identified and implemented to reduce GHG emissions to below the applicable threshold(s). These measures shall be incorporated as conditions of approval for the project. The following are examples of potential mitigation measures from the California Air Pollution Control Officers Association (CAPCOA) Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity. Mitigation measures shall be selected based on the nature of the project and characteristics of the GHG emission source(s). These measures include, but are not limited to: *Land Use & Development Planning* GHG emissions can be mitigated through smart urban planning, including:	may have a significant impact on the environment, resulting in a significant and unavoidable impact. Demolition of the CHFB site would be less than significant.

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
	• Prioritizing infill development and repurposing underutilized land. • Constructing mixed-use, high-density developments near transit hubs. • Retaining mature trees and planting new vegetation to improve air quality. • Promoting sustainable waste management practices, including methane recovery. *Green Building Measures* Projects can integrate environmentally sustainable features aligned with CALGreen and local building codes. Some strategies include: • Using energy-efficient materials for construction and renovation. • Installing energy-saving lighting, heating, cooling systems, and appliances. • Designing buildings with passive environmental controls to maximize natural heating and cooling. • Incorporating passive solar design and high-reflectivity materials to improve energy efficiency. • Installing electric vehicle charging stations to support clean transportation. • Developing renewable energy sources and promoting energy conservation. *Project Design & Emission Reduction* Lead agencies can include design elements that reduce emissions, such as:	

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
	• Adopting energy-efficient building techniques. • Utilizing low-emission construction materials. • Encouraging waste recycling and reuse to minimize environmental impact. • Implementing technologies to improve energy efficiency and reduce consumption. *Transportation & Mobility Strategies* To limit transportation-related emissions, the guidelines propose: • Expanding access to transit, bike lanes, and pedestrian networks. • Encouraging carpooling, bike-sharing, and neighborhood electric vehicle networks. • Improving infrastructure for biking and walking to reduce reliance on automobiles. • Providing employee incentives for transit use and alternative commuting options. • Reducing parking availability or unbundling parking costs to discourage single-occupancy vehicle trips. • Using fuel-efficient and zero-emission vehicles.	
GHG-2: Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Refer to Mitigation Measure GHG-1.	Buildout of the General Plan Update Land Use Element could conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases, resulting in a significant and

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
		unavoidable impact. Demolition of the CHFB site would be less than significant.
Would the project, combined with other related projects, generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment? Would the project, combined with other related projects, conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHG?	Refer to Mitigation Measure GHG-1.	Buildout of the General Plan Update Land Use Element and related cumulative development could have the potential to generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, resulting in a significant and unavoidable cumulative impact. Cumulative impacts associated with demolition of the CHFB site would be less than significant.
4.8 Hazards and Hazardous Materials		
HAZ-1: Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	No mitigation measures are required.	Less Than Significant Impact.
HAZ-2: Would the project 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?	**HAZ-1:** Prior to the issuance of a demolition permit for any structure constructed before 1978, the applicant shall conduct a comprehensive survey for asbestos-containing material (ACM) and lead based paint (LBP) to identify the locations and quantities of ACMs and LBP in the structure. The ACM and LBP surveys shall be conducted in accordance with applicable South Coast (Air Quality Management District (AQMD) regulations. The survey results shall be submitted to the Laguna Niguel Community Development Department prior to	Less Than Significant Impact with Mitigation Incorporated.

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
	issuance of a demolition permit. If ACMs or LBPs are identified during the surveys, the applicant shall retain a licensed or certified contactor to remove and dispose of all ACMs and LBP in accordance with California Code of Regulations Title 8, Sections 1529 and 1532.1. **HAZ-2:** As part of the development review process for qualifying projects, the Laguna Niguel Community Development Department shall determine if the proposed project is required to have a Phase I Environmental Site Assessment (ESA) prepared, based on the screening criteria provided in the City of Laguna Niguel CEQA Manual. Projects that are not subject to CEQA, without ground disturbance, or the potential to impact hazardous materials may not need a Phase I ESA. If required, the applicant shall have a Phase I ESA prepared by a qualified environmental professional consistent with the City of Laguna Niguel CEQA Manual. If the Phase I ESA identified recognized environmental conditions (REC) in connection with the project site, including if the project site is included on a list of hazardous materials sites complied pursuant to Government Code Section 65962.5, a Phase II investigation shall be required to determine the potential for release of hazardous materials. The Phase II investigation generally includes site sampling, such as soil, groundwater, and soil gas, to assess potential sources of environmental impacts and either confirm the extent of contamination or identify the need additional studies. All assessments, supporting studies,	

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
	and the results of any testing shall be provided to the Laguna Niguel Community Development Department. If contamination is present, the applicant shall implement appropriate abatement, management, or disposal actions in accordance with applicable regulatory requirements to prevent, minimize, and control hazardous materials during construction and operation. Relevant regulatory agencies include, for example, the Regional Water Quality Control Board, Orange County Environmental Health Department, Department of Toxic Substances Control, and/or South Coast Air Quality Management District.	
HAZ-3: Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Refer to Mitigation Measures HAZ-1 and HAZ-2.	Less Than Significant Impact with Mitigation Incorporated.
HAZ-4: Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	Refer to Mitigation Measure HAZ-2.	Less Than Significant Impact with Mitigation Incorporated.
HAZ-5: Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	No mitigation measures are required.	Less Than Significant Impact.
HAZ-6: Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	Refer to Mitigation Measure WF-1.	Less Than Significant Impact with Mitigation Incorporated.
Would the project, combined with other related cumulative projects, create a significant hazard to the	No mitigation measures are required.	Less Than Significant Impact.

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
public or the environment through the routine transport, use, or disposal of hazardous materials?		
Would the project, combined with other related cumulative projects, 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?	Refer to Mitigation Measures HAZ-1 and HAZ-2	Less Than Significant Impact with Mitigation Incorporated.
Would the project, combined with other related cumulative projects, emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Refer to Mitigation Measures HAZ-1 and HAZ-2.	Less Than Significant Impact with Mitigation Incorporated.
Would the project, combined with other related cumulative projects, be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	Refer to Mitigation Measure HAZ-2.	Less Than Significant Impact with Mitigation Incorporated.
Would the project, combined with other related cumulative projects, impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	No mitigation measures are required.	Less Than Significant Impact.
Would the project, combined with other related cumulative projects, expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	Refer to Mitigation Measure WF-1.	Less Than Significant Impact with Mitigation Incorporated.

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
4.9 Hydrology and Water Quality		
HWQ-1: Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	**HWQ-1:** Prior to issuance of a grading permit, applicants of qualifying development projects shall have a Water Quality Management Plan (WQMP) prepared by a qualified engineer. The WQMP shall be prepared in accordance with the methodologies, standards, and significance thresholds in the City of Laguna Niguel BMP Design Manual and the City's CEQA Manual and submitted for review and approval by the Laguna Niguel Community Development Department. The WQMP shall define project features and BMPs that will mitigate the project's impacts on receiving water quality and hydromodification. All project-specific requirements identified in the approved WQMP shall be incorporated into the project's final grading and drainage plans submitted for grading permit review and approval by the Laguna Niguel Community Development Department.	Less Than Significant Impact with Mitigation Incorporated.
HWQ-2: Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	No mitigation measures are required.	Less Than Significant Impact.
HWQ-3: Would the project 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: • result in substantial erosion or siltation on- or off-site;	Refer to Mitigation Measure HWQ-1. **HWQ-2:** Prior to issuance of a grading permit, applicants of qualifying development projects shall have a Hydrology Study prepared by a qualified engineer. The study shall be prepared in accordance with the methodologies, standards, and significance thresholds in the County of Orange Hydrology Manual (as amended	Less Than Significant Impact with Mitigation Incorporated.

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
• substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; • 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; or • impede or redirect flood flows?	locally) and the City's CEQA Manual and submitted for review and approval by the Laguna Niguel Community Development Department. This includes the study addressing the following: • Post-development drainage patterns and stormwater runoff flows are designed so as not exceed to existing conditions and will not result in flooding on or- off-site. • Whether the project site is within a regulatory floodplain and evaluate the potential for the proposed development to impede or redirect flood flows. For projects located within Very High Fire Hazard Severity Zones, High Fire Hazard Severity Zones, or slopes prone to producing debris flows, the Hydrology Study shall analyze both the burned and bulked conditions to determine the appropriate size and location of detention/debris basins, as necessary, based on project site conditions. All project-specific requirements identified in the approved Hydrology Study shall be incorporated into the project's final grading and drainage plans submitted for grading permit review and approval by the Laguna Niguel Community Development Department.	
HWQ-4: Would the project, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	No mitigation measures are required.	Less Than Significant Impact.
HWQ-5: Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	No mitigation measures are required.	Less Than Significant Impact.

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
Would the project, combined with other related cumulative projects, violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	Refer to Mitigation Measure HWQ-1.	Less Than Significant Impact with Mitigation Incorporated.
Would the project, combined with other related cumulative projects, substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	No mitigation measures are required.	Less Than Significant Impact.
Would the project, combined with other related cumulative projects, 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: • Result in substantial erosion or siltation on- or off-site; • Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; • 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; or • Impede or redirect flood flows?	Refer to Mitigation Measure HWQ-1 and HWQ-2.	Less Than Significant Impact with Mitigation Incorporated.
Would the project, combined with other related cumulative projects, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	No mitigation measures are required.	Less Than Significant Impact.
Would the project, combined with other related cumulative projects, conflict with or obstruct	No mitigation measures are required.	Less Than Significant Impact.

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
implementation of a water quality control plan or sustainable groundwater management plan?		
4.10 Land Use and Planning		
LU-1: Would the project physically divide an established community?	No mitigation measures are required.	Less Than Significant Impact.
LU-2: Would the project conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	No mitigation measures are required.	Less Than Significant Impact.
Would the project, combined with other related cumulative projects, physically divide an established community?	No mitigation measures are required.	Less Than Significant Impact.
Would the project, combined with other related cumulative projects, 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?	No mitigation measures are required.	Less Than Significant Impact.
4.11 Noise		
NOI-1: Would the project result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	**NOI-1:** As part of the development review process for qualifying projects, the Laguna Niguel Community Development Department shall determine if a construction noise assessment is required, based on the screening criteria provided in the City of Laguna Niguel CEQA Manual. For projects with the potential to result in significant construction-related noise impacts, applicants shall retain a qualified environmental professional to prepare a construction noise assessment. The construction noise assessment shall be prepared in accordance with the methodologies, standards, and	Less Than Significant Impact with Mitigation Incorporated.

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
	significance thresholds in the City's CEQA Manual and submitted for review and approval by the Laguna Niguel Community Development Department. This includes an analysis of potential construction noise impacts on noise-sensitive land uses and includes representative noise measurements, estimates of existing and projected noise levels, and Best Management Practices (BMPs), if necessary, to ensure compliance with the City's noise standards. Potential BMPs may include locating stationary noise sources as far from adjacent properties as possible, limiting construction hours, restricting delivery times, installing temporary noise barriers and/or other BMPs determined effective to minimize construction noise emissions. **NOI-2:** As part of the development review process for qualifying projects, the Laguna Niguel Community Development Department shall determine if an operational noise assessment is required, based on the screening criteria provided in the City of Laguna Niguel CEQA Manual. For projects with the potential to result in significant operational-related noise impacts, applicants shall retain a qualified environmental professional to prepare an operational noise assessment. The operational noise assessment shall be prepared in accordance with the methodologies, standards, and significance thresholds in the City's CEQA Manual and submitted for review and approval by the Laguna Niguel Community Development Department. The assessment shall include representative noise measurements,	

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
	estimates of existing and projected noise levels, and BMPs, if necessary, to ensure compliance with the City's noise standards. BMPs may include, but are not limited to, noise barriers, setbacks, site design, building facades, use of noise-minimizing materials such as rubberized asphalt, and equipment shielding and maintenance.	
NOI-2: Would the project result in the generation of excessive groundborne vibration or groundborne noise levels?	**NOI-3:** Prior to issuance of a grading permit, applicants of qualifying development projects shall have a construction vibration assessment prepared by a qualified environmental professional in accordance with the methodologies, standards, and significance thresholds in the City of Laguna Niguel CEQA Manual and submitted for review and approval by the Laguna Niguel Community Development Department. The assessment shall include a detailed plan to avoid potential significant impacts to existing buildings due to groundborne vibrations. If necessary, the plan shall identify and incorporate Best Management Practices (BMPs) to ensure consistency with the City's CEQA Manual criteria. BMPs may include, but are not limited to, pre-construction surveys, vibration monitoring, equipment selection and placement, alternative construction methods, open trenches, and installing vibration isolators based on California Department of Transportation's Construction Vibration Guidance Manual and/or other BMPs determined effective to minimize construction vibration impacts.	Less than Significant Impact with Mitigation Incorporated.
Would the project, combined with other related cumulative projects, generate a substantial temporary or permanent increase in ambient noise levels in the vicinity	Refer to Mitigation Measures NOI-1 and NOI-2.	Less Than Significant Impact with Mitigation Incorporated.

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		
Would the project, combined with other related cumulative projects, generate excessive groundborne vibration or groundborne noise levels?	Refer to Mitigation Measure NOI-3.	Less Than Significant Impact with Mitigation Incorporated.
4.12 Population and Housing		
POP-1: Would the project 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?	No mitigation measures are required.	Less Than Significant Impact.
POP-2: Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	No mitigation measures are required.	Less Than Significant Impact.
Would the project, combined with other related cumulative projects, 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)?	No mitigation measures are required.	Less Than Significant Impact.
Would the project, combined with other related cumulative projects, displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	No mitigation measures are required.	Less Than Significant Impact.
4.13 Public Services and Recreation		
PS-1: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or	No mitigation measures are required.	Less Than Significant Impact.

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
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 any of the public services?		
PSR-2: Would the project 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?	No mitigation measures are required.	Less Than Significant Impact.
PSR-3: Would the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	No mitigation measures are required.	Less Than Significant Impact.
Would the Project, combined with other relevant cumulative projects, result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services?	No mitigation measures are required.	Less Than Significant Impact.
Would the project, combined with other relevant cumulative projects, 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?	No mitigation measures are required.	Less Than Significant Impact.
Would the project, combined with other relevant cumulative projects, include recreational facilities or require the construction or expansion of recreational	No mitigation measures are required.	Less Than Significant Impact.

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
facilities which might have an adverse physical effect on the environment?		
4.14 Transportation		
TR-1: Would the Project conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	**TRA-1**: Upon approval of the City's General Plan Update Mobility Element that includes modifications to any Master Plan of Arterial Highways facilities on the Circulation Plan (Figure M-1), the Laguna Niguel Public Works Department shall coordinate with Orange County Transportation Authority (OCTA) to initiate an amendment to the countywide transportation system plan, the Master Plan of Arterial Highways (MPAH).	Less Than Significant Impact with Mitigation Incorporated.
TR-2: Would the Project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	**TRA-2**: As part of the development review process for qualifying projects, the Laguna Niguel Community Development Department shall determine if a Vehicle Miles Traveled (VMT) analysis is required, based on the screening criteria provided in the City's Transportation Assessment Guidelines, which are incorporated in the City of Laguna Niguel CEQA Manual and include provisions intended to reduce vehicle travel distances from and within the City. Qualifying projects are those that are not exempt from CEQA and do not meet at least one VMT screening criteria in the City's Transportation Assessment Guidelines. For projects not exempt, a VMT analysis shall be prepared in accordance with the City's Transportation Assessment Guidelines, including application of VMT reducing strategies.	Significant and Unavoidable Impact.
TR-3: Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or	No mitigation measures are required.	Less Than Significant Impact.

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
dangerous intersections) or incompatible uses (e.g., farm equipment)?		
TR-4: Would the project result in inadequate emergency access?	No mitigation measures are required.	Less Than Significant Impact.
Would the project, combined with other related cumulative projects, conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	Refer to Mitigation Measure TRA-1.	Less Than Significant Impact with Mitigation Incorporated.
Would the project, combined with other related cumulative projects, conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	Refer to Mitigation Measure TRA-2.	Significant and Unavoidable Impact.
Would the project, combined with other related cumulative projects, substantially increase hazards due to geometric design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	No mitigation measures are required.	Less Than Significant Impact.
Would the project, combined with other related cumulative projects, result in inadequate emergency access?	No mitigation measures are required.	Less Than Significant Impact.
4.15 Tribal Cultural Resources		
TCR-1: Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 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: 1. Listed or eligible for listing in the California Register of Historical Resources, or in a local	Refer to Mitigation Measure CUL-5. **TCR-1:** Prior to the commencement of any ground disturbing activities for qualifying development projects in which the potential exists for tribal cultural resources to be present, applicants shall coordinate with all interested tribes. If it is determined that the potential exists for tribal cultural resources to be present based on record searches or tribal knowledge, a qualified	Less Than Significant Impact with Mitigation Incorporated.

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
register of historical resources as defined in PRC Section 5020.1(k)? 2. 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 PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	archaeologist and designated Native American Monitor (Tribal Monitor) representing the Juaneño Band of Mission Indians Acjachemen Nation – Belardes (and additional Tribal Monitors from other consulting tribes, if applicable), shall be present on the project site during all ground-disturbing activities/earthwork to monitor grading activities. During initial monitoring, if the qualified archaeologist and/or Tribal Monitor determines that a reduced or discontinued level of monitoring is appropriate, or that continued monitoring is necessary, the scope of monitoring, in consultation with the Laguna Niguel Community Development Department, may be adjusted. It shall only be necessary for the Tribal Monitor to be present during construction phases that involve ground-disturbing activities. Ground disturbing activities include, but are not limited to pavement removal, potholing or auguring, grubbing, tree removals, boring, grading, excavation, drilling, and trenching, in areas of previously undisturbed soil material. The Tribal Monitor shall complete daily monitoring logs describing construction activities, locations, soil conditions, and any cultural materials identified. The monitoring shall end when all ground-disturbing activities are completed, or when the qualified archaeologist and/or Tribal Monitor determines that all remaining ground-disturbing activities have little to no potential for impacting Tribal Cultural Resources. If Tribal Cultural Resources are discovered, construction activities shall cease in the immediate vicinity of the find	

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
	(not less than the surrounding 50 feet) until the find can be assessed by the qualified archaeologist and/or Tribal Monitor. Construction activities may continue in other areas of the site while the resource is evaluated. If the resource is determined to be Native American in origin, the qualified archaeologist or Tribal Monitor shall perform data recovery and secure the item(s) until the Tribal Monitor determines the best course of action. Preservation in place (i.e., avoidance) is the preferred manner of treatment. If preservation in place is not feasible, treatment may include archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis as determined by the Tribal Monitor. If the find qualifies as a historic archaeological resource deemed significant by a qualified archaeologist as a "historical resource" or "unique archaeological resource" instead of a Native American resource, the protocol established in Mitigation Measure CUL-5 shall be implemented. If human remains and/or grave goods are discovered or recognized at the project site, all ground disturbance shall immediately cease within 50 feet of discovery, and the County Coroner shall be notified per Public Resources Code Section 5097.98, and Health & Safety Code Section 7050.5. Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and (2).	
Would the Project, combined with other related projects, cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code	Refer to Mitigation Measures TCR-1 and CUL-5.	Less Than Significant Impact with Mitigation Incorporated.

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
section 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: 1. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k); or 2. 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 PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?		
4.16 Utilities and Service Systems		
USS-1: Would the Project 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?	No mitigation measures are required.	Less Than Significant Impact.
USS-2: Would the Project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	No mitigation measures are required.	Less Than Significant Impact.

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
USS-3: Would the project 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?	No mitigation measures are required.	Less Than Significant Impact.
USS-4: Would the Project 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?	No mitigation measures are required.	Less Than Significant Impact.
USS-5: Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	No mitigation measures are required.	Less Than Significant Impact.
Would the project, combined with other related cumulative projects, require or result in the relocation or construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects?	No mitigation measures are required.	Less Than Significant Impact.
Would the project, combined with other related cumulative projects, have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	No mitigation measures are required.	Less Than Significant Impact.
Would the project, combined with other related cumulative projects, 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?	No mitigation measures are required.	Less Than Significant Impact.

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
Would the project, combined with other related cumulative projects, 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?	No mitigation measures are required.	Less Than Significant Impact.
Would the project, combined with other related cumulative projects, and comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	No mitigation measures are required.	Less Than Significant Impact.
4.17 Wildfire		
WF-1: Would the Project substantially impair an adopted emergency response plan or emergency evacuation plan?	No mitigation measures are required.	Less Than Significant Impact.
WF-2: Due to slope, prevailing winds, and other factors, would the Project exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	**WF-1:** As part of the development review process, the Laguna Niguel Community Development Department shall determine if the proposed project is located within an area designated as a Very High or High Fire Hazard Severity Zone, as mapped by the California Department of Forestry and Fire Protection. For projects within these designated zones, applicants shall prepare project-specific fire prevention plans in accordance with the methodologies, standards, and significance thresholds in the California Fire Code (as locally amended), California Building Code (as locally amended) and the City's CEQA Manual and submitted for review and approval by the Orange County Fire Authority (OCFA) and Laguna Niguel Community Development Department in accordance with applicable state and local wildfire safety regulations. The site-specific plans shall incorporate wildfire safety design features intended to reduce the risk of fire	Less Than Significant Impact with Mitigation Incorporated.

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
	ignition, limit fire spread and facilitate safe and effective emergency response and evacuation. Such features may include the use of ignition-resistant materials for roofs, vents, exterior walls, and windows; provision of adequate emergency evacuation routes, and combustible vegetation management protocols (removal or reduction) within 100 or more feet of habitable structures depending on site conditions. All identified project-specific requirements shall be incorporated into the project's final construction plans in compliance with the California Building Code (CBC) and California Fire Code (CFC), which are both parts of Title 24 of the California Code of Regulations (the California Building Standards Code). The final construction plans shall be submitted for building permit review and approval by the Laguna Niguel Community Development Department and OCFA.	
WF-3: Would the Project 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?	Refer to Mitigation Measure WF-1.	Less Than Significant Impact with Mitigation Incorporated.
WF-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?	Refer to Mitigation Measures WF-1 and HWQ-1.	Less Than Significant Impact with Mitigation Incorporated.
Would the Project, combined with other relevant cumulative projects, substantially impair an adopted emergency response plan or emergency evacuation plan?	No mitigation measures are required.	Less Than Significant Impact.

Table 2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance
Due to slope, prevailing winds, and other factors, would the Project, combined with other relevant cumulative projects, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	Refer to Mitigation Measure WF-1.	Less Than Significant Impact with Mitigation Incorporated.
Would the Project, combined with other relevant cumulative projects, 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?	Refer to Mitigation Measure WF-1.	Less Than Significant Impact with Mitigation Incorporated.
Would the Project, combined with other relevant cumulative projects, 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?	Refer to Mitigation Measures WF-1 and HWQ-1.	Less Than Significant Impact with Mitigation Incorporated.

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1.0 INTRODUCTION AND PURPOSE

The California Environmental Quality Act ("CEQA") specifies that before a public agency decides to approve a project that could have one or more adverse effects on the physical environment, the agency must inform itself about the Project's potential environmental impacts, give the public an opportunity to comment on the environmental issues, and take feasible measures to avoid or reduce potential harm to the physical environment. The CEQA Guidelines are in the California Code of Regulations ("CCR"), Title 14, Division 6, Chapter 3, Sections 15000-15387, while the CEQA Statute is codified in Public Resources Code Sections 21000-21189.91.

1.1 PURPOSE OF THE EIR

CEQA requires that all state and local agencies consider the potential environmental impacts of projects over which they have discretionary authority. An Environmental Impact Report ("EIR") intends to provide decision-makers and the public with information concerning the potential environmental impacts of a proposed project, possible ways to reduce or avoid the possible significant environmental impacts, and alternatives to a project. An EIR must also disclose significant impacts that cannot be avoided, growth inducing impacts, effects found not to be significant, as well as significant cumulative impacts of all past, present, and reasonably anticipated future projects.

The City of Laguna Niguel is the Lead Agency under CEQA and is responsible for preparing this Program EIR for the Laguna Niguel General Plan Update Project ("Project") (State Clearinghouse No. 2025050495). This Program EIR was prepared in conformance with CEQA (California Public Resources Code Section 21000 et seq.), CEQA Guidelines (California Code of Regulations, Title 14, Section 15000 et seq.), and the rules, regulations, and procedures for implementation of CEQA, as adopted by the City of Laguna Niguel. The principal CEQA Guidelines sections governing content of this document are Sections 15120 through 15132 (Contents of Environmental Impact Reports) and Section 15168 (Program EIR).

The purpose of the Program EIR is to review the existing conditions, analyze potential environmental impacts, , and identify mitigation measures to reduce potentially significant effects of the proposed City of Laguna Niguel General Plan Update ("General Plan Update"). For more detailed information regarding the proposed Project, refer to Section 2.0, *Project Description*.

The City of Laguna Niguel (which has the principal responsibility for processing and approving the Project) and other public (i.e., responsible and trustee) agencies that may use this Program EIR in the decision-making or permit process will consider the information in the Program EIR, along with other information that may be presented during the CEQA process. Environmental impacts are not always able to be mitigated to a less than significant level; in such cases, impacts are considered significant and unavoidable. In accordance with Section 15093(b) of the CEQA Guidelines, if a public agency approves a project that has significant impacts that cannot be mitigated (i.e., significant unavoidable impacts), the agency shall state in writing the specific reasons for approving the project, based on the Final EIR and any other information in the public record for the project, defined as a "statement of overriding considerations" per Section 15093 of the CEQA Guidelines.

This document analyzes the environmental effects of the General Plan Update to the degree of specificity appropriate to the current proposed actions, as required by Section 15146 of the CEQA Guidelines. The analysis considers the activities associated with the Project to determine the short-term and long-term effects associated with their implementation. The Program EIR discusses both the direct and indirect impacts of the Project, as well as the cumulative impacts associated with other past, present, and reasonably foreseeable future projects at a programmatic level.

The City prepared the EIR as a Program EIR in accordance with CEQA Guidelines Section 15168, which state the following.

a) *General. A program EIR is an EIR which may be prepared on a series of actions that can be characterized as one large project and are related either:*
    1. *Geographically,*
    2. *As logical parts in the chain of contemplated actions,*
    3. *In connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program, or*
    4. *As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.*

b) *Advantages. Use of a program EIR can provide the following advantages. The program EIR can:*
    1. *Provide an occasion for a more exhaustive consideration of effects and alternatives than would be practical in an EIR on an individual action,*
    2. *Ensure consideration of cumulative impacts that might be slighted in a case- by-case analysis,*
    3. *Avoid duplicative reconsideration of basic policy considerations,*
    4. *Allow the Lead Agency to consider broad policy alternatives and program-wide mitigation measures at an early time when the agency has greater flexibility to deal with basic problems or cumulative impacts, and*
    5. *Allow reduction in paperwork.*

c) *Use with Later Activities. Subsequent activities in the program must be examined in the light of the program EIR to determine whether an additional environmental document must be prepared.*
    1. *If a later activity would have effects that were not examined in the Program EIR, a new Initial Study would need to be prepared leading to either an EIR or a Negative Declaration.*
    2. *If the agency finds that pursuant to Section 15162, no new effects could occur or no new mitigation measures would be required, the agency can approve the activity as being within the scope of the project covered by the program EIR, and no new environmental document would be required.*
    3. *An agency shall incorporate feasible mitigation measures and alternatives developed in the program EIR into subsequent actions in the program.*
    4. *Where the subsequent activities involve site-specific operations, the agency should use a written checklist or similar device to document the evaluation of the site and the activity to determine whether the environmental effects of the operations were covered in the program EIR.*

5. *A program EIR will be most helpful in dealing with subsequent activities if it deals with the effects of the program as specifically and comprehensively as possible. With a good and detailed analysis of the program, many subsequent activities could be found to be within the scope of the project described in the program EIR, and no further environmental documents would be required.*

d) *Use with Subsequent EIRs and Negative Declarations. A program EIR can be used to simplify the task of preparing environmental documents on later parts of the program. The program EIR can:*
   1. *Provide the basis in an Initial Study for determining whether the later activity may have any significant impacts.*
   2. *Be incorporated by reference to deal with regional influences, secondary effects, cumulative impacts, broad alternatives, and other factors that apply to the program as a whole.*
   3. *Focus an EIR on a subsequent project to permit discussion solely of new effects which had not been considered before.*

1.2 LAGUNA NIGUEL GENERAL PLAN UPDATE

The City of Laguna Niguel General Plan is the overarching policy document that guides land use, housing, transportation, open space, public safety, community services, and other policy decisions throughout the City of Laguna Niguel (referred to as the Planning Area). The General Plan Update includes the elements mandated by State law, to the extent that they are relevant locally, including Land Use, Mobility, Resource Management (which includes the topics of Open Space and Conservation), Public Safety, and Noise. The City is not required to prepare an Environmental Justice element as there are no identified disadvantaged communities within the Planning Area. The Housing Element was recently adopted and is not part of this General Plan Update. The City may also address other topics of interest; this General Plan Update includes elements related to Public Facilities and Services and Economic Development. The General Plan Update includes a comprehensive set of goals and policies in each of these areas and provides guidance to the City on how to direct change, manage growth, and manage resources in the future.

1.3 INTENDED USES OF THE PROGRAM EIR

The City of Laguna Niguel, as the lead agency, has prepared this EIR to provide the public and responsible and trustee agencies with an objective analysis of the potential environmental impacts resulting from adoption of the General Plan Update and subsequent implementation of projects consistent with the General Plan Update. The environmental review process enables interested parties to evaluate the proposed Project in terms of its environmental consequences, to examine and recommend methods to eliminate or reduce potential adverse impacts, and to consider a reasonable range of alternatives to the project. While CEQA requires that consideration be given to avoid adverse environmental effects, the lead agency must balance adverse environmental effects against other public objectives, including the economic and social benefits of a project, in determining whether a project should be approved.

TIERING

This EIR will be used as the primary environmental document to evaluate all subsequent planning and permitting actions associated with the General Plan Update. Public Resources Code Section 21068.5

defines "tiering" as "the coverage of general matters and environmental impacts in an environmental impact report [EIR] prepared for a policy, plan, program, or ordinance followed by narrower or site-specific environmental impact reports [EIRs] which incorporate by reference the discussion in any prior environmental impact report [EIR] and which concentrate on the environmental impacts which (a) are capable of being mitigated, or (b) were not analyzed as a significant impact on the environment in the prior environmental impact report [EIR]."

CEQA Guidelines Section 15152(c) states that when a lead agency is using the tiering process in connection with an EIR for a large scale planning approval, such as a general plan or component thereof (e.g., an area plan or community plan), the development of detailed, site-specific information may not be feasible and can be deferred, in many instances, to a project-specific CEQA document. For future projects, the City of Laguna Niguel will determine the appropriate CEQA document that would evaluate the environmental impacts of the project being proposed at that time. Future environmental documents analyzing the project being proposed will incorporate this Program EIR by reference and will concentrate on the site-specific issues related to the particular project (CEQA Guidelines Section 15152). This Program EIR identifies General Plan goals and policies and mitigation measures and related performance standards that the City would apply to future proposed projects if the Program EIR is certified. In future site-specific review, the City would apply the performance standards set forth in this Program EIR to confirm that one or more mitigation measures proposed in the Program EIR would effectively avoid or reduce particular environmental impacts of the future project (CEQA Guidelines Section 15126.4(a)(1)(b)).

1.4 RESPONSIBLE AND TRUSTEE AGENCIES

Certain projects or actions undertaken by a Lead Agency require subsequent discretionary approvals or permits from other public agencies to be implemented. Such other agencies are referred to as Responsible Agencies and Trustee Agencies. Pursuant to CEQA Guidelines §§ 15381 and 15386, as amended, Responsible Agencies and Trustee Agencies are respectively defined as follows:

- "Responsible Agency" means a public agency, which proposes to carry out or approve a project, for which [a] Lead Agency is preparing or has prepared an EIR or Negative Declaration. For the purposes of CEQA, the term "responsible agency" includes all public agencies other than the Lead Agency, which have discretionary approval power over the project. (§15381)
- "Trustee Agency" means a state agency having jurisdiction by law over natural resources affected by a project, which are held in trust for the people of the State of California. Trustee Agencies include the California Department of Fish and Game, the State Lands Commission, the State Department of Parks and Recreation and the University of California with regard to sites within the Natural Land and Water Reserves System. (§15386)

The following are a list of Responsible and Trustee Agencies and other entities that may use this EIR for informational purposes or in their decision-making process, such as the issuance of regulatory permits, use permits, utility will-serve letters, etc. It should be noted that the purpose of the General Plan Update is to accommodate future projected growth and does not itself propose any new development. As project applications are submitted, they will be evaluated at the project level by applicable agencies/entities to determine which permits would be required.

- California Department of Forestry and Fire (CALFIRE)
- California Emergency Management Agency
- California Energy Commission
- California Environmental Protection Agency (CalEPA)
- California Air Resources Board (CARB)
- California Department of Conservation
- California Department of Fish and Wildlife (CDFW)
- California Department of Toxic Substances Control
- California Department of Transportation (Caltrans)
- California Department of Water Resources
- California Office of Emergency Services
- Capistrano Unified School District
- Moulton Niguel Water District
- Native American Heritage Commission
- Orange County Fire Authority
- Orange County Flood Control District (OC Flood)
- Orange County Sanitation District (OCSD)
- Regional Water Quality Control Board (RWQCB)
- San Diego Gas and Electric (SDG&E)
- Southern California Association of Governments (SCAG)
- Southern California Edison (SCE)
- South Coast Air Quality Management District (SCAQMD)
- South Coast Water District (SCWD)
- U.S. Army Corps of Engineers (USACE)
- U.S. Fish and Wildlife Service (USFWS)

1.5 ORGANIZATION AND SCOPE

Sections 15122 through 15132 of the CEQA Guidelines identify the content requirements for Draft and Final EIRs. An EIR must include a description of the environmental setting, an environmental impact analysis, mitigation measures for any significant impacts, alternatives, significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts. The EIR reviews environmental and planning documentation developed for the Project, environmental and planning documentation prepared for recent projects located within the Planning Area, and responses to the Notice of Preparation ("NOP").

This Draft EIR is organized in the following manner.

EXECUTIVE SUMMARY

The Executive Summary summarizes the characteristics of the proposed Project and provides a concise summary matrix of the Project's environmental impacts and mitigation measures. This chapter identifies the alternatives evaluated in the EIR.

SECTION 1.0 INTRODUCTION

Section 1.0 briefly describes the Project, presents the purpose of the environmental evaluation, identifies the lead, trustee, and responsible agencies, summarizes the process associated with preparation and certification of an EIR, identifies the scope and organization of the Draft EIR, and summarizes comments received on the NOP.

SECTION 2.0 PROJECT DESCRIPTION

Section 2.0 describes the environmental setting, background for the Project and the Project objectives. A detailed description of the General Plan Update, including the proposed elements, land use designations, land use map, and transportation improvements is provided. The development assumptions used during preparation of the environmental analysis and subsequent uses of the EIR are also described.

SECTION 3.0 BASIS OF CUMULATIVE ANALYSIS

Section 3.0 describes the approach and methodology for the cumulative environmental analysis.

SECTION 4.0 ENVIRONMENTAL ANALYSIS

Section 4.0 evaluates the impacts associated with implementation of the General Plan Update. This section is organized according to the environmental issue area. Each area includes a description of the environmental and regulatory setting relative to the issue, the CEQA thresholds for the specific issue area, and the environmental impacts of the Project. The Impacts and Mitigation Measures subsection describes implementation of General Plan Update goals and policies, and the implementation of mitigation measures, if needed, and their ability to reduce potential impacts.

SECTION 5.0 OTHER CEQA CONSIDERATIONS

Section 5.0 discusses long-term implications of the proposed action and considers irreversible environmental changes involved in the proposed action, should it be implemented. The Project's growth-inducing impacts, including the potential for population growth are also discussed.

SECTION 6.0 ALTERNATIVES

Section 6.0 provides a comparative analysis between the merits of the Project and the selected alternatives. CEQA Guidelines Section 15126.6 requires that an EIR describe a range of reasonable alternatives to the project, which could feasibly attain the basic objectives of the Project and avoid and/or lessen any significant environmental effects of the Project.

SECTION 7.0 EFFECTS FOUND NOT TO BE SIGNIFICANT

Section 7.0 provides an explanation of potential impacts determined not to be significant and therefore not discussed in detail in the EIR.

SECTION 8.0 REPORT PREPARERS

Section 8.0 lists all authors and agencies that assisted in the preparation of the Draft EIR by name, title, and company or agency affiliation.

APPENDICES

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

1.6 ENVIRONMENTAL REVIEW PROCESS

The review and certification process for the EIR has involved, or will involve, the following general procedural steps.

NOTICE OF PREPARATION AND SCOPING MEETING

Pursuant to CEQA Guidelines Section 15082, the City of Laguna Niguel circulated a NOP from May 13, 2025, to July 11, 2025, providing notification of the City's intent to prepare a Program EIR for the General Plan Update Project and soliciting input regarding the scope and content of the environmental information to be included in the Program EIR. The NOP was distributed to trustee and responsible agencies, the State Clearinghouse, and members of the public who requested such notice. The NOP was also posted at the Orange County Clerk and on the City's website. The City held a scoping meeting on May 21, 2025, providing participants with an overview of the proposed General Plan Update Project and the environmental review process. Participants had the opportunity to provide input regarding the scope and content of the environmental review. A summary of the NOP comments is provided later in this chapter. Appendix A, *NOP and NOP Comment Letters* includes the NOP and comments received.

DRAFT EIR

The Draft EIR contains a description of the Project, description of the environmental setting, identification of the Project's direct and indirect impacts on the environment, mitigation measures for impacts found to be significant, analysis of Project alternatives, and identification of significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts. The Draft EIR identifies issues determined to have no impact or less than a significant impact and provides detailed analysis of potentially significant and significant impacts. The City considered public comments responding to the NOP in preparation of the EIR analysis. Upon completion of the Draft EIR, the City will file the Notice of Completion ("NOC") with the State Clearinghouse of the Governor's Office of Land Use and Climate Innovation to begin the next public review period.

PUBLIC NOTICE/PUBLIC REVIEW

Coinciding with the NOC, the City will provide a public Notice of Availability ("NOA") for the Draft EIR and invite comment from the public, agencies, organizations, and other interested parties. Consistent with CEQA requirements, the review period for this Draft EIR is 45 days. The public may submit comments on the Draft EIR in written form addressed to:

City of Laguna Niguel
Starla Barker, General Plan Consultant
Community Development Department
30111 Crown Valley Parkway
Laguna Niguel, CA 92677

RESPONSE TO COMMENTS/FINAL EIR

Following the public review period, the City will prepare a Final EIR that responds to written comments received during the public review period.

CERTIFICATION OF THE EIR/PROJECT CONSIDERATION

Laguna Niguel City Council will review and consider the Final EIR. If the City finds that the Final EIR is "adequate and complete," the City Council may certify the Final EIR in accordance with CEQA. As set forth by CEQA Guidelines Section 15151, the standards of adequacy require an EIR to provide sufficient analysis accounting for environmental consequences to inform decisions on the proposed Project.

Upon review and consideration of the Final EIR, the City Council may take action to approve, revise, or deny the Project. If the EIR determines that the Project would result in significant adverse impacts to the environment that cannot be mitigated to less than significant levels, the City Council would be required to adopt a statement of overriding considerations with written findings in accordance with CEQA Guidelines Sections 15091 and 15093. If the Project requires mitigation measures (beyond the General Plan Update policies that reduce potentially significant impacts, as identified throughout the EIR), the City would also adopt a Mitigation Monitoring and Reporting Program (“MMRP”) in accordance with Public Resources Code Section 21081.6(a) and CEQA Guidelines Section 15097 for mitigation measures incorporated into or imposed upon the Project to reduce or avoid significant environmental effects. The MMRP would ensure fulfillment of each mitigation measure during Project implementation, in a manner consistent with the EIR.

1.7 INCORPORATION BY REFERENCE

Pertinent documents relating to this EIR have been cited in accordance with CEQA Guidelines Section 15148, which encourages “incorporation by reference” as a means of reducing redundancy and length of environmental reports. The documents listed below, which are available for public review at the City of Laguna Niguel City Hall at 30111 Crown Valley, and available on the City’s website (https://www.cityoflagunaniguel.org/88/Planning-Zoning) are hereby incorporated by reference into this EIR. Information contained within these documents has been utilized for each section of this EIR. A brief synopsis of the scope and content of these documents is provided below.

LAGUNA NIGUEL 1992 GENERAL PLAN AND ENVIRONMENTAL IMPACT REPORT

The City of Laguna Niguel's first General Plan was prepared and adopted in 1992. Except for the Housing and Land Use Elements, most of the elements are original per the 1992 adoption. The 1992 General Plan incorporates policies addressing both State and local laws, regional plans and other documents enacted at that time. The 1992 General Plan is comprised of chapters, including Land Use, Open Space/Parks/Conservation, Circulation, Public Facilities, Noise, Seismic/Public Safety, Housing (2021-2029), Growth Management, and Community Service Standards. Each chapter includes goals, policies, and actions (or programs) and serves as a decision-making tool to guide future growth and development. The 1992 General Plan Land Use Element includes the Land Use Map, which establishes the planned land use pattern for the City based primarily on the community’s vision and goals for the future.

The 1992 General Plan EIR analyzes the environmental impacts; considers a reasonable range of alternatives; and identifies significant cumulative and long-term impacts which may be best addressed with the policies of the 1992 General Plan.

LAGUNA NIGUEL GENERAL PLAN HOUSING ELEMENT

The State of California requires that each jurisdiction's housing element be updated every eight (8) years and certified by the State. The Laguna Niguel 2021-2029 Housing Element was adopted on December 5, 2023. The Housing Element provides an indication of the need for housing in the community in terms of housing affordability, availability, adequacy, and accessibility. The Housing Element provides a strategy to address housing needs and identifies a series of specific housing programs to meet community needs. The Housing Element is an official municipal response to a growing awareness for the need to provide housing for all economic segments of the community, as well as a legal requirement for all California jurisdictions. It provides Laguna Niguel with the opportunity to plan for the existing and future housing needs in the community.

The Housing Element was prepared in compliance with the 2021-2029 planning cycle for cities within the Southern California Association of Governments (SCAG) region. It identifies strategies and programs that focus on: 1) providing diverse housing sites and opportunities; 2) conserving and improving the existing affordable housing stock; 3) removing governmental and other constraints to housing development; and 4) promoting equal housing opportunities. The Housing Element identifies how the City will accommodate its Regional Housing Needs Allocation (RHNA) of 1,207 housing units for the 2021-2029 planning period.

LAGUNA NIGUEL LOCAL COASTAL PROGRAM

The California Coastal Act requires each local government lying wholly or partly within the State-designated Coastal Zone to prepare a Local Coastal Program (LCP). The City's LCP is comprised of portions of the South Laguna Specific Plan and the Aliso Creek Specific Plan, both of which were certified by the California Coastal Commission prior to incorporation. After incorporation, the California Coastal Commission certified the Laguna Niguel Local Coastal Program as a single plan. The City is responsible for the issuance of Coastal Development permits in the Coastal Zone.

LAGUNA NIGUEL GATEWAY SPECIFIC PLAN AND ENVIRONMENTAL IMPACT REPORT

On November 15, 2011, the Laguna Niguel City Council certified the Laguna Niguel Gateway Specific Plan Program Environmental Impact Report and adopted a comprehensive update to the Laguna Niguel Gateway Specific Plan, originally adopted in 1999. The Gateway Specific Plan includes the approximate 315-acre area along Crown Valley Parkway, Cabot and Forbes Roads, bounded by Interstate 5, San Joaquin Hills Transportation Corridor, and the City limits to the north and south. At the time of the Specific Plan's original adoption, the area was designated for Community Commercial, Professional Office, Industrial/Business Park, and Public/Institutional uses. The Gateway Specific Plan was updated to add Residential Attached and Mixed-Use land use designations in support of market demands and trends toward transit-oriented multi-family and mixed-use development. The 2011 Gateway Specific Plan provides for up to 2,994 residential units and 2.26 million square feet of retail, office, entertainment, hotel, and other non-residential uses. It allows existing businesses to remain, serving as a guide for the private market to attract and develop new land uses that will gradually transition the Gateway area into

an attractive and desirable transit and pedestrian-oriented urban village where people live, work, shop, are entertained and recreate.

LAGUNA NIGUEL LOCAL HAZARD MITIGATION PLAN

The Laguna Niguel Local Hazard Mitigation Plan (LHMP) was last updated in 2023 in accordance with the Disaster Mitigation Act (DMA) of 2000. The LHMP provides the city with a blueprint for hazard mitigation action planning to reduce hazard risks and disaster impacts. The LHMP conducts a risk assessment that identifies the location of hazards; the value of existing land and property in hazard locations; and an analysis of risk to life, property, and the environment that may result from natural hazard events. The LHMP also includes mitigation strategies aimed at reducing risk from natural hazards by identifying resources, information, and strategies for risk reduction, while helping to guide and coordinate mitigation activities throughout the City.

LAGUNA NIGUEL MUNICIPAL CODE

The Laguna Niguel Municipal Code (Municipal Code) consists of all the ordinances adopted by the City Council which are of a general and permanent nature. The Municipal Code is one of the City's primary tools to control land uses, in accordance with the General Plan programs and policies. The Laguna Niguel Zoning Ordinance or Zoning Code (Title 9 of the Municipal Code) is intended to guide the development of the City in an orderly manner, implement the policies of the General Plan, protect and enhance the quality of the natural and built environment, promote the public health, safety and general welfare by regulating the use of land and buildings and the location and basic form of structures, and provide the physical, environmental, economic, and social advantages that result from the orderly planned use of land resources.

Municipal Code Title 8, Building Regulations, Article 2, *2022 California Building Code and Regulated Codes*, adopts the 2022 California Building Standards Code, with amendments in consideration of the City's local climactic, geological, and topographical considerations. In addition to Title 8, other relevant Municipal Code sections include Title 7, *Highways, Rights of way, and vehicles* and Title 13, *Parks and Recreational Facilities*.

1.8 COMMENTS RECEIVED ON THE NOTICE OF PREPARATION

The City of Laguna Niguel received 125 letters during the NOP comment period, primarily submitted via email, in addition to the verbal comments received during the Scoping Meeting. Table 1-1, *Notice of Preparation Comment Matrix*, lists the CEQA impact topics that will be evaluated in the EIR, identifies each commenter and the issue(s) they commented on or would like to see evaluated. Generally, the issue that concerned most of the commenters was land use, followed by transportation, geology/soils, and then aesthetics. The EIR provides an in-depth evaluation of these topics, as well as all the other topics listed, as required by CEQA.

Table 1-1
Notice of Preparation Comment Matrix

Commenter	Comment Date	Aesthetics	Agriculture	Air Quality/Energy/GHG	Biological Resources	Cultural/Tribal Resources	Geology/Soils/Minerals	Hazards/Hazardous Materials	Hydrology/Drainage	Land Use/Planning/Population	Noise/Vibration	Public Services/Recreation	Transportation	Utilities/Service Systems	Wildfire
Agencies/Organizations															
Welcoming Neighbors Home, Rona Henry	05/15/2025									X					
The Kennedy Commission, Alejandra Perez Matus and Cesar Covarrubias	05/20/2025					X				X					
Native American Heritage Commission, Andrew Green	05/23/2025					X									
Laguna Niguel Historical Society, Nancy Kurtz	05/29/2025									X		X			
California Department of Conservation, Judith Zachariasen	06/09/2025						X								
Juaneño Band of Mission Indians, Acjachemen Nation-Belardes, Joyce Perry	6/10/2025					X									
California Department of Transportation, District 12, Local Development Review, Joseph Jamoralin	06/11/2025												X		

Table 1-1 (continued)
Notice of Preparation Comment Matrix

Commenter	Comment Date	Aesthetics	Agriculture	Air Quality/Energy/GHG	Biological Resources	Cultural/Tribal Resources	Geology/Soils/Minerals	Hazards/Hazardous Materials	Hydrology/Drainage	Land Use/Planning/Population	Noise/Vibration	Public Services/Recreation	Transportation	Utilities/Service Systems	Wildfire
Private Citizens															
Sean Matsler	05/08/2025									X					
Ryan Aeh	05/09/2025									X					
Scott A. Richter	05/13/2025									X					
Veronica Nazareth	05/17/2025	X		X						X		X	X		
Linda Haghi	05/19/2025									X					
Paul Anderson	05/19/2025									X					
Stuart Scholten	05/19/2025									X					
Julie Hall	05/20/2025									X					
Marcella Lawson	05/20/2025									X					
Rita Spitzer	05/20/2025									X					
Bob Bunyan	05/21/2025					X									
Cindy Ashley	05/21/2025									X					
Cynthia M	05/21/2025									X					
Emily Heinrich	05/21/2025							X							
Jacki Valentin	05/21/2025									X					
Michael Sall	05/21/2025									X					
Iris Anderson	05/22/2025									X					
Patricia Hannouche	05/22/2025	X			X		X		X		X		X		
Susan Vasquez	05/22/2025	X					X	X	X				X	X	
Daniel Ling	05/23/2025									X					
Rebecca Lee Carpenter	05/23/2025									X					

Table 1-1 (continued)
Notice of Preparation Comment Matrix

Commenter	Comment Date	Aesthetics	Agriculture	Air Quality/Energy/GHG	Biological Resources	Cultural/Tribal Resources	Geology/Soils/Minerals	Hazards/Hazardous Materials	Hydrology/Drainage	Land Use/Planning/Population	Noise/Vibration	Public Services/Recreation	Transportation	Utilities/Service Systems	Wildfire
Susan Perrine	05/23/2025						X				X				
Majid Ghaboosi	05/27/2025									X					
Thomas L. Garner	05/28/2025												X		
Melodye Shore	05/30/2025			X							X		X		
Carmel Beall	05/31/2025				X										
Courtney Lorenz	05/31/2025			X						X			X		
Daniel R. Vasquez	06/01/2025	X					X								
Sid & Antonia Smolen	06/01/2025	X									X		X		
Debbie Bennett	06/02/2025	X		X			X	X	X	X	X		X	X	X
Denae Hermawan	06/02/2025						X			X					
Jonathan Brick	06/02/2025				X					X					
Lauren Turcutto	06/02/2025						X			X	X		X		
Louis Desimone	06/02/2025				X		X			X			X		
Mark S. Dobkin	06/02/2025	X					X				X		X		
Matt Turcutto	06/02/2025	X					X	X		X	X		X		
Merit Maasik	06/02/2025	X			X						X		X		
Erin Hyatt	06/03/2025	X						X			X		X		
Victor & Bonnie Molaschi	06/03/2025						X		X				X		
Bohdan Turok	06/04/2024	X					X	X		X	X		X	X	X
Kim Opel	06/04/2024						X				X		X		
Marc & Cheryl McCarthy	06/04/2024	X			X		X			X		X	X	X	X
Carl Bjorkman	06/05/2025	X					X			X	X		X		X

Table 1-1 (continued)
Notice of Preparation Comment Matrix

Commenter	Comment Date	Aesthetics	Agriculture	Air Quality/Energy/GHG	Biological Resources	Cultural/Tribal Resources	Geology/Soils/Minerals	Hazards/Hazardous Materials	Hydrology/Drainage	Land Use/Planning/Population	Noise/Vibration	Public Services/Recreation	Transportation	Utilities/Service Systems	Wildfire
Kathy Adams	06/05/2025	X								X					
Patricia Young-Nicklin	06/05/2025	X			X		X	X		X	X		X	X	X
Kristina Walsh	06/06/2025						X			X	X		X	X	
Lois & Debra DeSimone	06/06/2025				X		X		X				X		
Teri & Gary Pohlson	06/06/2025	X					X	X		X	X		X	X	X
Craig Carmel (1)	06/07/2025	X													
Craig Carmel (2)	06/07/2025						X		X	X					
Dennis Ray	06/07/2025			X							X	X	X		
Jan Sekas	06/07/2025									X			X		
Kim Opel	06/07/2025	X					X				X		X		
Nancy Arnold	06/07/2025	X			X						X		X		
Phil & Jeannie Jordan	06/07/2025									X					
Thom Page	06/07/2025	X					X	X			X		X		
Frank McGrath	06/08/2025	X								X			X		
Martha Fletcher	06/08/2025				X		X	X	X	X	X		X		
Patricia Gough	06/08/2025	X			X		X	X			X		X		
Randi and John Cruz	06/08/2025	X		X	X		X	X			X		X		
Caitlin Pendergest	06/09/2025	X			X		X	X		X	X		X	X	X
Chris Coetzee	06/09/2025									X					
Denis Ketelaars	06/09/2025	X		X			X	X	X	X	X	X	X	X	X

Table 1-1 (continued)
Notice of Preparation Comment Matrix

Commenter	Comment Date	Aesthetics	Agriculture	Air Quality/Energy/GHG	Biological Resources	Cultural/Tribal Resources	Geology/Soils/Minerals	Hazards/Hazardous Materials	Hydrology/Drainage	Land Use/Planning/Population	Noise/Vibration	Public Services/Recreation	Transportation	Utilities/Service Systems	Wildfire
Iris Anderson	06/09/2025									X					
Jill Weiner	06/09/2025	X			X		X	X		X	X		X		X
Mauricio Espinosa	06/09/2025	X					X	X	X	X	X		X		
Nancy Schenk	06/09/2025			X	X		X	X	X	X		X	X	X	X
Scott & Marylyn Hannon	06/09/2025	X											X		
Taryn Espinosa	06/09/2025						X	X	X	X		X	X		X
Thom Taylor	06/09/2025				X		X	X	X	X		X	X		X
Rita Spitzer	06/10/2025									X			X		
Abba Kader	06/10/2025									X					
Andrea Esty	06/10/2025									X					
Annmarie Morahan	06/10/2025									X					
Caitlin Huggins	06/10/2025	X		X	X		X	X	X	X	X	X	X	X	X
Darla Kelly	06/10/2025	X								X					
Don & Sandi Anderson	06/10/2025									X			X		
Elmira Elahi	06/10/2025									X					
Grace Stancati	06/10/2025							X	X	X			X		
Hassan Hosseini	06/10/2025	X		X	X		X	X		X	X		X	X	X
Heather Breard	06/10/2025									X					
Jana Enzo	06/10/2025	X								X		X			
Janet Smith	06/10/2025									X					
Jen Montgomery	06/10/2025	X		X	X		X	X		X	X		X	X	X
Jessica Chomyn	06/10/2025									X			X	X	

Table 1-1 (continued)
Notice of Preparation Comment Matrix

Commenter	Comment Date	Aesthetics	Agriculture	Air Quality/Energy/GHG	Biological Resources	Cultural/Tribal Resources	Geology/Soils/Minerals	Hazards/Hazardous Materials	Hydrology/Drainage	Land Use/Planning/Population	Noise/Vibration	Public Services/Recreation	Transportation	Utilities/Service Systems	Wildfire
Jill Donaldson	06/10/2025									X					
John Long	06/10/2025	X								X					
Jordan Glenn	06/10/2025			X	X			X		X	X		X	X	
Katy O'Malley	06/10/2025									X			X		
Legita Law	06/10/2025									X					
Margaret Wold-Sackey	06/10/2025	X						X		X					
Mari Perini	06/10/2025									X					
Mary Mayer	06/10/2025									X					
Mike Smith	06/10/2025				X					X		X	X		
Naila Moloo	06/10/2025									X					
Renat Mennanov	06/10/2025									X					
Robert & Mary Seiffert	06/10/2025			X	X		X	X	X	X	X	X	X	X	X
Sam Smith	06/10/2025									X		X			
Sarah Levitt	06/10/2025									X					
Scott Hudnall	06/10/2025	X								X			X		
Shannon Art	06/10/2025									X					
Stephanie Katz	06/10/2025				X						X	X	X	X	X
Steve Montgomery	06/10/2025	X		X	X		X	X	X	X	X		X	X	X
Teresa Risch	06/10/2025									X					
Wayne Lindsay	06/10/2025									X					
Will Breard	06/10/2025									X		X			
Brent Andre	06/11/2025	X								X		X	X		

Table 1-1 (continued)
Notice of Preparation Comment Matrix

Commenter	Comment Date	Aesthetics	Agriculture	Air Quality/Energy/GHG	Biological Resources	Cultural/Tribal Resources	Geology/Soils/Minerals	Hazards/Hazardous Materials	Hydrology/Drainage	Land Use/Planning/Population	Noise/Vibration	Public Services/Recreation	Transportation	Utilities/Service Systems	Wildfire
Candi Homan	06/11/2025						X		X	X			X		
Greg Walsh	06/11/2025														
Jeff Pintar	06/11/2025	X		X			X		X	X	X	X			
Joy Andre	06/11/2025									X	X		X		
Julie Hall	06/11/2025									X			X	X	
Paul and Sonia Moser	06/11/2025	X			X			X		X			X		
Philip Pope	06/11/2025	X					X			X					
Phyllis Spragge	06/11/2025	X					X			X			X		X
Robert Short	06/11/2025						X	X	X	X	X	X	X		X
Raymond McPeak	06/12/2025									X			X		
Tyler Adamcik	06/12/2025				X					X			X		
Verbal Comments at Scoping Meeting – May 21, 2025															
Various Private Citizens	05/21/2025					X	X		X	X	X	X	X		

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2.0 PROJECT DESCRIPTION

2.1 PROJECT LOCATION

Laguna Niguel is located in the San Joaquin Hills in the southeastern corner of Orange County (refer to Figure 2-1, *Regional Location Map*). The City is approximately 14.7 square miles in land area and surrounded by several local jurisdictions including the City of Dana Point to the south; the City of San Juan Capistrano to the east; the County of Orange (Aliso and Woods Canyon Regional Park) and the City of Laguna Beach to the west; and the cities of Aliso Viejo, Laguna Hills, and Mission Viejo to the north. Interstate 5 and State Route 73 provide regional access to Laguna Niguel.

State law requires cities to adopt a comprehensive, long-term general plan for their geographic area known as the "Planning Area." This area includes a city's incorporated boundaries and potentially surrounding territories deemed relevant to its planning efforts, referred to as the "Sphere of Influence." The City of Laguna Niguel does not have any Sphere of Influence areas beyond its corporate boundaries, its Planning Area, as shown in Figure 2-2, *General Plan Planning Area*, encompasses only the City limits (approximately 9,464 acres).

2.2 ENVIRONMENTAL SETTING

Laguna Niguel is a community of approximately 64,291 residents.[1] The City and surrounding area are located within the traditional territory of the Gabrielino-Tongva, Juaneño, Luiseño, Cupeño, and Cahuilla peoples. Modern settlement of the area dates back to the Spanish period and Laguna Niguel land grant in the mid-19th century. Laguna Niguel derives its name from the Spanish word "Laguna," which means lagoon, and the word "Nigueli," which was the name of a Juaneño village located near Aliso Creek. The rancho was primarily used as grazing land for sheep and cattle. The genesis of today's Laguna Niguel was the establishment of the Laguna Niguel Corporation in 1959 by Cabot, Cabot and Forbes, who intended to create a master planned community. In 1962, the Laguna Niguel Corporation officially opened the residential communities of Monarch Bay and Niguel Terrace, comprising a total of 565 homes. The residential population had grown to 1,000 by 1964 and the Laguna Niguel Homeowner's Association was formed in 1966. In 1986, a community services district was formed following a residential vote. In November of 1988, voters overwhelmingly supported incorporation which became official on December 1, 1989, making Laguna Niguel the 29th city in Orange County. Today, the City is characterized as a master-planned community, primarily consisting of residential neighborhoods, an abundance of open space and parks, and supportive commercial, recreational, and civic uses.

CITY OF LAGUNA NIGUEL GENERAL PLAN

The City of Laguna Niguel's first General Plan was adopted in 1992. Except for the Housing and Land Use Elements, most of the elements are original per the 1992 adoption. Pursuant to the 2025 iteration of the

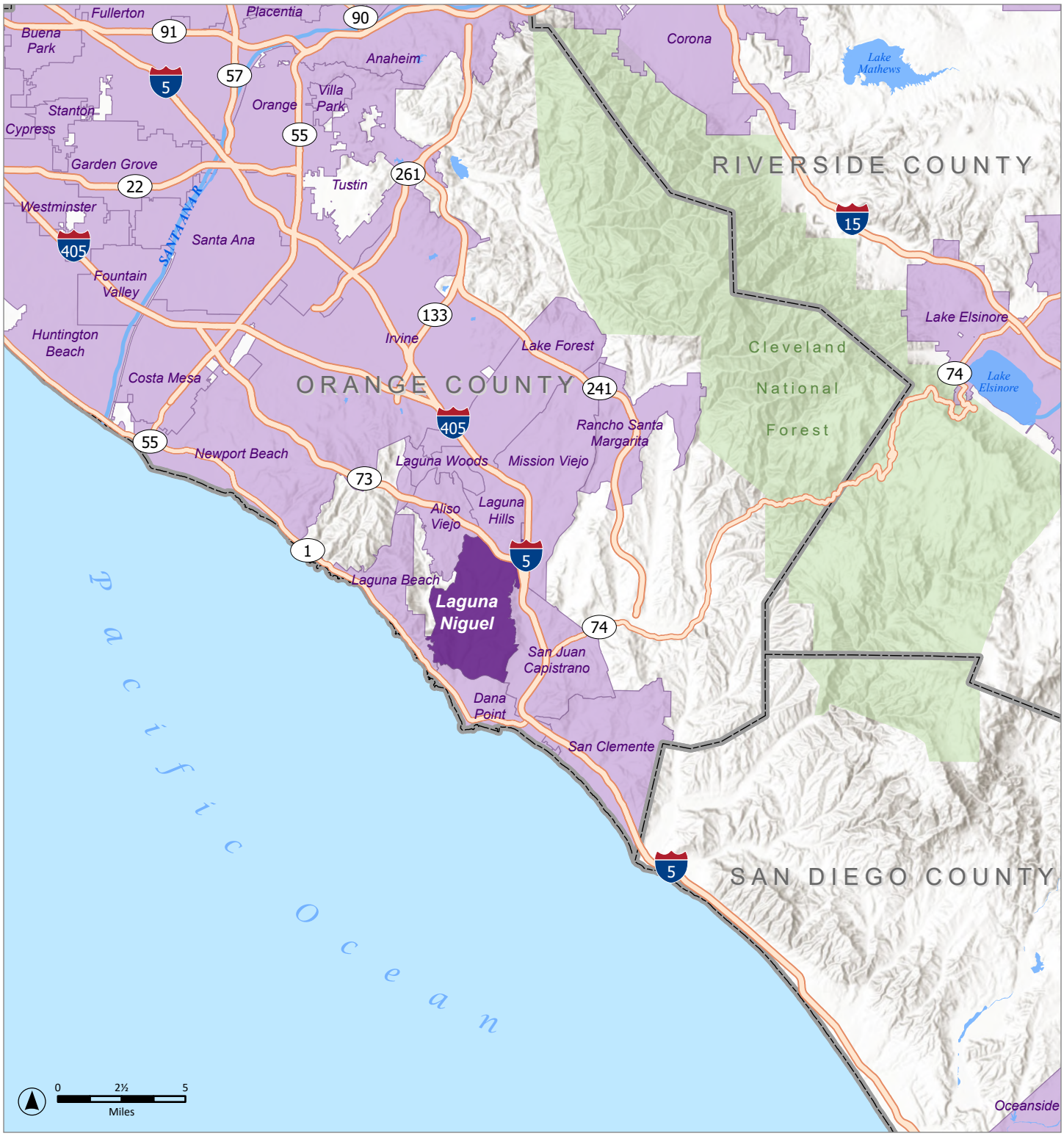
[1] California Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties, and the State, January 2021-2024*, May 2024.

Laguna Niguel Strategic Plan, Goal #5: Economic and Community Development, Strategy 4, a comprehensive update of the City's General Plan is identified as an action item to be completed in 2025.

City of Laguna Niguel Existing General Plan Land Use Designations and Land Use Map

The City's existing General Plan Land Use Map (Figure 2-3, *Existing General Plan Land Use Map*) identifies land use designations within the Planning Area. These land use designations identify the types and nature of development allowed throughout the City. There are nine broad categories of land use designations listed and described below. Some parcels have more than one designation (where essentially two designations are combined and both applicable to a parcel), as shown on Figure 2-3.

1. **Residential Detached:** Intended to provide for the development of one detached single-family dwelling unit per individual lot/parcel.
2. **Residential Attached:** Intended to provide for the development of attached single-family residential dwelling units, as well as multi-family attached townhomes, apartments, and condominium projects on a single or multiple legal lots/parcels.
3. **Neighborhood Commercial:** Intended to provide for a variety of neighborhood-serving commercial uses. A typical neighborhood commercial center (generally between one and 10 acres) consists of several small retailers, restaurants, and/or personal service uses that provide daily convenience goods and services.
4. **Community Commercial:** Intended to provide for a diverse range of commercial uses serving the entire community. Community commercial centers are larger planned shopping complexes which provide a broader range of goods and services and serve a greater trade area than neighborhood centers.
5. **Professional Office:** Intended to provide for professional offices, corporate headquarters, research and development, and administrative offices. Other uses that are determined to be compatible with the primary use, such as limited supporting retail operations may also be allowed.
6. **Public/Institutional:** Intended to provide for a wide range of public, quasi-public, and special purpose facilities that provide various governmental or social services to the community.
7. **Parks and Recreation:** Intended to provide for active recreational uses and activities within open space areas. Such uses include ballfields and other playing fields; active parks; sports courts and playgrounds; and community and neighborhood recreational facilities. Passive recreational activities may also be included as an ancillary part of the recreation complex. In selected situations, cultural facilities such as theaters, museums, or other similar specialized uses with a recreational value may fit with this designation.
8. **Open Space:** Intended to preserve areas for passive recreation, visual enhancement, or resource conservation. These areas may include natural resources, undeveloped canyons and hillsides, landscaped slopes or buffers, and trails. Active sports or other organized recreational activities are generally discouraged in these areas. This designation includes those areas of the community that are primarily open and unimproved, except for recreational, or other public use features, such as trails, view areas, benches, and picnic tables.
9. **Industrial/Business Park:** Intended to provide for a variety of compatible light manufacturing, wholesaling and office uses supportive of a contemporary business center environment.



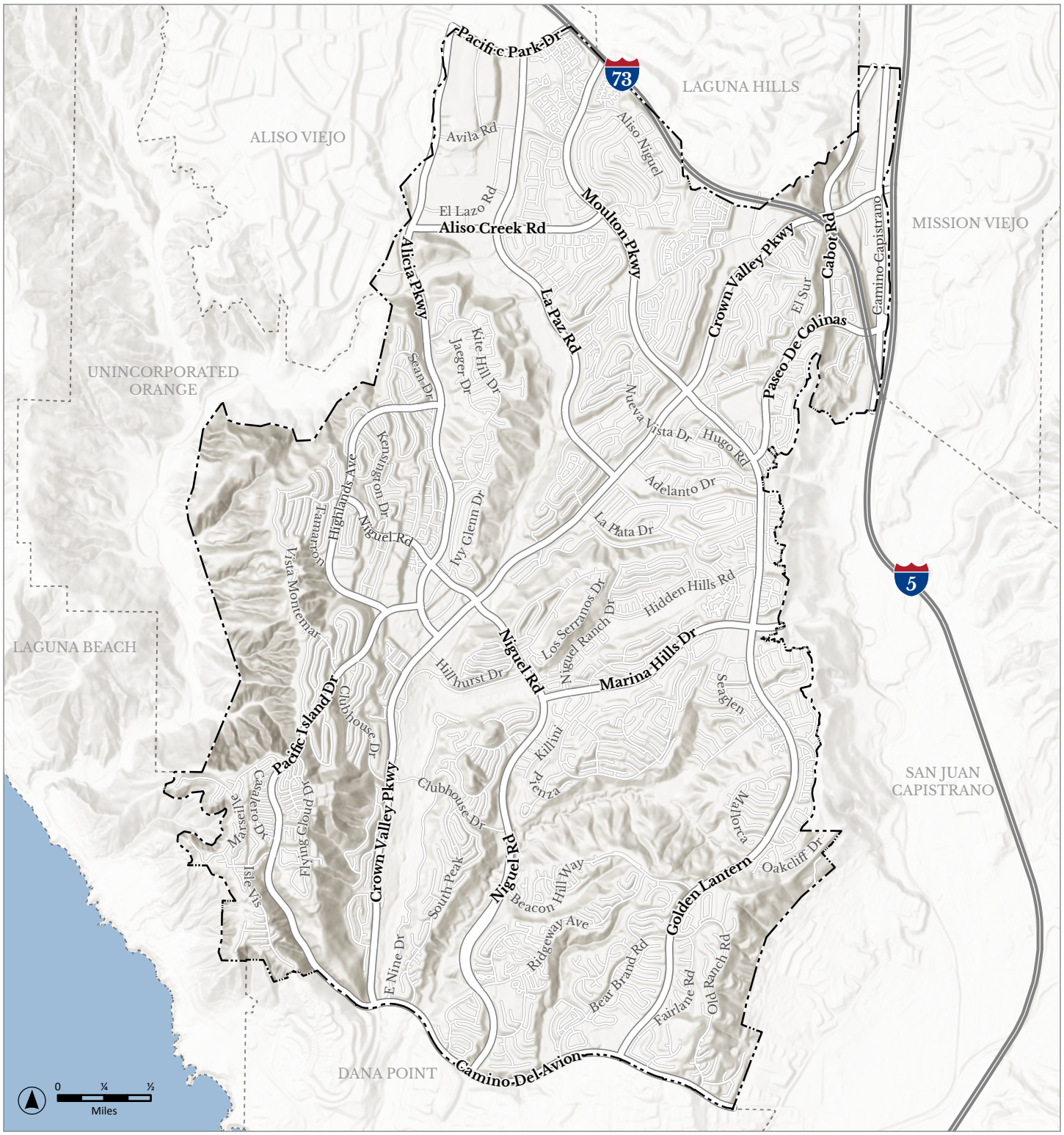
Data sources: California State Geoportal; USGS Transportation.

Prepared for the City of Laguna Niguel by De Novo Planning Group
March 13, 2025

LEGEND

- City of Laguna Niguel
- Other Incorporated Areas
- County Boundary
- National Forest

Figure 2-1.
Regional Location Map



Data sources: City of Laguna Niguel; Orange County GIS.

Prepared for the City of Laguna Niguel by De Novo Planning Group
March 13, 2025.

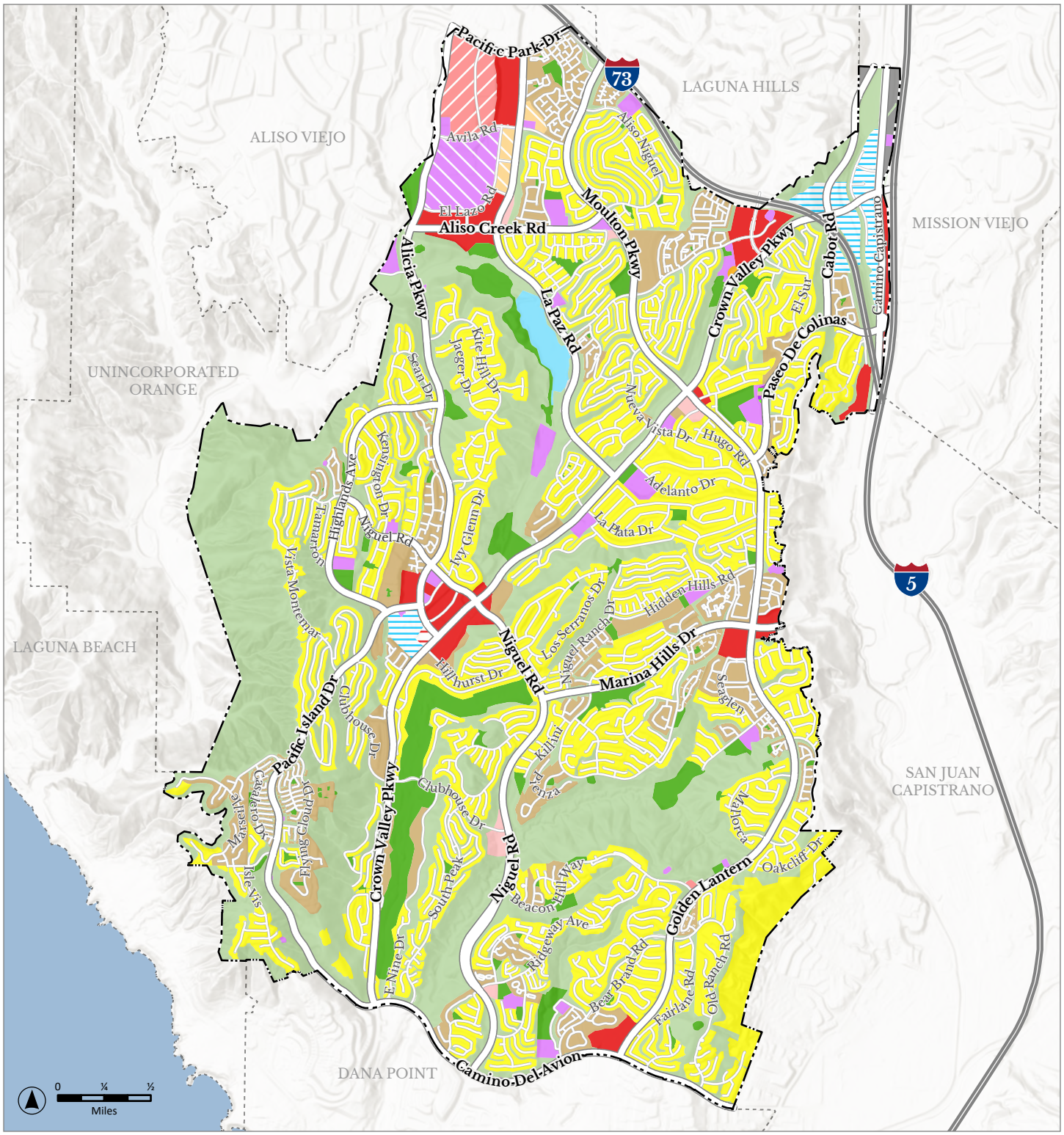
LEGEND

Laguna Niguel City Boundary

Other Jurisdictions

Figure 2-2.

General Plan Planning Area



Data sources: City of Laguna Niguel Official General Plan Map, 9-11-2023; Orange County GIS.

Prepared for the City of Laguna Niguel by De Novo Planning Group
March 12, 2025.

LEGEND

- Laguna Niguel City Boundary
- RD: Residential Detached
- RA: Residential Attached
- CN: Neighborhood Commercial
- CC: Community Commercial
- PO: Professional Office
- PI: Public/Institutional
- PR: Parks and Recreation
- OS: Open Space
- I/BP/PO/CC: Industrial/Business Park; Professional Office; Community Commercial
- CC/PO: Community Commercial; Professional Office
- CC/PO/PI: Community Commercial; Professional Office; Public/Institutional
- PI/PO: Public/Institutional; Professional Office
- PO/I/BP: Professional Office; Industrial/Business Park
- CC/PO/PI/RA: Community Commercial; Professional Office; Public/Institutional; Residential Attached
- PI/RA/PR: Public/Institutional; Residential Attached; Parks and Recreation
- Water

Figure 2-3.

Existing General Plan Land Use Map

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Community Profile and Sub-profile Areas

For comprehensive planning purposes, the existing General Plan divides Laguna Niguel into 14 Community Profile Areas and 103 Sub-profile Areas. The 14 Community Profile Areas were delineated based on factors such as land use types, neighborhoods, major streets, natural features, homeowners' association boundaries, and Traffic Analysis Zones (TAZ). The current Community Profile Map for the City is presented in Figure 2-4, *Existing Community Profile Areas*. The Land Use Chapter of the existing General Plan includes summaries of existing and projected development buildout for each Sub-profile Area. Development applications that exceed the land use limits within their respective Sub-profile Area require a General Plan Amendment.

Opportunity Areas

The existing General Plan identifies three Opportunity Areas that offer special economic and community development opportunities. The existing Opportunity Areas (1, 2, and 3, as described below) are within Community Profile Areas 1, 4, and 14, respectively, as indicated in Figure 2-4. It is noted that the General Plan Update proposes to replace these three existing Opportunity Areas with three new Opportunity Areas for targeted growth; refer to Section 2.5.3 for further discussion regarding the proposed Opportunity Areas and Overlays.

Opportunity Area 1 (Community Profile Area 1): Country Village/Narland Business Center. The Country Village/Narland Business Center area is located in the northwest corner of the City, south of Pacific Park and east of Alicia Parkway. This area was envisioned to be the City's largest business, commercial, and retail hub.

At the time of the existing General Plan's adoption, this opportunity area was designated for a mix of Community Commercial, Professional Office, Industrial/Business Park, and Public/Institutional land uses. A significant portion of the area, previously undeveloped, was subsequently developed with the Marketplace at Laguna Niguel and major big-box retailers (Walmart, Costco, and Kohl's). The General Plan also envisioned the creation of public plazas and gathering spaces along with the expansion of the Chet Holifield Federal Building (CHFB), Birtcher Business Center (comprised of the Laguna Niguel Promenade, Laguna Niguel Business Center, and Laguna Design Center), and Aliso Village properties.

Opportunity Area 2 (Community Profile Area 4): Camino Capistrano/Cabot Road Business Area. The Camino Capistrano/Cabot Road Business area (also referred to as the Laguna Niguel Gateway Area) is located in the northeast corner of the City near the I-5 Freeway and includes the Laguna Niguel/Mission Viejo Metrolink transit station. This area is governed by the Gateway Specific Plan, originally adopted in 1999.

At the time of the Specific Plan's original adoption, the area was designated for Community Commercial, Professional Office, Industrial/Business Park, and Public/Institutional uses. In November 2011, the Gateway Specific Plan was updated to add Residential Attached and Mixed-Use land use designations in support of market demands and trends toward transit-oriented multi-family and mixed-use development.

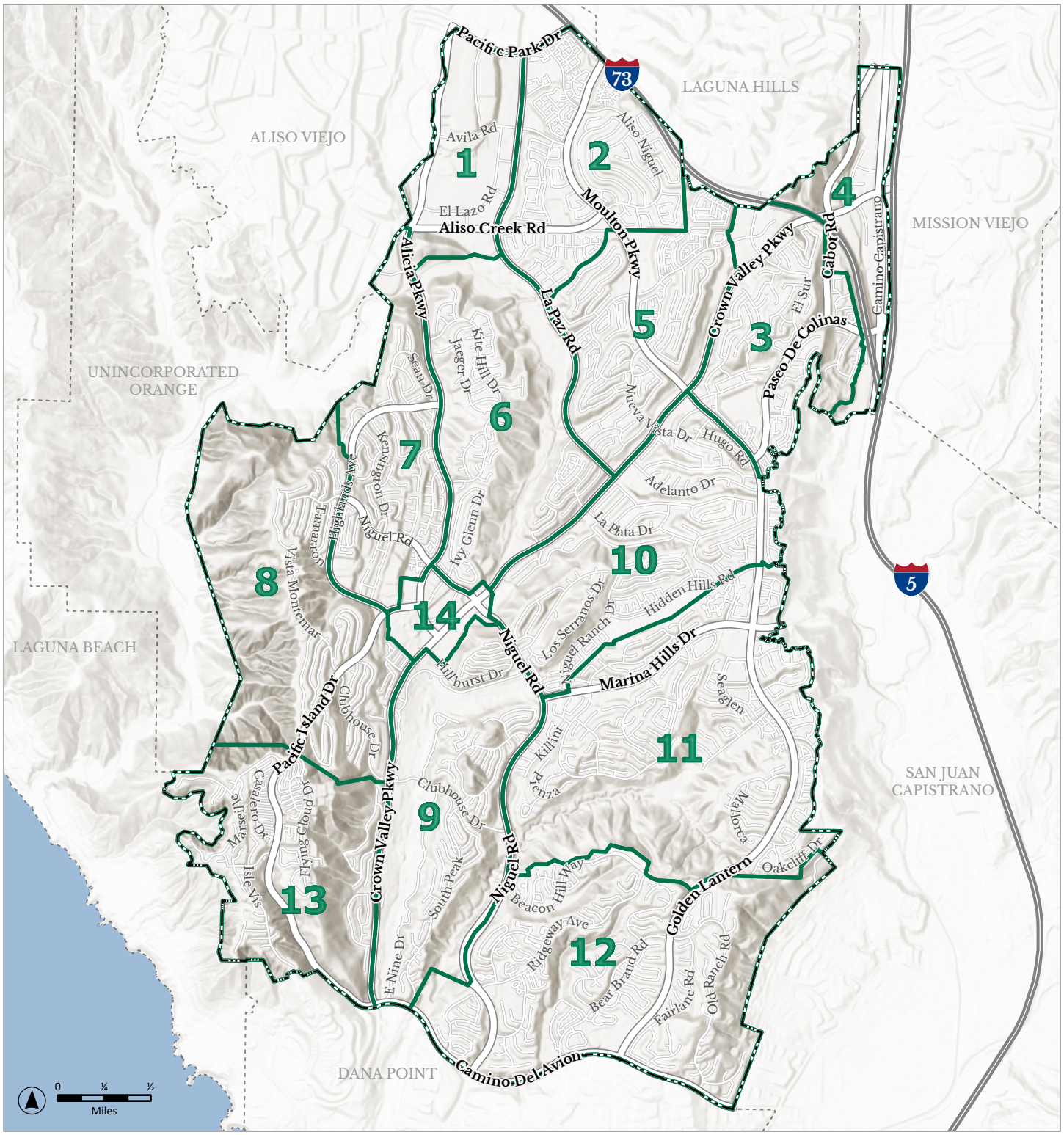
Opportunity Area 3 (Community Profile Area 14): Town Center. The Town Center area is centrally located and generally bound by Niguel Road, Crown Valley Parkway, and Pacific Island Drive; Alicia Parkway runs

through its center. This area, which includes Laguna Niguel City Hall and property owned by the County of Orange, was envisioned as a special focal point for the City.

The Laguna Niguel City Center Mixed Use Project, approved by the City Council on June 21, 2022, set a foundation for an updated "downtown" vision within this opportunity area. Prioritizing placemaking, the planned project incorporates specialty retail, restaurants, office, community-oriented event/programmable spaces, integrated residential apartment homes, a new community library, and extensive walkable open spaces, paseos, and plazas. This approved project has the potential to serve as a catalyst leading to broader redevelopment, transforming the area's aging and fragmented commercial properties into a thriving community hub blending complementary land uses within a walkable, pedestrian-friendly environment.

CITY OF LAGUNA NIGUEL ZONING ORDINANCE

The City's Zoning Ordinance (Zoning Code) is codified in Title 9, *Planning and Zoning*, of the Laguna Niguel Municipal Code. The Zoning Code is intended to guide the development of the City in an orderly manner, implement the policies of the General Plan, protect and enhance the quality of the natural and built environment, promote the public health, safety and general welfare by regulating the use of land and buildings and the location and basic form of structures, and provide the physical, environmental, economic, and social advantages that result from the orderly planned use of land resources.



Data sources: City of Laguna Niguel; Orange County GIS.

Prepared for the City of Laguna Niguel by De Novo Planning Group
March 14, 2025.

LEGEND

- Laguna Niguel City Boundary
- Other Jurisdictions
- Community Profile Areas

Figure 2-4.

Existing Community Profile Areas

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2.3 PROJECT BACKGROUND

California Government Code Section 65300 et seq. requires all counties and cities to adopt a comprehensive, long-term general plan for the physical development of its planning area. The General Plan acts as a "constitution" for development and is the jurisdiction's lead legal document in relation to growth, development, and resource management issues. The General Plan must include land use, circulation, housing, conservation, open space, noise, safety, and environmental justice elements or topics, as specified in Government Code Section 65302, to the extent that the issues identified by State law exist in a city's planning area.

The City of Laguna Niguel proposes a comprehensive update to its General Plan to address the requirements of State law and the relevant items addressed in Government Code Section 65300 et seq. The General Plan Update (Project) will incorporate the necessary State-mandated elements. The City of Laguna Niguel is not required to include an environmental justice element because there are no identified disadvantaged communities within the City, and the City's 2021-2029 Housing Element was certified by the Department of Housing and Community Development (HCD) on February 22, 2024, and is not part of this update. The City's General Plan will also include the following optional elements: Economic Development and Public Facilities and Services.

State planning and zoning law (California Government Code Section 65000 et seq.) requires development regulations (e.g., zoning and subdivision standards) to be consistent with the general plan and any applicable specific plans, area plans, master plans, and other related planning documents. Amendments to the general plan may trigger corresponding changes in the zoning ordinance within a reasonable time to ensure consistency between the revised future land use designations in the general plan (if any) and the permitted uses or development standards of the zoning ordinance (Gov. Code Section 65860, subd. [c]). Thus, the Zoning Code is effectively the principal tool for implementing the City's General Plan, and by State law, must be consistent with the General Plan. Amendments to the City's Zoning Code would occur subsequent to adoption of the General Plan Update and are not part of this Project.

2.4 STATEMENT OF OBJECTIVES

The following objectives have been identified for the update to the General Plan:

1. Preserve, protect, and enhance Laguna Niguel's existing residential neighborhoods;
2. Promote residential growth that includes a diverse range of housing development options and densities, ensuring that residents across income levels, age groups, and those with special needs can live within the community;
3. Promote redevelopment in Opportunity Areas that provide economic and community benefits through job creation, enhanced retail and restaurant spaces, and the incorporation of public gathering spaces;
4. Advance economic development policies that support existing local businesses, attract new businesses, promote job growth, and avoid vacant buildings or underutilized commercial sites;

5. Ensure new developments incorporate well-designed site planning, high-quality architecture, and functional outdoor spaces, while ensuring they are compatible with the surrounding setting in terms of land uses, scale, and aesthetics;

6. Ensure new development provides positive fiscal benefit to the City and contributes to new and existing infrastructure;

7. Preserve, protect, and enhance an integrated network of natural and man-made parks and open spaces that supports conservation of natural resources and recreational opportunities;

8. Maintain adequate, reliable, and essential public infrastructure and facilities, including transportation and utilities to support both existing and future development;

9. Maintain a Circulation Plan that fosters a safe and efficient roadway network by minimizing congestion and providing acceptable operation and level of service for vehicles at intersections and roadways; and

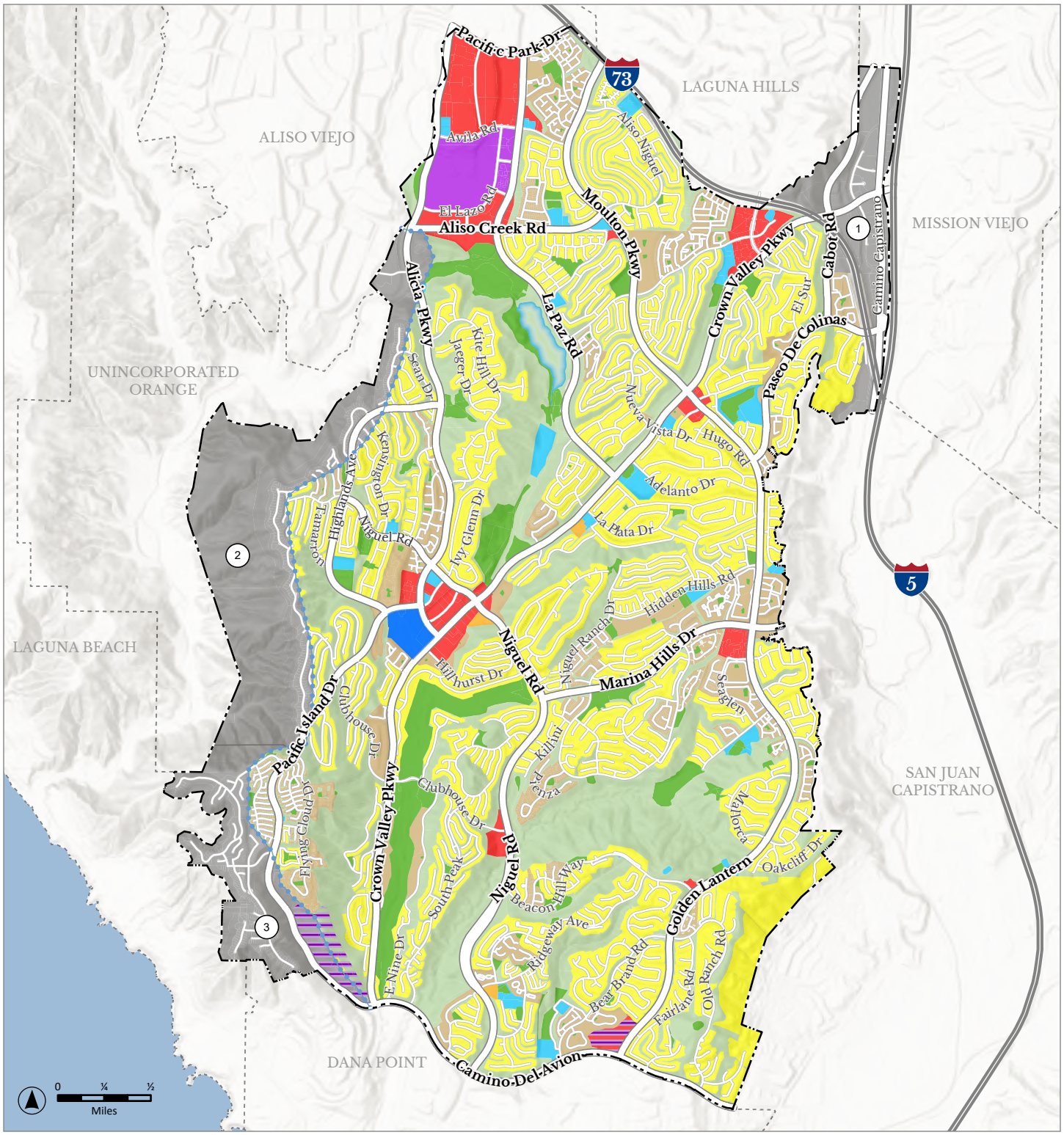
10. Maintain and enhance the City's active transportation network to facilitate walking, bicycling, and public transit, improving multimodal connectivity throughout the City.

2.5 PROJECT CHARACTERISTICS

The City of Laguna Niguel's comprehensive update to its existing General Plan (herein referred to as the "General Plan Update," "Project" or "proposed Project"), addresses State law requirements and relevant items addressed in Government Code Section 65300 et seq. The General Plan Update will guide the City's development and conservation through land use objectives and policy guidance. The General Plan is intended to be an expression of the community's vision for the City and constitutes the policy and regulatory framework by which future development projects will be reviewed and public improvements will be implemented. The Guiding Principles for the General Plan Update include:

- Thriving Community
- Strong and Resilient Economy
- Environmental Stewardship
- Connecting People and Places
- Innovation for a Better Future

The General Plan Update includes a comprehensive set of goals and policies, organized into seven new elements (plus the Housing Element), including a revised Land Use Map (refer to Figure 2-5, *General Plan Update Land Use Map*). The goals and policies provide guidance to the City on how to direct change and manage growth, infrastructure, and natural resources over a 20-year planning horizon. The General Plan Update also addresses additional elements related to the physical development of the City. The degree of specificity and level of detail of the discussion of each General Plan element need only reflect local conditions and circumstances.



Data sources: City of Laguna Niguel Official General Plan Map, 9-11-2023; Orange County GIS.

Prepared for the City of Laguna Niguel by De Novo Planning Group
August 11, 2025.

LEGEND

- Laguna Niguel City Boundary
- Laguna Niguel Lake
- Coastal Zone Boundary

General Plan Land Use

- RD: Residential Detached
- RA: Residential Attached
- GC: General Commercial
- BP: Business Park
- MCF: Managed Care Facility
- PR: Parks and Recreation
- OS: Open Space
- PI: Public Institutional
- CC: Civic Center
- (#) SP: Specific Plan
  1. Laguna Niguel Gateway Specific Plan
  2. Aliso Creek Specific Plan/Local Coastal Program
  3. South Laguna Specific Plan/Local Coastal Program

Overlays

- Opportunity Area Overlay 1
- Opportunity Area Overlay 2
- Opportunity Area Overlay 3
- Hospitality Overlay

Figure 2-5.

General Plan Update Land Use Map

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2.5.1 GENERAL PLAN UPDATE ELEMENTS

As part of the General Plan Update, some of the elements are renamed and reorganized, including combining topical areas, as described and summarized below.

Land Use Element

The Land Use Element serves as a comprehensive blueprint for the physical development of Laguna Niguel. It establishes a framework for the location, character, and intensity of both existing development and future strategic growth, shaping where people live, work, play, and shop. The Land Use Element includes the Land Use Map, which identifies land use designations for each parcel in the Planning Area (Figure 2-5); refer to Section 2.5.2, below for further discussion regarding the land use designations.

Mobility Element

The Mobility Element (formerly Circulation) seeks to support travel throughout the City by way of a safe, cohesive, interconnected transportation network. It correlates closely with the Land Use Element and identifies the general locations and extent of existing and proposed major thoroughfares, transportation routes, and alternative transportation facilities necessary to support Laguna Niguel's mobility network, which includes streets (travel lanes, bicycle lanes, sidewalks, etc.), trails, and transit (bus and train). The Circulation Plan is designed to create a comprehensive roadway network to accommodate the future growth outlined in the Land Use Element.

Resource Management Element

The Resource Management Element (formerly Open Space and Parks) combines the state-mandated conservation and open space elements and focuses on protecting and enhancing Laguna Niguel's natural and human-made resources. Overall, the Resource Management Element supports the community's commitment to environmental stewardship through mindful conservation efforts aimed at safeguarding both natural and man-made resources for future generations.

Public Safety Element

The Public Safety Element (formerly Seismic/Public Safety) serves to identify the risks posed by various hazards, and to reduce the potential for injury, loss of life, property damage, and environmental damage caused by natural and manmade hazards. It also addresses the impact of climate change, which is likely to intensify many of these risks. The Public Safety Element is a State-mandated element that addresses protection from short- and long-term risks associated with hazards and other required safety topics to the extent they exist in the City. It addresses locally relevant safety issues, including hazardous waste and materials, police protection, and emergency preparedness, as well as interrelated considerations in the context of fire and geological hazards.

Noise Element

As required by State law, the Noise Element identifies and assesses noise levels from major sources to inform land use planning and reduce residents' exposure to excessive noise.

Economic Development Element

The Economic Development Element aims to guide the City's future policy decisions to support and strengthen the local economy. Although not required for a General Plan, the City has included this element to recognize that fostering economic vibrancy and resilience is essential to planning for Laguna Niguel's future.

Public Facilities and Services Element

The Public Facilities and Services Element focuses on maintaining and expanding existing infrastructure and community services. While not specifically required by State law for inclusion in the General Plan, the Public Facilities and Services Element plays a key role in ensuring the infrastructure and public services needs of the Laguna Niguel community. This Element aligns with the topics addressed in other General Plan Elements, specifically the City's Land Use, Mobility, Resource Management, and Public Safety Elements.

Housing Element

The Housing Element is the City's primary policy guide for the maintenance, improvement, and development of housing. The Housing Element indicates the need for housing in the community in terms of affordability, availability, adequacy, and accessibility, establishes a strategy to address housing needs, and identifies a series of specific housing program actions to meet community needs at all income levels for the 6th Cycle Housing Element Planning Period (2021-2029). The City's 2021-2029 Housing Element was certified by HCD in February 2024; as such, this Element is not part of the General Plan Update Project.

Existing and Proposed General Plan Elements

Existing General Plan Elements	General Plan Update Elements
• Land Use	• Land Use
• Circulation	• Mobility
• Open Space and Parks	• Resource Management
• Public Facilities	• Public Facilities and Services
• Seismic/Public Safety	• Public Safety
• Noise	• Noise
• Housing	• Housing
• Growth Management	• Economic Development
• Community Service Standards	

Note: *The Housing Element is not part of the General Plan Update Project.

2.5.2 LAND USE DESIGNATIONS AND LAND USE MAP

Table 2-1, *Proposed General Plan Land Use Designations*, summarizes land uses included in the General Plan Update, followed by a description of each proposed designation. The General Plan Land Use Map identifies land use designations for each parcel within the Planning Area (Figure 2-5).

Table 2-1
Proposed General Plan Land Use Designations

General Plan Land Use Designations	Within Planning Area	
	Acres	% of Total Acres
Residential Detached	2,569.13	27.1%
Residential Attached	827.29	8.7%
General Commercial	316.60	3.3%
Business Park	101.06	1.1%
Public Institutional	132.36	1.4%%
Civic Center	28.27	0.3%
Managed Care Facilities	11.36	0.1%
Open Space	2,252.51	23.8%
Parks and Recreation	477.70	5.0%
Specific Plan*	1,201.61	12.7%
Other**	1,545.88	16.3%
Total	**9,463.77**	**100.0%**
Opportunity Area Overlay 1	--***	--***
Opportunity Area Overlay 2	--***	--***
Opportunity Area Overlay 3	--***	--***
Hospitality Overlay	74.11	0.80%

Note: Acreages are rounded to the nearest hundredth.

* The Specific Plan Land Use Designation includes a range of different land uses within each of the City's Specific Plans, such as residential, commercial, public institutional, open space, and parks/recreation.

** Acreage includes undevelopable land such as water and public rights-of-way.

*** The Opportunity Area Overlays are not applied to any areas at this time. Application of these Overlays to specific property requires consistency with established criteria and subsequent legislative actions as described further below.

Residential Detached (RD)

The RD designation is intended to provide for the development of detached single-family residential dwelling units. This designation ensures residential development that maintains the character of Laguna Niguel's traditional suburban neighborhoods.

Residential Attached (RA)

The RA designation is intended to provide for the development of higher-density attached single-family residential dwelling units, as well as multi-family attached townhomes, apartments, and condominium projects. This designation allows for more diverse and compact residential options, supporting a range of housing needs and preferences within the community.

General Commercial (GC)

The GC designation is intended to provide for a diverse range of commercial uses serving both neighborhood and regional needs. Typical uses include retail stores, restaurants, entertainment venues (e.g., cinemas, bowling alleys), professional offices (medical, financial, administrative, corporate), automobile-related businesses (sales, service, gas stations), personal service establishments, fitness and recreational facilities, private educational institutions and their support facilities, health care facilities, and hospitality establishments. This broad designation fosters a vibrant commercial environment, catering to a wide range of consumer needs and supporting economic diversity within the designated areas.

Business Park (BP)

The BP designation is intended to provide for business growth, innovation, and economic development for a range of uses, such as professional offices, corporate headquarters, research and development facilities, incubator businesses, and administrative offices. Additionally, compatible light manufacturing, assembly, storage, and wholesale operations may be permissible. Other uses that are determined to be compatible with the primary use, such as limited supporting retail operations may also be allowed.

Public Institutional (PI)

The PI designation is intended to provide for a wide range of public, quasi-public, and special purpose private facilities that provide governmental or social services to the community. This may include, for example, religious institutions, schools, public utilities, government offices, fire stations, sheriff sub-stations, libraries, museums, community centers, solid and liquid waste disposal facilities, and other public uses.

Civic Center (CC)

The CC designation applies to the Laguna Niguel Civic Center and is intended to provide for a mixed-use civic center campus that integrates public facilities (e.g., city hall, fire station, sheriff sub-station, library) with private development featuring retail shops, restaurants, offices, and residential apartments. A key emphasis is the inclusion of vibrant outdoor open spaces, such as dining areas, a “town green,” paseos, and plazas that create a walkable community-oriented "downtown" environment that blends civic, residential, and commercial uses.

Managed Care Facility (MCF)

The MCF designation is intended to provide for facilities that offer various levels of care for senior citizens (e.g., assisted living facilities, skilled nursing homes, memory care centers, and continuing care retirement communities). These areas uniquely blend residential and commercial land use characteristics, differentiating them from other land use categories. By combining residential amenities with medical and

support services, MCFs offer specialized environments that address the evolving needs of the senior population within the community.

Open Space (OS)

The OS designation is intended to preserve natural and conservation areas, undeveloped hillsides and canyons, landscaped slopes, buffers, and trails. These areas are primarily for passive recreation, visual enhancement, and/or resource conservation. Active sports and organized recreational activities are generally discouraged in these areas. This designation also applies to parts of the community that remain predominantly open and undeveloped, aside from ancillary amenities such as trails, benches, and picnic tables for public enjoyment.

Parks and Recreation (PR)

The PR designation is intended to provide for active recreational uses, such as ball fields and sports courts, active parks, playgrounds, and other community or neighborhood recreational facilities. Passive recreational amenities and trails may also be incorporated as complementary elements of the recreation complex. In some cases, cultural facilities such as theaters, museums, or other similar specialized features with a recreational value may align with this designation. The PR designation allows for the development and maintenance of recreational facilities that serve the diverse needs of the community, promoting health, social interaction, and quality of life for residents of all ages and abilities.

Specific Plan (SP)

The Specific Plan designation provides the City the ability to establish detailed policies, development and design standards, and other criteria for the development or redevelopment of a particular area. In accordance with State law, specific plans generally consist of a land plan, circulation plan, development standards, design guidelines, and a phasing plan. They also set forth detailed implementation programs necessary to serve the planning area.

Overlays

While Laguna Niguel's base land use plan employs more traditional broad land use designations, planning tools such as overlays enable more strategic and adaptable planning for targeted growth areas. This nuanced approach allows Laguna Niguel to more effectively adapt to evolving social and economic goals, including attracting high-quality developments that benefit the community and stimulate revitalization and economic growth.

To ensure that development within these targeted growth areas aligns with the broader community vision, the base land use designation requirements govern each area, but additional development potential defined and facilitated by the overlay designation may be accessible if specific criteria are met, as outlined below.

Opportunity Areas and Overlays

The General Plan Update identifies three Opportunity Areas, each serving a distinct role that complements the broader community vision. These Opportunity Areas are targeted for considerable growth through the establishment of area-specific overlays. These "Opportunity Area Overlays," which may be applied

through separate legislative action, provide a pathway for potential redevelopment flexibility in exceedance of the maximum growth permitted by each base land use designation.

Opportunity Area 1 (The Marketplace at Laguna Niguel)

Opportunity Area 1 includes the Marketplace at Laguna Niguel shopping center. This area, totaling approximately 39 acres, is located in the City's northwest corner, bounded by Pacific Park Drive, Heather Ridge, Alicia Parkway, and a Wal-Mart property within Sub-profile Area 1I. The General Plan Land Use Map (Figure 2-5) designates the area as General Commercial.

Opportunity Area Overlay 1, if applied, would consist of the introduction of a mix of complementary land uses that would maximize the area's development potential and profile as a key gateway to Laguna Niguel. Provided the criteria outlined in the proposed Land Use Element are met, including but not limited to approval of multiple project-specific legislative actions, Opportunity Area Overlay 1 would increase the General Plan buildout limit for the area to 500 residential attached units and 500,498 square feet of commercial uses.

Opportunity Area 2 (The Chet Holifield Federal Building)

Opportunity Area 2 includes the CHFB site. This area, totaling approximately 88 acres, is bounded by Avila Road, Alicia Parkway, and El Lazo Road (including the northeast corner of Avila Road and Alicia Parkway) within Sub-profile Area 1C. The General Plan Land Use Map (Figure 2-5) designates the site as Business Park (86 acres) and Public Institutional (2 acres).

Opportunity Area Overlay 2, if applied, would consist of complete demolition of the existing building and full redevelopment of the site prioritizing the establishment of a thriving employment hub as the primary focus of a dynamic live-work-play environment. Absent application of Opportunity Area Overlay 2, no demolition of the CHFB would occur. Provided the criteria outlined in the proposed Land Use Element are met, including but not limited to approval of multiple project-specific legislative actions, Opportunity Area Overlay 2 would increase the General Plan buildout limit for the area to 500 residential attached units, a 120-room boutique hotel, and 910,000 square feet of commercial uses including more intensive medical related uses.

Opportunity Area 3 (Town Center)

Opportunity Area 3 includes the majority of the Town Center, totaling approximately 66 acres. This area includes the non-residential properties at the intersections of Crown Valley Parkway and Niguel Road as well as those fronting Crown Valley Parkway, Alicia Parkway, Town Center Drive, and Ivy Glenn Drive within Sub-profile Areas 14A, 14B, and 14D (Sub-profile Area 14C is excluded due to the City Hall and City Center Mixed-Use Project). The General Plan Land Use Map (Figure 2-5) designates this area as General Commercial (61 acres) and Public Institutional (5 acres).

Opportunity Area Overlay 3, if applied, would consist of a mix of complementary land uses that would maximize the area's development potential and incentivize its continuing evolution into a vibrant, interconnected city center. Provided the criteria outlined in the proposed Land Use Element are met, including but not limited to approval of multiple project-specific legislative actions, Opportunity Area

Overlay 3 would increase the General Plan buildout limit for the area to 500 residential attached units and 601,823 square feet of commercial uses.

Hospitality Overlay

The General Plan Update Land Use Map (Figure 2-5) identifies two Hospitality Overlay sites that could accommodate future high-quality hotel uses. These sites are located along the southern City limit within Community Sub-Profile Areas 12J and 13D. The sites were identified for the potential for expansive ocean and/or other territorial views. This overlay facilitates the development of high-quality hotels by encouraging greater flexibility regarding land use and development intensity.

To realize the development potential of the Hospitality Overlay, approval of multiple project-specific legislative actions is required.

2.5.3 COMMUNITY PROFILE AND SUB-PROFILE AREAS

The proposed Land Use Element continues to separate Laguna Niguel into 14 Community Profile Areas, as shown in Figure 2-6, *General Plan Update Community Profile Areas* and Figure 2-7, *General Plan Update Community Profile and Sub-Profile Areas*, to facilitate a manageable approach to community planning and land use implementation. The delineation of the 14 Community Profile Areas was based upon factors such as land use types, planning area boundaries, major streets, natural features, homeowners' association boundaries, and the Orange County Transportation Authority (OCTA) TAZ regional transportation modeling system.

The 14 Community Profile Areas and their respective Sub-profile Areas establish the baseline General Plan buildout limits, hereafter referred to as Maximum Development Intensities (MDIs). As detailed in Tables 2-2 through 2-15, the proposed MDIs are provided by Sub-profile Area, categorizing residential development by type (maximum detached or attached dwelling units) and maximum density, as well as commercial development by maximum square footage and maximum Floor Area Ratio (FAR). Additional land use specific MDIs are also provided for public institutional, hospitality, and managed care uses. The Community Profile Area summaries are for statistical purposes only. MDIs may not be transferred between Sub-profile Areas.

It is important to note that beyond MDIs, various factors influence parcel development. These include, but are not limited to, a parcel's physical characteristics, compatibility with surrounding uses, market conditions, infrastructure and access constraints, and historical development trends.

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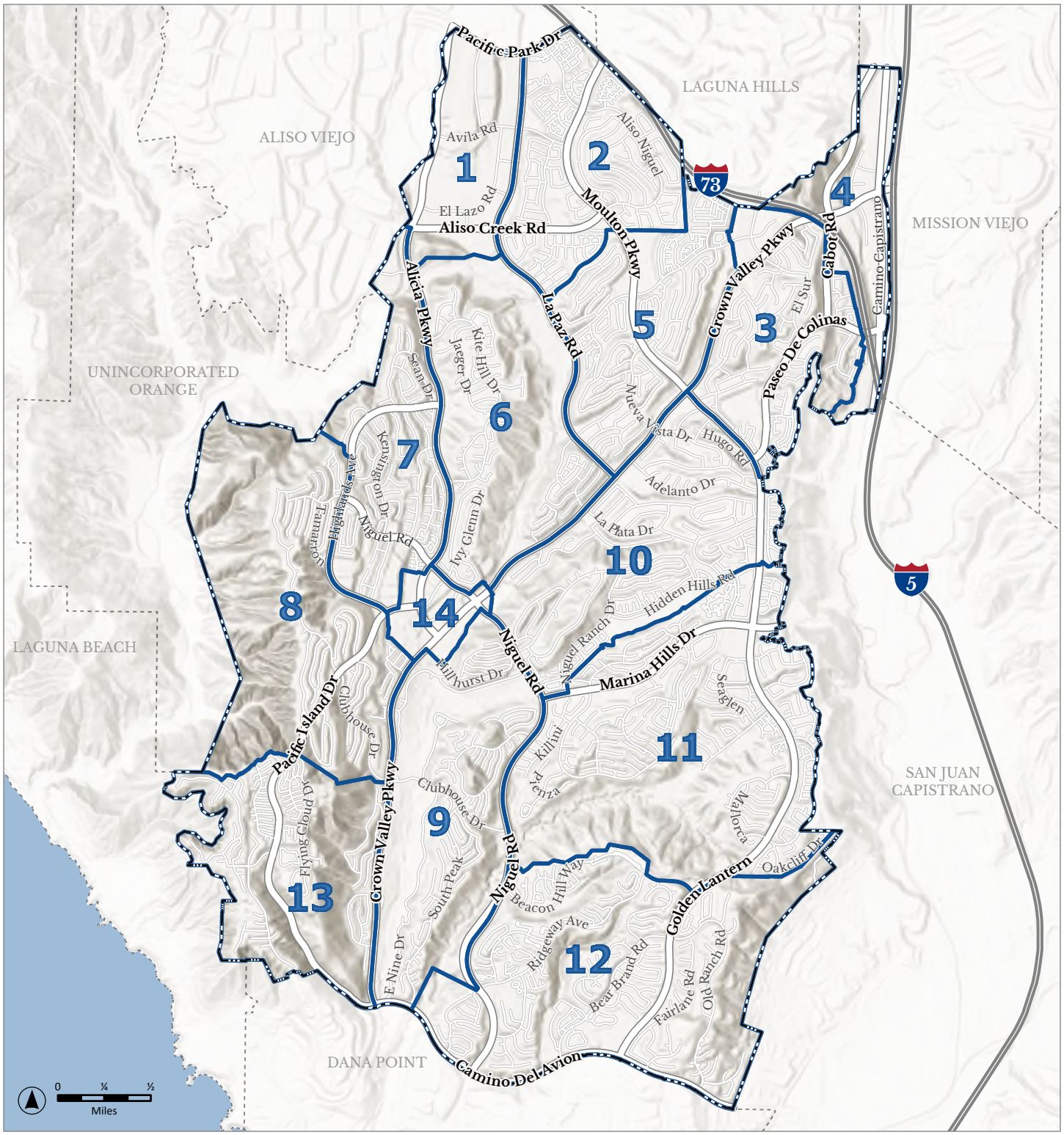


Data sources: City of Laguna Niguel; Orange County GIS.

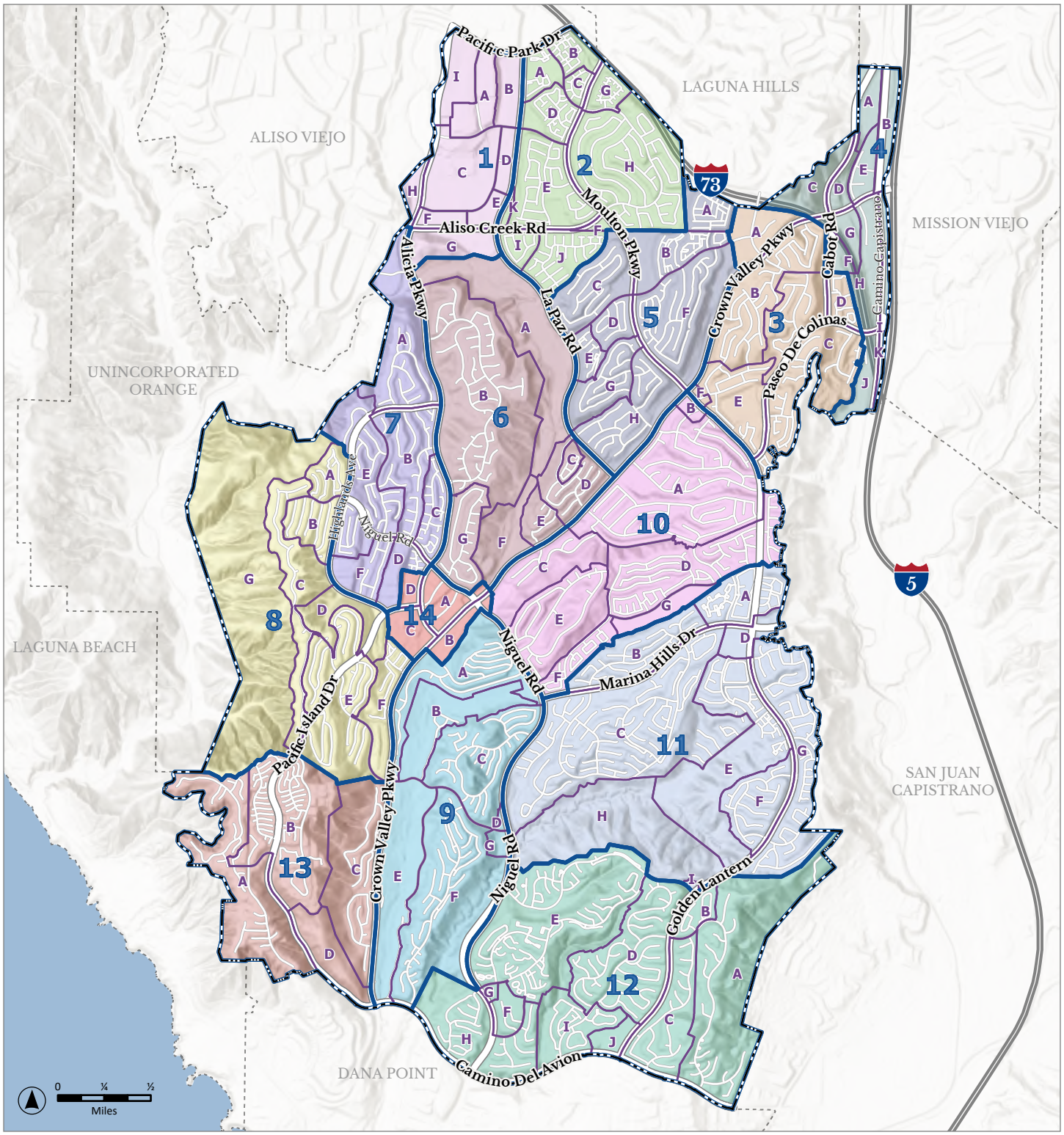
Prepared for the City of Laguna Niguel by De Novo Planning Group
August 11, 2025.

LEGEND

- Laguna Niguel City Boundary
- Other Jurisdictions
- Community Profile Areas

Figure 2-6.

General Plan Update Community Profile Areas



Data sources: City of Laguna Niguel; Orange County GIS.

Prepared for the City of Laguna Niguel by De Novo Planning Group
April 15, 2025.

LEGEND

- Laguna Niguel City Boundary
- Other Jurisdictions

Community Profile Areas

1 2 3 4 5 6 7 8 9 10 11 12 13 14

Community Sub-Profile Areas

A Community Sub-Profile Areas

Figure 2-7.

General Plan Update Community Profile and Sub-Profile Areas

Table 2-2
Community Profile Area 1

Sub-profile Area	Maximum Development Intensities							
	Residential Detached Units	Acreage	Residential Attached Units	Acreage	Density	Commercial Square Footage	Acreage	FAR
1A	0	0.00	0	0.00	0.00	426,000	41.24	0.24
1B	0	0.00	0	0.00	0.00	335,921	31.10	0.25
1C	0	0.00	0	0.00	0.00	1,050,580	88.28	0.27
1D	0	0.00	0	0.00	0.00	491,570	15.03	0.75
1E	0	0.00	0	0.00	0.00	161,261	12.83	0.29
1F	0	0.00	0	0.00	0.00	228,341	12.52	0.42
1G	0	0.00	0	0.00	0.00	133,690	14.56	0.21
1H	0	0.00	0	0.00	0.00	0	0.00	0.00
1I	0	0.00	0	0.00	0.00	350,626	39.42	0.20
Summary	**0**	**0.00**	**0**	**0.00**	**0.00**	**3,177,989**	**254.98**	**0.29**

Maximum Development Intensities for Public Institutional, Hospitality, & Managed Care Land Uses:
Sub-profile 1C: Chet Holifield Federal Building Mechanical Equipment

Table 2-3
Community Profile Area 2

Sub-profile Area	Maximum Development Intensities							
	Residential Detached Units	Acreage	Residential Attached Units	Acreage	Density	Commercial Square Footage	Acreage	FAR
2A	0	0.00	392	19.02	20.61	0	0.00	0.00
2B	0	0.00	372	15.19	24.49	0	0.00	0.00
2C	0	0.00	243	12.24	19.85	0	0.00	0.00
2D	0	0.00	311	29.88	10.41	22,506	3.97	0.13
2E	327	37.68	185	15.30	9.66	0	0.00	0.00
2F	0	0.00	0	0.00	0.00	0	0.00	0.00
2G	113	9.92	0	0.00	11.39	0	0.00	0.00
2H	939	119.55	0	0.00	7.85	0	0.00	0.00
2I	110	16.44	0	0.00	6.69	0	0.00	0.00
2J	303	30.93	0	0.00	9.80	0	0.00	0.00
2K	0	0.00	0	0.00	0.00	34,985	3.78	0.21
Summary	**1,792**	**214.52**	**1,503**	**91.63**	**10.76**	**57,491**	**7.75**	**0.17**

Maximum Development Intensities for Public Institutional, Hospitality, & Managed Care Land Uses:
Sub-profile D: Up to 1,440 sf OCFA Fire Station #39; up to 10,111 sf Chabad Jewish Center
Sub-profile E: Up to 21,000 sf AT&T Substation; Laguna Niguel Elementary School Capacity – up to 546 students
Sub-profile F: Up to 21,060 sf Sea Country Senior & Community Center
Sub-profile H: MNWD Water Storage Tank

Table 2-4
Community Profile Area 3

Sub-profile Area	Maximum Development Intensities							
	Residential Detached Units	Acreage	Residential Attached Units	Acreage	Density	Commercial Square Footage	Acreage	FAR
3A	0	0.00	0	0.00	0.00	489,111	34.24	0.32
3B	320	54.68	0	0.00	5.85	0	0.00	0.00
3C	539	118.50	192	29.11	4.95	0	0.00	0.00
3D	0	0.00	264	21.87	12.07	0	0.00	0.00
3E	174	37.06	30	2.45	5.16	0	0.00	0.00
3F	0	0.00	0	0.00	0.00	24,467	3.19	0.18
Summary	**1,033**	**210.24**	**486**	**53.43**	**5.76**	**513,578**	**38.43**	**0.31**

Maximum Development Intensities for Public Institutional, Hospitality, & Managed Care Land Uses:
Sub-profile A: MNWD Water Storage Tank; Niguel Hills Middle School Capacity – up to 1,499 students

Table 2-5
Community Profile Area 4

Sub-profile Area	Maximum Development Intensities							
	Residential Detached Units	Acreage	Residential Attached Units	Acreage	Density	Commercial Square Footage	Acreage	FAR
4A	0	0.00	0	0.00	0.00	76,480	3.10	0.57
4B	0	0.00	0	0.00	0.00	323,200	19.65	0.38
4C	0	0.00	220	36.02	6.11	121,968	*	0.08
4D	0	0.00	709	9.87	71.83	0	0.00	0.00
4E	0	0.00	1,118	18.48	60.50	126,463	*	0.00
4F	0	0.00	142	2.14	66.36	173,900	5.24	0.76
4G	0	0.00	142	15.28	9.29	247,639	*	0.37
4H	0	0.00	663	38.53	17.21	404,400	*	0.24
4I	0	0.00	0	0.00	0.00	138,740	16.90	0.19
4J	0	0.00	0	0.00	0.00	141,860	25.81	0.13
4K	0	0.00	0	0.00	0.00	58,150	3.07	0.43
Summary	**0**	**0.00**	**2,994**	**120.32**	**24.88**	**1,812,800**	**73.78**	**0.56**

Maximum Development Intensities for Public Institutional, Hospitality, & Managed Care Land Uses:
Sub-profile B: SDGE Substation
Sub-profile D: Watermark Laguna Niguel Managed Care Facility – up to 110 units
Sub-profile H: Laguna Niguel/Mission Viejo Metrolink Transit Station; up to 200-room hotel
Sub-profile K: Up to 150 hotel rooms, including 33-room existing hotel
*Acreage is recorded under "Residential Attached Units"; commercial uses are allowed and the FAR is calculated based on the "Residential Attached Units" acreage identified

Table 2-6
Community Profile Area 5

Sub-profile Area	Maximum Development Intensities							
	Residential Detached Units	Acreage	Residential Attached Units	Acreage	Density	Commercial Square Footage	Acreage	FAR
5A	0	0.00	423	19.98	21.17	0	0.00	0.00
5B	0	0.00	1,090	56.97	19.13	0	0.00	0.00
5C	233	31.87	0	0.00	7.31	17,082	1.70	0.23
5D	151	13.25	92	0.00	18.34	0	0.00	0.00
5E	0	0.00	176	15.80	11.14	0	0.00	0.00
5F	488	55.42	0	0.00	8.81	12,100	1.80	0.15
5G	210	27.89	0	0.00	7.53	0	0.00	0.00
5H	280	49.54	29	1.32	6.08	0	0.00	0.00
Summary	**1,362**	**177.97**	**1,810**	**94.07**	**11.66**	**29,182**	**3.50**	**0.19**

Maximum Development Intensities for Public Institutional, Hospitality, & Managed Care Land Uses:
Sub-profile C: Up to 27,662 sf Mission Lutheran Church
Sub-profile F: Marian Bergeson Elementary School Capacity – up to 698 students
Sub-profile H: SDG&E Metering Station

Table 2-7
Community Profile Area 6

Sub-profile Area	Maximum Development Intensities							
	Residential Detached Units	Acreage	Residential Attached Units	Acreage	Density	Commercial Square Footage	Acreage	FAR
6A	0	0.00	0	0.00	0.00	0	0.00	0.00
6B	629	120.02	0	0.00	5.24	0	0.00	0.00
6C	94	5.28	0	0.00	17.80	0	0.00	0.00
6D	200	23.70	0	0.00	8.44	0	0.00	0.00
6E	0	0.00	77	15.97	4.82	0	0.00	0.00
6F	0	0.00	0	0.00	0.00	0	0.00	0.00
6G	204	46.25	0	0.00	4.41	0	0.00	0.00
Summary	**1,127**	**195.25**	**77**	**15.97**	**5.70**	**0**	**0.00**	**0.00**

Maximum Development Intensities for Public Institutional, Hospitality, & Managed Care Land Uses:
Sub-profile A: MNWD Regional Sewage Treatment Plant
Sub-profile F: Up to 48,000 sf Crown Valley Park - Community Center; up to 30,460 sf Crown Valley Park - YMCA

Table 2-8
Community Profile Area 7

Sub-profile Area	Maximum Development Intensities							
	Residential Detached Units	Acreage	Residential Attached Units	Acreage	Density	Commercial Square Footage	Acreage	FAR
7A	186	33.38	0	0.00	5.57	0	0.00	0.00
7B	322	48.71	48	4.75	6.92	0	0.00	0.00
7C	0	0.00	358	35.16	10.18	0	0.00	0.00
7D	0	0.00	416	29.88	13.92	0	0.00	0.00
7E	374	67.54	170	0.00	8.05	0	0.00	0.00
7F	126	18.30	0	0.00	6.89	0	0.00	0.00
Summary	**1,008**	**167.93**	**992**	**69.80**	**8.41**	**0**	**0.00**	**0.00**

Maximum Development Intensities for Public Institutional, Hospitality, & Managed Care Land Uses:
Sub-profile A: Up to 27,600 sf Church of Jesus Christ of Latter-day Saints
Sub-profile E: Up to 24,388 sf Laguna Niguel Seventh-Day Adventist Church
Sub-profile F: Moulton Elementary School Capacity – up to 788 students

Table 2-9
Community Profile Area 8

Sub-profile Area	Maximum Development Intensities							
	Residential Detached Units	Acreage	Residential Attached Units	Acreage	Density	Commercial Square Footage	Acreage	FAR
8A	0	0.00	255	17.02	14.98	0	0.00	0.00
8B	138	21.43	0	0.00	0.00	0	0.00	0.00
8C	150	39.57	0	0.00	3.79	0	0.00	0.00
8D	11	2.66	165	8.04	16.45	0	0.00	0.00
8E	441	67.71	0	0.00	6.51	0	0.00	0.00
8F	40	7.36	389	31.11	11.15	0	0.00	0.00
8G	0	0.00	0	0.00	0.00	0	0.00	0.00
Summary	**780**	**138.73**	**809**	**56.17**	**8.15**	**0**	**0**	**0.00**

Maximum Development Intensities for Public Institutional, Hospitality, & Managed Care Land Uses:
Sub-profile A: MNWD Storage Tank

Table 2-10
Community Profile Area 9

Sub-profile Area	Maximum Development Intensities							
	Residential Detached Units	Acreage	Residential Attached Units	Acreage	Density	Commercial Square Footage	Acreage	FAR
9A	263	72.29	130	9.18	4.82	0	0.00	0.00
9B	30	7.96	0	0.00	3.77	0	0.00	0.00
9C	251	61.06	0	0.00	4.11	0	0.00	0.00
9D	0	0.00	0	0.00	0.00	18,144	2.95	0.14
9E	66	10.55	319	30.48	9.38	0	0.00	0.00
9F	311	63.26	0	0.00	4.92	0	0.07	0.00
9G	0	0.00	0	0.00	0.00	51,587	9.90	0.12
Summary	**921**	**215.11**	**449**	**39.66**	**5.38**	**69,731**	**12.92**	**0.12**

Maximum Development Intensities for Public Institutional, Hospitality, & Managed Care Land Uses:

Sub-profile A: Crestavilla Managed Care Facility – up to 224 units

Sub-profile B: Includes portions of the 18-hole El Niguel Country Club

Sub-profile E: Includes portions of the 18-hole El Niguel Country Club

Sub-profile E: Includes portions of the El Niguel Racquet Club

Table 2-11
Community Profile Area 10

Sub-profile Area	Maximum Development Intensities							
	Residential Detached Units	Acreage	Residential Attached Units	Acreage	Density	Commercial Square Footage	Acreage	FAR
10A	910	212.54	34	2.20	4.44	0	0.00	0.00
10B	0	0.00	0	0.00	0.00	45,562	6.97	0.15
10C	120	16.97	176	10.17	10.90	0	0.00	0.00
10D	751	92.23	0	0.00	8.14	0	0.00	0.00
10E	316	71.24	0	0.00	4.44	0	0.00	0.00
10F	90	7.46	189	10.78	15.29	0	0.00	0.00
10G	0	0.00	344	18.16	18.95	0	0.00	0.00
Summary	**2,187**	**400.45**	**743**	**41.31**	**6.63**	**45,562**	**6.97**	**0.15**

Maximum Development Intensities for Public Institutional, Hospitality, & Managed Care Land Uses:

Sub-profile A: Up to 42,270 sf Saint Timothy's Church; up to 11,312 sf Grace Church; Crown Valley Elementary School Capacity - up to 1,288 students (leased by Community Roots Academy Charter School Capacity; OCASA Charter School); Griffin Managed Care Facility – up to 108 units; Childcare Preschool – up to 72 students

Sub-profile B: Up to 8,286 sf Christian Science Church & Reading Room; McDowell Elementary Private School Capacity – up to 90 students

Sub-profile G: Hidden Hills Elementary School Capacity – up to 607 students

Table 2-12
Community Profile Area 11

Sub-profile Area	Maximum Development Intensities							
	Residential Detached Units	Acreage	Residential Attached Units	Acreage	Density	Commercial Square Footage	Acreage	FAR
11A	0	0.00	1,287	51.42	25.03	0	0.00	0.00
11B	200	40.99	128	18.07	5.55	0	0.00	0.00
11C	617	141.19	144	65.13	3.69	0	0.00	0.00
11D	0	0.00	192	8.97	21.40	166,992	15.22	0.25
11E	30	10.75	950	52.46	15.50	0	0.00	0.00
11F	206	48.05	0	0.00	4.29	0	0.00	0.00
11G	707	93.76	647	13.15	12.66	0	0.00	0.00
11H	0	0.00	0	0.00	0.00	0	0.00	0.00
11I	0	0.00	0	0.00	0.00	11,607	1.70	0.16
Summary	**1,760**	**334.73**	**3,348**	**209.20**	**9.39**	**178,599**	**16.92**	**0.24**

Maximum Development Intensities for Public Institutional, Hospitality, & Managed Care Land Uses:

Sub-profile E: Up to 10,000 sf OCFA Fire Station #49; George White Elementary School Capacity – up to 728 students

Sub-profile H: MNWD Water Storage Tank

Table 2-13
Community Profile Area 12

Sub-profile Area	Maximum Development Intensities							
	Residential Detached Units	Acreage	Residential Attached Units	Acreage	Density	Commercial Square Footage	Acreage	FAR
12A	135	207.96	0	0.00	0.65	0	0.00	0.00
12B	54	7.01	114	8.20	11.05	0	0.00	0.00
12C	266	45.89	0	0.00	5.80	0	0.00	0.00
12D	412	116.32	0	0.00	3.54	0	0.00	0.00
12E	574	107.16	290	41.43	5.81	0	0.00	0.00
12F	36	5.54	136	0.00	31.07	0	0.00	0.00
12G	0	0.00	0	0.00	0.00	0	0.00	0.00
12H	317	47.21	105	10.57	7.30	0	0.00	0.00
12I	0	0.00	371	34.04	10.90	0	0.00	0.00
12J	0	0.00	0	0.00	0.00	205,620	17.13	0.28
Summary	**1,794**	**537.08**	**1,016**	**94.24**	**4.45**	**205,620**	**17.13**	**0.28**

Maximum Development Intensities for Public Institutional, Hospitality, & Managed Care Land Uses:

Sub-profile F: Malcolm Elementary School Capacity – up to 728 students

Sub-profile G: Aegis Managed Care Facility – up to 78 units

Sub-profile I: Electrical Substation; Saint Anne's Catholic Private School Capacity – up to 790 students, including 104 preschool students

Sub-profile J: The Hospitality Overlay facilitates the potential development of a high-quality hotel at Ocean Ranch Village, subject to a General Plan Amendment (including update of the Sub-profile MDI), a Zone Change, and a Specific Plan

Table 2-14
Community Profile Area 13

Sub-profile Area	Maximum Development Intensities							
	Residential Detached Units	Acreage	Residential Attached Units	Acreage	Density	Commercial Square Footage	Acreage	FAR
13A	172	47.82	253	33.84	5.20	0	0.00	0.00
13B	114	14.34	626	73.99	8.38	0	0.00	0.00
13C	192	35.04	0	0.00	5.48	0	0.00	0.00
13D	1	4.50	0	0.00	0.22	0	0.00	0.00
Summary	**479**	**101.70**	**879**	**107.83**	**6.48**	**0**	**0.00**	**0.00**

Maximum Development Intensities for Public Institutional, Hospitality, & Managed Care Land Uses:

Sub-profile A: MNWD Storage Tank

Sub-profile B: MNWD Storage Tanks (2)

Sub-profile D: The Hospitality Overlay facilitates the potential development of up to a 120-room high-quality hotel, subject to a General Plan Amendment, a Zone Change, and a Specific Plan

Table 2-15
Community Profile Area 14

Sub-profile Area	Maximum Development Intensities							
	Residential Detached Units	Acreage	Residential Attached Units	Acreage	Density	Commercial Square Footage	Acreage	FAR
14A	0	0.00	0	0.00	0.00	296,430	29.10	0.23
14B	0	0.00	0	0.00	0.00	164,727	20.57	0.18
14C	0	0.00	275	*	9.73	160,590	28.27	0.00
14D	0	0.00	0	0.00	0.00	92,596	11.60	0.18
Summary	**0**	**0.00**	**275**	**0.00**	**9.73**	**714,343**	**89.54**	**0.18**

Maximum Development Intensities for Public Institutional, Hospitality, & Managed Care Land Uses:

Sub-profile A: Up to 14,400 sf South County Post Office; up to 38,814 sf Laguna Niguel Presbyterian Church

Sub-profile C: Up to 41,000 sf Laguna Niguel City Hall; up to 16,300 sf Laguna Niguel Library; up to 7,555 sf OCFA Fire Station #5

*Acreage is recorded under "Commercial Square Footage," which includes City Hall (4.15 acres) and OCFA Fire Station #5

2.5.4 TRANSPORTATION IMPROVEMENTS

Circulation Plan

The proposed Circulation Plan, as illustrated on Figure 2-8, *Proposed Circulation Plan*, is designed to accommodate the future growth outlined in the Land Use Element (described above) while maintaining an efficient roadway network at acceptable levels of service. Table 2-16, *Planned Transportation Improvements*, identifies proposed changes to existing roadways and intersections.

Table 2-16
Planned Transportation Improvements

Intersection	Improvements
Within the City of Laguna Niguel	
La Paz Road at Rancho Niguel Road	• Restripe to remove NBT. • Restripe to remove 2nd SB departure lane. • Restripe to remove 2nd SBT. • Restripe to remove 2nd NB departure lane.
Cabot Road at Crown Valley Parkway	• Restripe to convert 2nd NBT to NBT/R. • Widen and restripe to provide SBR. • Restripe to convert EBR to EBT/R. • Widen and restripe to provide 4th WB departure lane. • Restripe to provide WBT/R.
Forbes Road at Crown Valley Parkway	• Restripe to provide 2nd NBL, remove NBT, and convert NBR to NBT/R. • Restripe to provide 2nd SB departure lane. • Widen and restripe to provide 2nd SBL. • Widen and restripe to provide 2nd WBL and 4th WBT.
I-5 SB Ramps at Crown Valley Parkway	• Widen and restripe to provide 5th EBT. • Widen and restripe to provide 2nd WBL.
I-5 NB Ramps at Crown Valley Parkway	• Widen and restripe to provide 2 NBL. • Widen and restripe to provide EBT/R. • Widen and restripe to provide 2nd loop on-ramp SB departure lane.
Camino Capistrano at Paseo de Colinas	• Widen and restripe to provide 2 NBR. • Widen and restripe to provide WBL.
Camino Capistrano at Avery Parkway	• Widen and restripe to provide 2nd NBR. • Widen and restripe to provide 2nd SB departure lane. • Widen and restripe to provide 2nd WBR.

Table 2-16 (continued)
Planned Transportation Improvements

Intersection	Improvements
Within the City of Laguna Niguel	
I-5 SB Ramps at Avery Parkway	• Widen and restripe to provide 2nd SBL and 2nd SBR. • Restripe SBT/R to SBR. • Widen and restripe to provide 2nd on-ramp SB departure lane. • Widen and restripe to provide 3 additional EBT. • Widen and restripe to provide 3rd WB departure lane. • Widen and restripe 2nd WBL and 2 additional WBT. • Widen and restripe to provide 3 additional EB departure lanes.
I-5 NB Ramps at Avery Parkway	• Widen and restripe to convert NBR to NBL/R and provide NBR. • Restripe NBL/T to NBL. • Widen and restripe to provide 3rd on-ramp NB departure lane. • Widen and restripe to provide 2nd WBL and 2 additional EBT. • Widen and restripe to provide 3 additional WB departure lanes. • Widen and restripe to provide 2 additional WBT. • Widen and restripe to provide 1 additional EB departure lanes.
Roadway Segment	**Improvements**
Within the City of Laguna Niguel	
La Paz Road, between Aliso Creek Road and Rancho Niguel Road	• Reduce the number of travel lanes from four travel lanes to two travel lanes.
Intersection	**Improvements**
Outside of the City of Laguna Niguel	
Marguerite Parkway at Avery Parkway	• Widen and restripe to provide 2nd NBL. • Widen and restripe to provide EBR. • Widen and restripe to provide WBR.

NBR = Northbound Right, NBT = Northbound Through, NBL = Northbound Left; SBR = Southbound Right, SBT = Southbound Through, SBL = Southbound Left; EBR = Eastbound Right, EBT = Eastbound Through, EBL = Eastbound Left; WBR = Westbound Right, WBT = Westbound Through, WBL = Westbound Left.

The Master Plan of Arterial Highways (MPAH) is a countywide transportation plan for Orange County. OCTA administers the MPAH, including the review and approval of amendments requested by local agencies. The proposed Circulation Plan includes the following three changes to the existing MPAH:

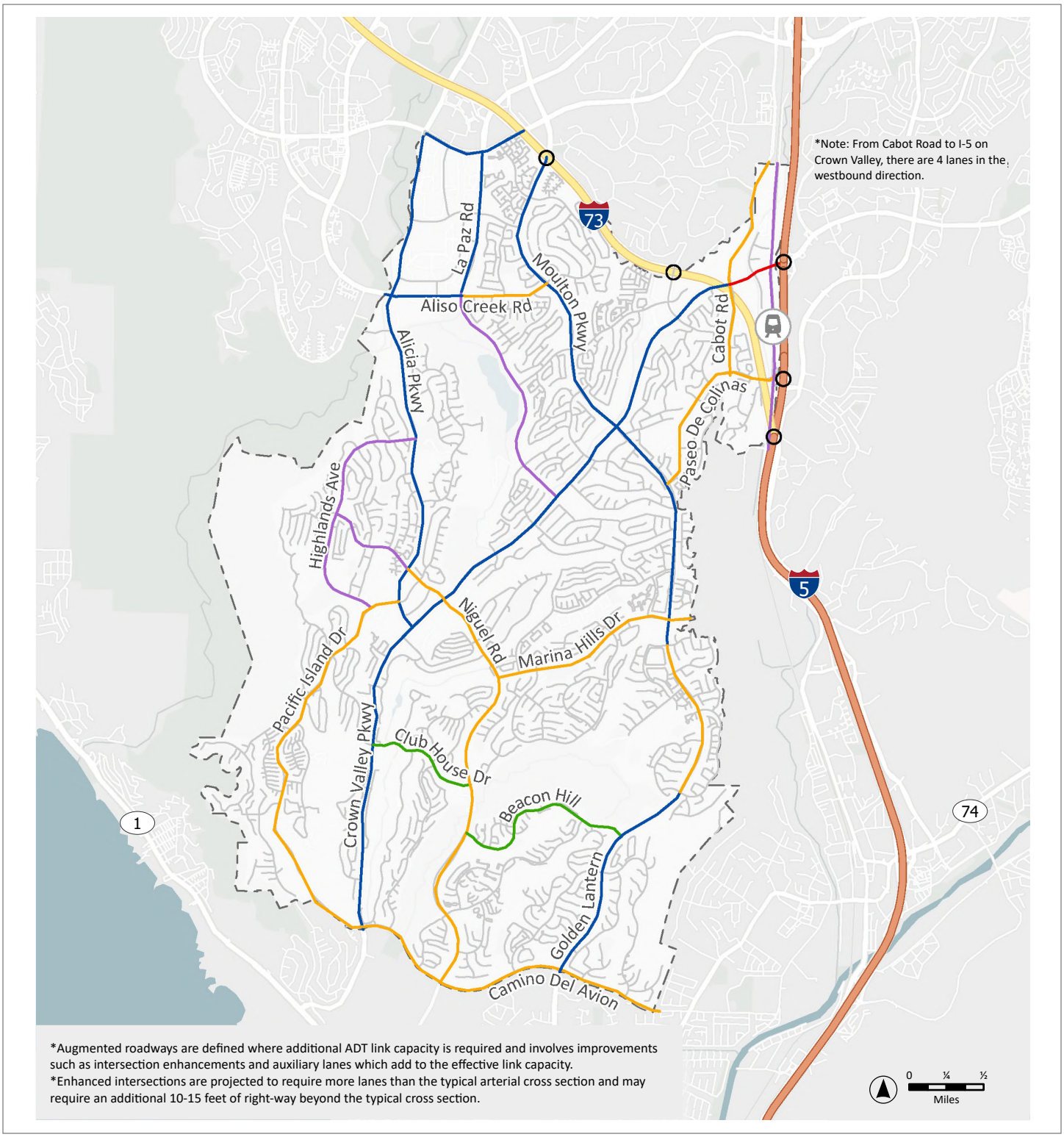
1) Maintain existing conditions on Camino Los Padres, which consists of the removal of the previously contemplated Camino Los Padres extension from its current terminus to Camino Capistrano, which extends beyond the City limits.

2) Reduce the number of travel lanes on La Paz Road between Aliso Creek Road and Crown Valley Parkway from two lanes in each direction to one lane in each direction.

3) Maintain existing travel lane conditions on Golden Lantern between Sweet Meadow Lane and Sardina Lane, which consists of the removal of the previously contemplated roadway widening.

Trails and Bikeways System

The proposed Trails Plan, as identified in Figure 2-9, *Proposed Trails Plan*, and proposed Bikeways Plan, as identified in Figure 2-10, *Proposed Bikeways Plan*, would continue to provide active transportation opportunities within and beyond the City.



Data source: Fehr & Peers

Prepared for the City of Laguna Niguel by De Novo Planning Group
August 11, 2025

LEGEND

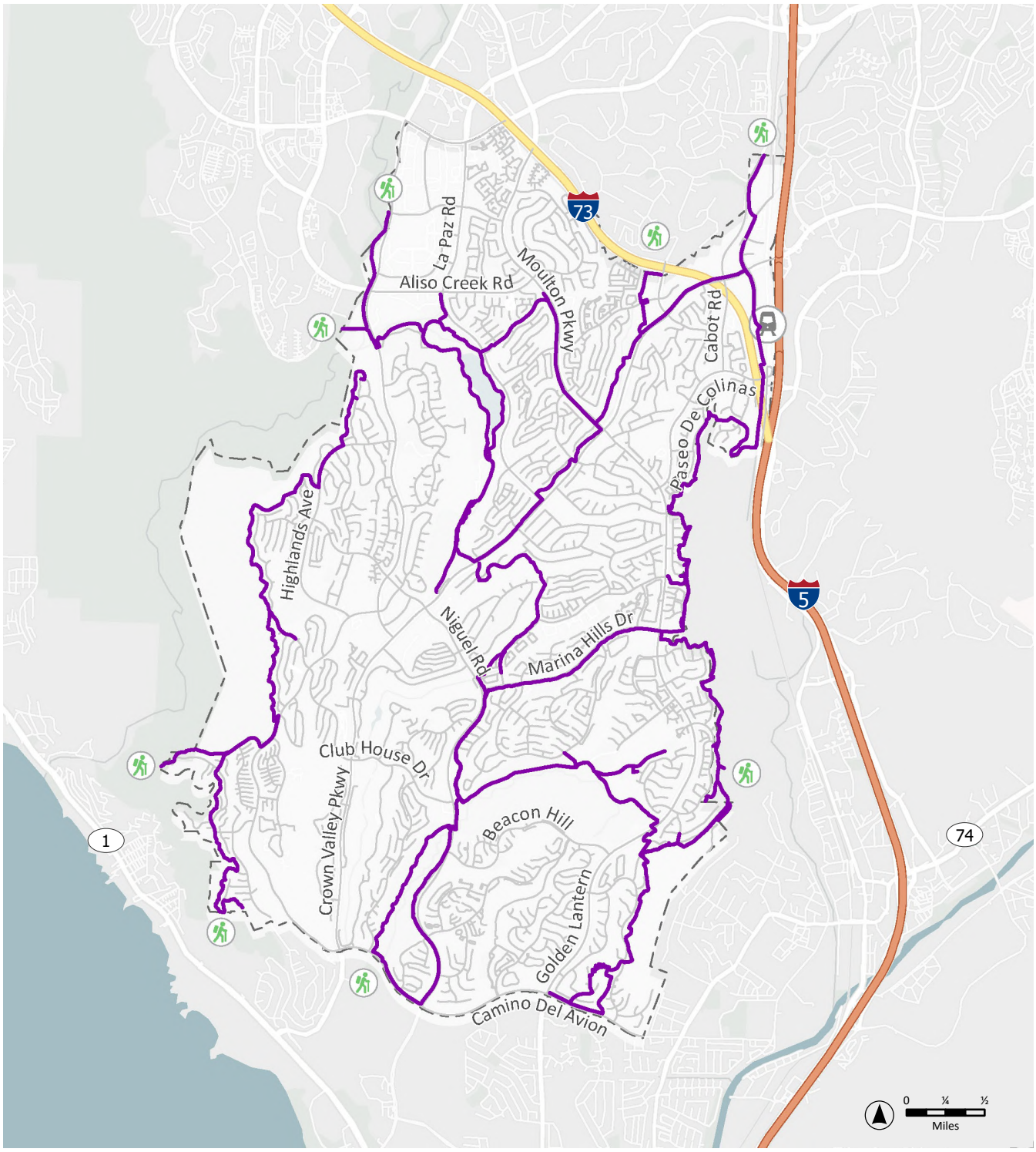
- Laguna Niguel City Boundary
- Opportunity Areas
- Gateway Specific Plan
- Metrolink Station
- San Diego Freeway
- San Joaquin Hills Transportation Corridor
- Local Streets
- Interchange

Road Classification

- Augmented Major
- Major
- Primary
- Secondary
- Commuter

Figure 2-8.

Proposed Circulation Plan



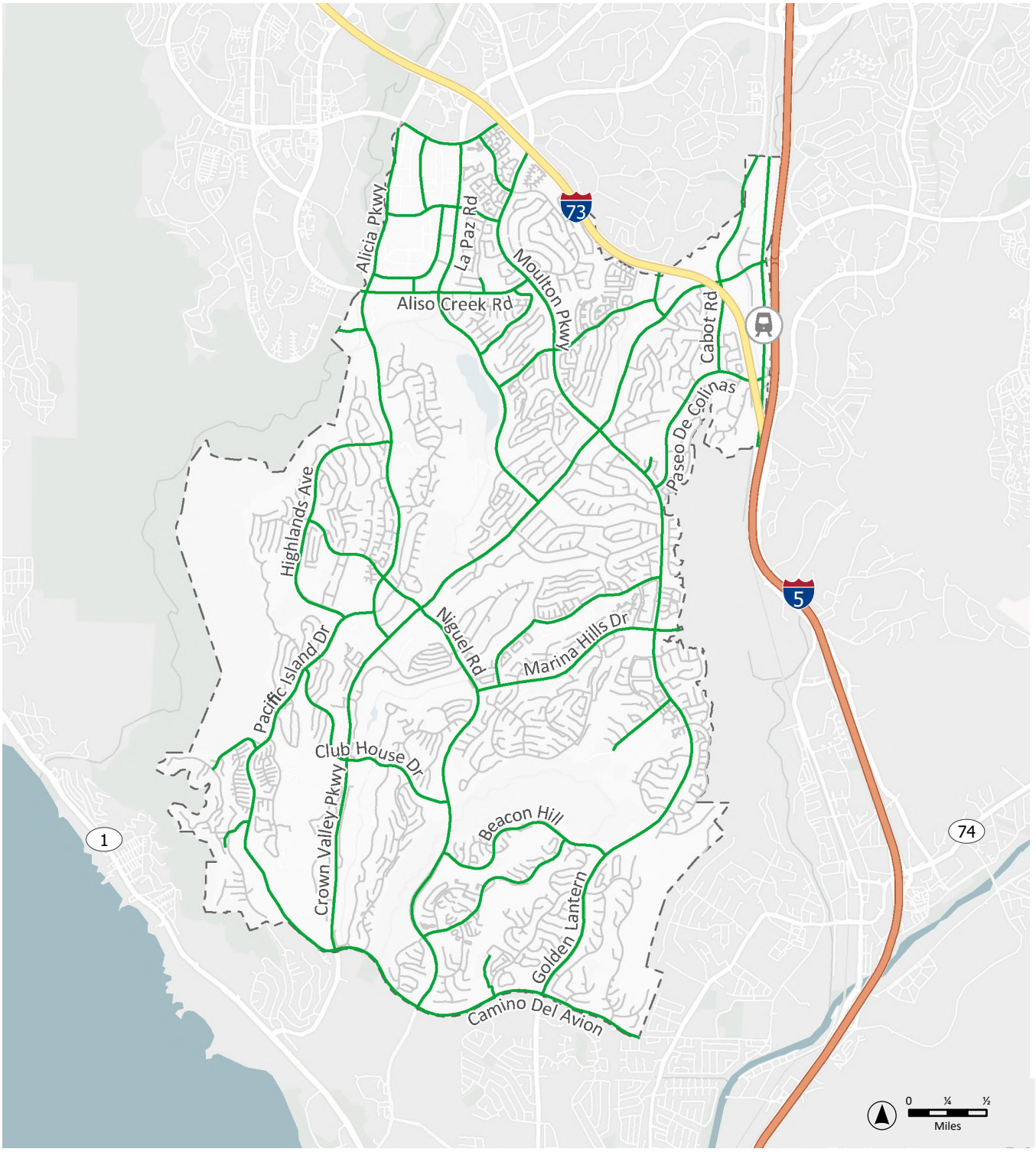
Data source: Fehr & Peers

Prepared for the City of Laguna Niguel by De Novo Planning Group
August 15, 2025

Trails
Regional Trail Connectors
San Diego Freeway
San Joaquin Hills Transportation Corridor
Local Streets
Laguna Niguel City Boundary
Metrolink Station

Figure 2-9.

Proposed Trails Plan



Data source: Fehr & Peers

Prepared for the City of Laguna Niguel by De Novo Planning Group
August 15, 2025

LEGEND

- Bikeways
- San Diego Freeway
- San Joaquin Hills Transportation Corridor
- Local Streets
- Laguna Niguel City Boundary
- Metrolink Station

Figure 2-10.

Proposed Bikeways Plan

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2.5.5 GENERAL PLAN BUILDOUT ANALYSIS

The General Plan EIR evaluates the maximum development that could occur within the Planning Area, which includes complete buildout of the Maximum Development Intensities (MDIs) including the two Hospitality Overlay sites and complete implementation of the Opportunity Area Overlays.[2] While no specific development projects are proposed as part of the Laguna Niguel General Plan Update, except for the assumption that the CHFB will be demolished as part of a future redevelopment effort, the General Plan will accommodate future growth in Laguna Niguel, including but not limited to new businesses, expansion of existing businesses, and new residential uses. The buildout analysis assumes a 20-year planning horizon, with 2045 as the theoretical full buildout year of the General Plan (the point at which all parcels in the City are developed according to their General Plan land use designation and buildout limit, described above).

Table 2-17, *General Plan Update Growth Assumptions Compared to Existing Conditions*, and Table 2-18, *General Plan Update Growth Assumptions*, provide a statistical summary of the buildout potential associated with the General Plan Update's Community Profile Areas and future implementation of all three Opportunity Area Overlays (which, as described earlier, would require approval of multiple project-specific legislative actions) compared to existing, on-the-ground conditions. As shown in Tables 2-17 and 2-18, buildout of the General Plan Community Profile Areas, including the Hospitality Overlay sites, and implementation of the three Opportunity Area Overlays could yield a total of up to 31,124 dwelling units, 520 managed care facility units, a population of 76,151 people, approximately 6,862,257 square feet of commercial building floor area, approximately 401,658 square feet of public institutional building floor area, 590 hotel rooms, and 19,267 jobs within the Planning Area. Development associated with the Proposed Community Profile Areas and implementation of the three Opportunity Area Overlays represents growth above existing conditions of up to approximately 3,464 new dwelling units, 8,418 people, 1,099,496 square feet of new commercial building floor area, 557 hotel rooms, and 5,467 jobs (no new managed care facility units or public institutional square footage are anticipated). This ultimate buildout is analyzed in the EIR.

For each environmental issue addressed in Section 4.0, *Environmental Analysis*, the analysis of the General Plan Update is based on various assumptions regarding existing and future conditions in Laguna Niguel. Unless otherwise stated, the assumptions are as specified in Tables 2-17 and 2-18.

[2] While the General Plan Update Land Use Element introduces the concept of three Opportunity Area Overlays, the General Plan Update does not adopt any of the potential Opportunity Area Overlays, which are subject to subsequent legislative discretionary actions. However, to be conservative, this EIR analyzes the maximum potential future development, including full implementation of the Opportunity Area Overlays as if all three become adopted and implemented in the future.

Table 2-17
General Plan Update Residential and Commercial Growth Assumptions Compared to Existing Conditions

Community Profile Area	Residential Detached Unit Max			Residential Attached Unit Max			Commercial Square Footage Max		
	Existing Condition	Gen Plan Update	Growth	Existing Condition	Gen Plan Update	Growth	Existing Condition	Gen Plan Update	Growth
1	0	0	0	0	0	0	3,059,716	3,177,989	118,273
2	1,792	1,792	0	1,503	1,503	0	57,491	57,491	0
3	962	1,033	71	456	486	30	473,109	513,578	40,469
4	0	0	0	1,499	2,994	1,495	1,111,023	1,812,800[1]	701,777
5	1,362	1,362	0	1,810	1,810	0	29,182	29,182	0
6	1,124	1,127	3	68	77	9	0	0	0
7	1,007	1,008	1	992	992	0	0	0	0
8	768	780	12	768	809	41	0	0	0
9	921	921	0	449	449	0	69,731	69,731	0
10	2,185	2,187	2	743	743	0	45,562	45,562	0
11	1,760	1,760	0	3,348	3,348	0	163,418	178,599	15,181
12	1,783	1,794	11	1,016	1,016	0	199,776	205,620	5,844
13	465	479	14	879	879	0	0	0[2]	0
14	0	0	0	0	275	275	553,753	714,343	160,590
Total	**14,129**	**14,243**	**114**	**13,531**	**15,381**	**1,850**	**5,762,761**	**6,804,895**	**1,042,134**
Opportunity Area Overlays	0	0	0	0	1,500	1,500	1,954,959[4]	2,012,321[3,4]	57,362
Total Plus Opportunity Area Overlays	**14,129**	**14,243**	**114**	**13,531**	**16,881**	**3,350**	**5,762,761**	**6,862,257**	**1,099,496[5]**

Notes:

1. The potential buildout square footage excludes the allocation for up to 350 hotel rooms for Sub-profiles 4H and 4K (including the existing 33-room hotel in Sub-profile 4K). Hotel MDIs for sub-profiles are based on number of hotel rooms instead of square footage, which is accounted for in Table 2-5.
2. The potential buildout square footage excludes a high-quality hotel of up to 120 rooms in Sub-profile 13D. Hotel MDIs for sub-profiles are based on number of hotel rooms instead of square footage, which is accounted for in Table 2-14, subject to the Hospitality Overlay criteria.
3. The development scenario for Sub-profile Area 1C (CHFB) includes: 910,000 square feet of commercial space, 500 residential attached units, and a 120-room boutique hotel, replacing the existing 1,050,580 square feet of building area, subject to the Opportunity Overlay 2 criteria.
4. The total combined existing and proposed commercial square footage for Opportunity Areas 1, 2, and 3 is provided for reference; combined existing commercial square footage for the Opportunity Areas is already accounted for as part of the overall existing condition total and the proposed combined commercial square footage for the Opportunity Areas includes what is already allowed under the General Plan plus what would be allowed if the Overlays are applied.
5. The environmental analysis for the General Plan Update accounts for the residential units and commercial square footage in Table 2-17 and citywide MDIs for hospitality (e.g., hotels), public institutional, and managed care uses.

Table 2-18
General Plan Update Growth Assumptions

	Existing Conditions	Total Growth Potential			Net Change (Proposed Community Profile Areas and Opportunity Areas compared to Existing Conditions)
		Proposed Community Profile Areas	Proposed Opportunity Areas	Proposed Community Profile Areas and Opportunity Areas	
Residential Units	27,660	29,624	1,500	31,124	3,464
Managed Care Facility Units	520	520	0	520	0
Population	67,734	72,506	3,645	76,151	8,418
Commercial Square Footage	5,762,761[1]	6,804,895[2]	2,012,321[3]	6,862,257	1,099,496
Public Institutional Square Footage	401,658	401,658	0	401,658	0
Hotel Rooms	33	470	120	590	557
Jobs[4]	13,800[1]	19,036[2]	5,336[3]	19,267	5,467

Notes:
1. The "Existing Conditions" jobs total reflects partial occupancy of CHFB at 200,000 square feet of building area consistent with historic usage.
2. The "Proposed Community Profile Areas" assumes full occupancy of CHFB at 1,050,580 square feet of building area and corresponding jobs.
3. The "Proposed Opportunity Areas" assumes 910,000 square feet of commercial space for CHFB and corresponding jobs.
4. Jobs account for citywide MDIs for hospitality (e.g., hotels), public institutional, and managed care uses.

2.6 USE OF THE EIR AND REQUIRED AGENCY APPROVALS

This EIR may be used for the following direct and indirect approvals and permits associated with adoption and implementation of the General Plan Update.

2.6.1 CITY OF LAGUNA NIGUEL

The City of Laguna Niguel is the lead agency for the Project. The Laguna Niguel General Plan Update will be presented to the Planning Commission for review and recommendation and to the City Council for review and consideration for adoption. The City Council has sole discretionary authority to approve and adopt the General Plan Update. In order to approve the Project, the City Council would consider the following actions:

- Certification of the General Plan EIR;
- Adoption of required CEQA findings and Statement of Overriding Considerations for the above action, if required;
- Adoption of a Mitigation Monitoring and Reporting Program; and

- Approval of the General Plan Update.

2.6.2 SUBSEQUENT USES OF THE EIR

The policy framework set forth in the General Plan Update would not result in the entitlement or construction of any new development project. All new development within the Planning Area would continue to be subject to the City's development review and approval processes. Elected and appointed officials and City staff will review subsequent project applications for consistency with the General Plan and Municipal Code and will prepare appropriate environmental documentation in compliance with CEQA and other applicable environmental requirements.

Pursuant to Section 15168 of the State CEQA Guidelines, this EIR is a Program EIR. The goals, policies, land use designations, MDIs, and other substantive components of the General Plan Update constitute the "program" evaluated in this Program EIR as it reviews environmental effects associated with implementation of the General Plan Update. When considering approval of subsequent activities under the proposed General Plan Update, the City would utilize this EIR as the basis in determining potential environmental effects and the appropriate level of environmental review, if any, of a subsequent activity. Projects or activities successive to this EIR may include, but are not limited to, the following:

- Approval and funding of major projects and capital improvements;
- Future Specific Plan approvals;
- Revisions to the Laguna Niguel Municipal Code;
- Revisions to existing Specific Plans;
- Development plan approvals, such as tentative subdivision maps, site development permits, variances, conditional use permits, and other land use permits;
- Development agreements;
- Property rezoning consistent with the General Plan;
- Permit issuances and other approvals necessary for public and private development projects; and
- Permit issuances and other approvals necessary for implementation of the General Plan.

2.6.3 OTHER GOVERNMENT AGENCY APPROVALS

Subsequent projects and other actions to support implementation of the General Plan Update would require actions, including permits and approvals by other public agencies, that may include, but are not necessarily limited to:

- California Department of Fish and Wildlife (CDFW) approval of potential future streambed alteration agreements, pursuant to the California Fish and Game Code, as well as approval of any future potential take of State-listed wildlife and plant species pursuant to the California Endangered Species Act;

- California Department of Transportation (Caltrans) approval of projects and encroachment permits for projects affecting State highway facilities;
- Regional Water Quality Control Board (RWQCB) approval for National Pollution Discharge Elimination System (NPDES) compliance, including permits and Storm Water Pollution Prevention Plan approval and monitoring, approvals under Section 401 of the Clean Water Act (CWA) for discharge of dredged or fill material into waters of the State;
- U.S. Fish and Wildlife Service (USFWS) approvals involving any future potential take of Federally-listed wildlife and plant species and their habitats, pursuant to the Federal Endangered Species Act; and
- U.S. Army Corps of Engineers (USACE) approvals under Section 404 of the CWA for discharge of dredged or fill material into waters of the United States, including wetlands.

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3.0 BASIS OF CUMULATIVE ANALYSIS

CEQA Guidelines Section 15355 defines cumulative impacts as "…two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts."

Pursuant to CEQA Guidelines Section 15130(a), an EIR shall discuss the cumulative impacts of a project when the project's incremental effect is cumulatively considerable, as defined in CEQA Guidelines Section 15065(a)(3). Where the incremental effect of a project is not "cumulatively considerable," a lead agency need not consider that effect significant but must briefly describe its basis for concluding that the effect is not cumulatively considerable. The potential cumulative impacts associated with the Project are assessed in Section 4.0, *Environmental Analysis*, of this EIR for each applicable environmental issue area to a degree that reflects each impact's severity and likelihood of occurrence. The geographic area for each impact varies depending on the nature of the impact, however, since this is a programmatic EIR that encompasses the entire City boundary (Planning Area), cumulative projects are assumed to occur outside of the Planning Area.

As indicated above, a cumulative impact involves two or more individual effects. The following elements are necessary in an adequate discussion of cumulative impacts, as noted in Sections 15130(b) through 15130(e) of the CEQA Guidelines:

> *(b) The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by standards of practicality and reasonableness, and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact. The following elements are necessary to an adequate discussion of significant cumulative impacts:*
>
> > *(1) Either:*
> >
> > > *(A) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency; or,*
> > >
> > > *(B) A summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect. Such plans may include: a general plan, regional transportation plan, or plans for the reduction of greenhouse gas emissions. A summary of projections may also be contained in an adopted or certified prior environmental document for such a plan. Such projections may be supplemented with additional information such as a regional modeling program. Any such document shall be referenced and made available to the public at a location specified by the leading agency.*

(2) When utilizing a list, as suggested in paragraph (1) of subdivision (b), factors to consider when determining whether to include a related project should include the nature of each environmental resource being examined, the location of the project and its type. Location may be important, for example, when water quality impacts are at issue since projects outside the watershed would probably not contribute to a cumulative effect. Project type may be important, for example, when the impact is specialized, such as a particular air pollutant or mode of traffic.

(3) Lead agencies should define the geographic scope of the area affected by the cumulative effect and provide a reasonable explanation for the geographic limitation used.

(4) A summary of the expected environmental effects to be produced by those projects with specific reference to additional information stating where that information is available; and

(5) A reasonable analysis of the cumulative impacts of the relevant projects. An EIR shall examine reasonable, feasible options for mitigating or avoiding the project's contribution to any significant cumulative effects.

(c) With some projects, the only feasible mitigation for cumulative impacts may involve the adoption of ordinances or regulations rather than the imposition of conditions on a project-by-project basis.

(d) Previously approved land use documents such as general plans, specific plans, and regional transportation plans may be used in cumulative impact analysis. A pertinent discussion of cumulative impacts contained in one or more previously certified EIRs may be incorporated by reference pursuant to the provisions for tiering and program EIRs. No further cumulative impacts analysis is required when a project is consistent with a general, specific, master or comparable programmatic plan where the lead agency determines that the regional or areawide cumulative impacts of the proposed project have already been adequately addressed, as defined in section 15152(f), in a certified EIR for that plan.

(e) If a cumulative impact was adequately addressed in a prior EIR for a community plan, zoning action, or general plan, and the project is consistent with that plan or action, then an EIR for such a project should not further analyze that cumulative impact, as provided in Section 15183(j).

The cumulative impact analyses in this Draft EIR uses Method B (CEQA Guidelines Section 15130(b)(1)(B)), described above. The analysis considered the adopted regional growth forecasts from the Southern California Association of Governments' (SCAG) 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), the 2020-2045 RTP/SCS and the South Coast Air Quality Management District's (SCAQMD) 2022 Air Quality Management Plan (2022 AQMP) for operational air quality and AQMP consistency impacts, or other long-range planning documents, such as the Moulton Niguel Water District 2020 Urban Water Management Plan for cumulative water supply.

Quantification can pose a challenge for cumulative impacts, as it requires speculative estimates of impacts including, but not limited to, the following: the geographic diversity of impacts (impacts of future development may affect different areas); variations in time of impacts; and data for buildout projections may change following subsequent approvals. However, every attempt has been made herein to make sound qualitative judgments of the combined effects of, and relationship between, land uses and potential environmental impacts.

Table 3-1, *Orange County Growth Projections*, summarizes household, population, and employment growth forecasts for Orange County. The Project considers growth patterns for the year 2045. As shown in Table 3-1, SCAG forecasts that Orange County's population will grow to 3,401,000 persons by 2045, an increase of approximately 7.9 percent over the 2024 population estimate of 3,150,835 persons. The number of households in the Orange County region is projected to increase from approximately 1,157,425 households in 2024 to 1,239,000 households in 2045, an increase of approximately 7.0 percent. Employment numbers are forecasted to increase approximately 31.3 percent from approximately 1,522,000 jobs in 2024 to 1,998,000 jobs in 2045 within the county. Section 4.12, *Population and Housing*, further elaborates on projected growth assumptions within the Planning Area and the Orange County region.

Table 3-1
Orange County Growth Projections

Description	Population	Households	Jobs (Employment)
Existing Conditions (2024)[1]	3,150,835	1,157,425	1,522,000
SCAG 2045 Forecasts[2]	3,401,000	1,239,000	1,998,000
2045 SCAG: Existing Conditions Difference	250,165	81,575	476,000
2045 SCAG: Existing Conditions % Difference	7.9%	7.0%	31.3%

Source:
1: California Department of Finance, *Report E-5 Population and Housing Estimates for Cities, and Counties, and the State*. January 1, 2023, and California Employment Development Department, *Orange County Profile*, 2024.
2: Southern California Association of Governments (SCAG), *2024-2050 RTP/SCS, Demographics and Growth Forecast*, April 4, 2024.

As shown in Section 2.0, *Project Description*, Tables 2-17 and 2-18, buildout of the General Plan Community Profile Area MDIs Areas and implementation of the three Opportunity Area Overlays could yield a total of up to 31,124 dwelling units, 520 managed care facility units, a population of 76,151 people, approximately 6,862,257 square feet of commercial building floor area, approximately 401,658 square feet of public institutional building floor area, 590 hotel rooms, and 19,267 jobs within the Planning Area. Development associated with the Proposed Community Profile Area MDIs represents growth above existing conditions of up to approximately 3,464 new dwelling units, 8,418 people, 1,099,496 square feet of new commercial building floor area, 557 hotel rooms, and 5,467 jobs (no new managed care facility units or public institutional square footage are anticipated). Therefore, the Project represents a portion of the growth anticipated by SCAG for the Orange County region (Table 3-1). The potential for impacts resulting from the buildout of the General Plan Update Land Use Element and impacts resulting from

growth and development in the surrounding area and greater region to combine and result in a cumulative impact is assessed within each environmental topical area of this EIR (Section 4.0, *Environmental Analysis*).

4.0 ENVIRONMENTAL ANALYSIS

The City determined that an Environmental Impact Report (EIR) would be required for the Project; as allowed by CEQA Guidelines Section 15063(a), no Initial Study was prepared. A Notice of Preparation (NOP) was prepared and circulated for the proposed Project on May 13, 2025; refer to Appendix A, *NOP and NOP Comment Letters*. Input received during the NOP comment period (May 13, 2025 to July 11, 2025) and the EIR Scoping Meeting (May 21, 2025) were used to inform the scope for the EIR evaluation.

This EIR focuses on the potentially significant and significant effects of the Project and documents the reasons for concluding that other effects will be less than significant. The following subsections of the EIR contain a detailed environmental analysis of the existing conditions, Project impacts (including direct and indirect, short-term, long-term, and cumulative impacts), recommended mitigation measures, and unavoidable significant impacts, if applicable, for the following environmental issue areas:

4.1	Aesthetics and Scenic Resources	4.9	Hydrology and Water Quality
4.2	Air Quality	4.10	Land Use and Planning
4.3	Biological Resources	4.11	Noise
4.4	Cultural Resources	4.12	Population and Housing
4.5	Energy	4.13	Public Services and Recreation
4.6	Geology and Soils	4.14	Transportation
4.7	Greenhouse Gas Emissions	4.15	Tribal Cultural Resources
4.8	Hazards and Hazardous Materials	4.16	Utilities and Service Systems
		4.17	Wildfire

Each potentially significant environmental issue area is addressed in a separate section of the EIR and is organized into the following subsections:

- "Purpose" provides a general description of the topic to be addressed.
- "Environmental Setting" provides a description of the existing environmental setting and condition (typically at the time of the NOP) that provides a baseline against which potential impacts of the project can be compared.
- "Regulatory Setting" contains an overview of the federal, State, regional, and local programs and regulations relevant to each environmental issue.
- "Significance Criteria and Thresholds" refer to quantitative or qualitative standards, performance levels, or criteria used to compare the existing environmental setting with and without the project to determine whether the impact is significant. The City relies on the questions included in CEQA Guidelines Appendix G as the thresholds of significance for assessing impacts (City of Laguna Niguel CEQA Manual, Revised February 24, 2023) An ironclad definition of significant effect is not possible because the significance of any activity may vary with the setting" (CEQA Guidelines

Section 15064[b]). Principally, "... a substantial, or potentially substantial, adverse change in any of the physical conditions within an area affected by the Project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic and aesthetic significance" constitutes a significant impact (CEQA Guidelines Section 15382). The standards used to evaluate the significance of impacts are sometimes qualitative rather than quantitative because appropriate quantitative standards are neither available for many types of impacts nor applicable for some types of projects.

- "Impacts and Mitigation Measures" describes the methodology used in assessing potential impacts of the project and contains an analysis of direct and indirect impacts from construction, operation, and maintenance activities related to future development that could occur under the project. For each impact identified, a level of impact will be described using the following categories:
    - Significant impacts include a description of the circumstances where an established or defined threshold would be exceeded.
    - Less than significant impacts include effects that may be noticeable, but do not exceed established or defined thresholds. Potentially significant impacts that are mitigated to a less than significant level by mitigating programs, actions, or other factors are also included in this category.
    - No impact describes circumstances where there is no adverse effect on the environment.

  Mitigation Measures are measures that would be required of the Project to avoid a significant adverse impact; to minimize a significant adverse impact; to rectify a significant adverse impact by restoration; to reduce or eliminate a significant adverse impact over time by preservation and maintenance operations; or to compensate for the impact by replacing or providing substitute resources or environment.
- "Cumulative Impacts" describes potential environmental changes to the existing physical conditions that may occur as a result of the proposed project together with all other reasonably foreseeable, planned, and approved future projects producing related or cumulative impacts.
- "Significant Unavoidable Impacts" describes impacts that would be significant and cannot be feasibly mitigated to less than significant and thus would be unavoidable. To approve a project with unavoidable significant impacts, the lead agency must adopt a Statement of Overriding Considerations. In adopting such a statement, the Lead Agency is required to balance the benefits of a project against its unavoidable environmental impacts in determining whether to approve the project. If the benefits of a project are found to outweigh the unavoidable adverse environmental effects, the adverse effects may be considered "acceptable" (CEQA Guidelines Section 15093[a]).
- "References" identifies the sources used in and throughout the subsection.

CEQA provides that an EIR shall focus on the significant effects on the environment and discuss potential environmental effects with emphasis in proportion to their severity and probability of occurrence. During preparation of this EIR, the City conducted an analysis of the proposed Project's effect on specific environmental topic areas, included as part of the CEQA Guidelines Appendix G Environmental Checklist form. Through evaluation, certain impacts of the Project were found to have no impact or have a less than

significant impact due to the inability of a project of this scope to create such impacts or the absence of Project characteristics producing effects of this type. These effects are not required to be included in the EIR's primary environmental analysis sections (Section 4.1 through 4.17). In accordance with CEQA Guidelines Section 15128, Section 7.0, *Effects Found Not To Be Significant*, provides a brief description of potential impacts found to have no impact or a less than significant impact.

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4.1 AESTHETICS AND SCENIC RESOURCES

4.1.1 PURPOSE

This section identifies the existing aesthetic conditions withing the Planning Area and provides an analysis of potential impacts associated with implementation of the General Plan Update.

CONCEPTS AND TERMINOLOGY

The assessment of aesthetics and scenic resources involves a qualitative analysis that is inherently subjective in nature. People viewing the same landscape may have different responses to that landscape and any proposed visual changes based upon their values, familiarity, concern, or expectations. Visual changes to the landscape affect viewers differently since each person's attachment to and value for a particular landscape is unique. However, generalizations can be made about viewer sensitivity to scenic quality and visual changes. The visual sensitivity of a landscape is affected by the viewing distances at which it is seen, such as close-up or far away. The visual sensitivity of a landscape is also affected by the travel speed at which a person is viewing the landscape (e.g., high speeds on a highway, low speeds on a hiking trail, or a bench at a public park).

The same feature of a project can be perceived differently by people depending on the distance between the observer and the object viewed. When a viewer is closer to a viewed object in the landscape, more detail can be seen, and there is greater potential influence of the object on visual quality because of its form or scale (relative size of the object in relation to the viewer). When the same object is viewed at background distances, details may be imperceptible but overall forms of terrain and vegetation are evident, and the horizon and skyline are dominant. In the middle-ground, some detail is evident (e.g., the foreground), and landscape elements are seen in context with landforms and vegetation patterns (e.g., the background).

The following terms and concepts are used in this EIR section:

- **Scenic vista**. Scenic vistas are publicly accessible viewsheds that include scenic resources.
- **Scenic highway**. Any stretch of public roadway that is designated as a scenic corridor by a federal, State, or local agency.
- **Scenic resources**. Scenic resources refer to aesthetically pleasing natural and man-made physical features. Important scenic resources in and around Laguna Niguel include hillsides, ridgelines, and waterways.
- **Sensitive receptors**. Viewer responses to visual settings are inferred from a variety of factors, including distance, viewing angle, types of viewers, number of viewers, duration of view, and viewer activities. Viewer activities can range from a circumstance that encourages a viewer to observe the surroundings more closely (such as recreational activities) to one that discourages close observation (such as commuting in heavy traffic). Viewers in recreational areas are considered to have high sensitivity to visual resources.

- **Viewshed**. The viewshed for a project is defined as the surrounding geographic area from which the project is likely to be seen, based on topography, atmospheric conditions, land use patterns, and roadway orientations.
- **Visual character.** Visual character is typically defined as the features (landforms, vegetation, water features, development type and architecture, and cultural modifications) that impart an overall visual impression of an area's landscape. Visual character is influenced by many different landscape and development attributes including color contrasts, landform prominence, repetition of geometric forms, and uniqueness of textures among other characteristics.
- **Light and Glare.** Lighting effects are associated with the use of artificial light during the evening and nighttime hours. There are two primary sources of light: light emanating from building interiors passing through windows and light from exterior sources (i.e., street lighting, building illumination, security lighting, parking lot lighting, landscape lighting, and signage). Light introduction can be a nuisance. Uses such as residences and hotels are considered light sensitive, since occupants have expectations of privacy during evening hours and may be subject to disturbance by bright light sources. Light spill is typically defined as the presence of unwanted light on properties adjacent to the property being illuminated. With respect to lighting, the degree of illumination may vary widely depending on the amount of light generated, height of the light source, presence of barriers or obstructions, type of light source, and weather conditions.

  Glare is primarily a daytime occurrence caused by the reflection of sunlight or artificial light on highly polished surfaces such as window glass or reflective materials and, to a lesser degree, from broad expanses of light-colored surfaces. Perceived glare is the unwanted and potentially objectionable sensation as observed by a person as they look directly into the light source of a luminaire. Daytime glare generation is common in urban areas and is typically associated with buildings with exterior facades largely or entirely comprised of highly reflective glass. Glare can also be produced during evening and nighttime hours by the reflection of artificial light sources such as automobile headlights. Glare generation is typically related to either moving vehicles or sun angles, although glare resulting from reflected sunlight can occur regularly at certain times of the year. Glare-sensitive uses include residences, hotels, and transportation corridors.

4.1.2 ENVIRONMENTAL SETTING

Laguna Niguel occupies a hilly basin near the southern end of the San Joaquin Hills, a small coastal mountain range in southern Orange County. Elevations in Laguna Niguel range from near sea level to 936 feet at the summit of Niguel Hill, in the southwest corner of the City. Low mountain ridges, some of which attain heights of one- to two-hundred feet, trend northeast to southwest and dissect much of the Laguna Niguel area.

The Planning Area's visual character is defined by an abundance of open space and development consisting predominantly of detached single-family residential communities. There are nearly 200 distinct neighborhoods or subdivisions, with most of the detached single-family communities within a homeowners association (HOA). These residential uses are connected by landscaped corridors and surrounded by extensive open space and recreational uses. The natural setting of Laguna Niguel is

characterized by low lying hills and steeper escarpments that create several prominent landforms. Most of the natural landscape of Laguna Niguel has been altered by previous grading activities; however, there are still several prominent ridgelines in the City. One of the more important ridge areas is in the southwestern portion of the City, in the Aliso Canyon area. This area is characterized by predominantly steep slopes with elevations ranging from 818 to 220 feet and provides distant views of the ocean. Other ridges are in the Salt Creek and Colinas Bluff areas. Many of these ridge areas have slopes that are more than 30 percent.

Retail, office, industrial, and public/institutional land uses make up a small proportion of the City's total land area and are primarily located along major corridors, such as Crown Valley Parkway, Alicia Parkway, La Paz Road, and Golden Lantern. Most retail land uses are concentrated within neighborhood and community shopping centers such as Town Center, the Marketplace at Laguna Niguel, Plaza de la Paz, Ocean Ranch Village, Laguna Niguel Promenade, Crown Valley Mall, Laguna Niguel Plaza, Laguna Heights, and the Center at Rancho Niguel.

SCENIC VISTAS

While the City's existing General Plan does not designate scenic vistas, views of scenic resources are available from numerous publicly available vantage points within the Planning Area, including public trails, parks and open space areas, and streets. Mid-to-long range views of the San Joaquin Hills and long-range views of the Santa Ana Mountains are generally available throughout much of the Planning Area. Long-range views of the Pacific Ocean are also afforded from public trails, parks, and streets within the southern portion of the Planning Area, such as Aliso Summit Trail, Laguna Ridge Trail, Colinas Bluff Trail, and Long View Trail. Views of these scenic resources are highly dependent on topographic features of the area and atmospheric conditions. Publicly accessible long-range views are primarily provided from elevated locations at public trails, parks, and streets within the Planning Area. Other features that contribute to the visual character within the Planning Area include open space areas, trees and landscaping, the density and distribution of existing development, and the architecture of the built environment.

SCENIC HIGHWAYS

No eligible or designated State Scenic Highways exist within the Planning Area.[1] The nearest officially designated State Scenic Highway is a portion of State Route 91 (SR-91) in the City of Anaheim, beginning at the intersection of SR-91 and SR-55. The portion of SR-91 that is officially designated as a State Scenic Highway is located approximately 20 miles north of the Planning Area; the Planning Area is not within the viewshed of this State Scenic Highway. The nearest eligible State Scenic Highways include a portion of SR-1 from the City of Long Beach to the intersection of Interstate 5 (I-5) in Dana Point, approximately 0.25-miles west of the City at its closest point; a portion of I-5 from San Diego to the intersection of SR-74 near San Juan Capistrano, approximately one mile southeast of the City at its closest point; and a portion of SR-74 from its intersection with I-5 to Idyllwild, approximately 1.2 miles east of the City at its closest point.

[1] California Department of Transportation, *California State Scenic Highway System Map*, https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa, accessed March 18, 2025.

The County of Orange General Plan designates scenic highways within the County through two categories: viewscape corridors and landscape corridors.[2] A viewscape corridor is a route which traverses a corridor within which unique or unusual scenic resources and aesthetic values are found. A landscape corridor traverses developed or developing areas and has been designated for special treatment to provide a pleasant driving environment as well as community enhancement. The County Scenic Highway Plan designates the following landscape corridors within the City: a portion of Alicia Parkway (north of Aliso Creek Road), Camino del Avion, Crown Valley Parkway, La Paz Road, Moulton Parkway, a portion of Niguel Road (from Crown Valley Parkway to Camino del Avion), and Golden Lantern.[3]

The City's existing General Plan Open Space, Parks, and Conservation Element includes a Scenic Corridors Plan. While there are no City designated Scenic Highways, several major existing City thoroughfares are designated as Landscape Corridors (Figure 5-13, Landscape Corridors), valued for their scenic character, and intended to enhance the driving experience and overall visual quality of the community. These corridors include the roadway as well as adjacent landscapes and public and private properties that contribute to their visual appeal and help soften the transition to surrounding developed areas. Their boundaries are generally defined by what is visible from the roadway.

LIGHT AND GLARE

Sensitive light and glare receptors in and around the Planning Area are generally represented by residential uses and open space lands that provide wildlife habitat (e.g., Laguna Niguel Regional Park, Aliso Canyon, and Salt Creek Corridor). Sunlight reflecting from structures is a primary source of glare during the day, while nighttime light and glare can be divided into both stationary and mobile sources. Stationary sources of nighttime light include structure illumination, interior lighting, decorative landscape lighting, and streetlights. The principal mobile source of nighttime light and glare is vehicle headlamp illumination. This ambient light environment can be accentuated during periods of low clouds or fog.

The variety of urban land uses in the Planning Area are the main source of daytime and nighttime light and glare. They are typified by single- and multi-family residences, commercial structures, and streetlights. These areas and their associated human activities (inclusive of vehicular traffic) characterize the existing light and glare environment present during daytime and nighttime hours in the Planning Area. Areas along major corridors in the Planning Area, major commercial centers, and the Laguna Niguel Gateway Specific Plan area generally have more sources of glare due to increased vehicle traffic and reflective surfaces associated with higher density and building intensity in these areas.

Within the Planning Area, existing light sources generally include buildings, recreational facilities (i.e., sports fields), and night-time safety lighting along roadways and within parking lots. Interior light emanating from a structure, exterior light sources (i.e., security lighting), or lighting to illuminate features for safety or decorative purposes may be visible within the existing landscape.

Sunlight reflecting off a reflective surface can result in glare effects and unsafe visual conditions that may interfere with the vision of motorists operating vehicles in the area or that may otherwise generally

[2] County of Orange, *County of Orange General Plan, Transportation Element*, November 2020.
[3] County of Orange, *County of Orange General Plan, Figure IV-11: Scenic Highway Plan*, 2005.

degrade scenic views. Few structures within the Planning Area exhibit highly reflective materials (i.e., taller buildings with extensive glazing); therefore, potential glare effects are not considered to be of major concern under existing conditions.

4.1.3 REGULATORY SETTING

STATE

California Scenic Highways and Historic Parkways Program

Created in 1963, the California Scenic Highways and Historic Parkways Program preserves and protects highway corridors located in areas of outstanding natural beauty from changes that would diminish the aesthetic value of the adjacent lands. The California Department of Transportation (Caltrans) maintains its State Scenic Highways and Historic Parkways Program, through which segments of the state highway system are designated as being of particular scenic value or interest. A highway may be designated as scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view. Interstates, state highways, byways, and parkways are eligible for designation or for recognition as eligible for designation. The program is governed by the regulations found in the California Streets and Highways Code, Section 260 et seq.

California Streets and Highway Code Section 261 requires local government agencies to take the following actions to protect the scenic appearance of the scenic corridor:

- Regulate land use and density of development;
- Provide detailed land and site planning;
- Prohibit offsite outdoor advertising and control of on-site outdoor advertising;
- Pay careful attention to and control of earthmoving and landscaping; and
- Scrutinize the design and appearance of structures and equipment.

California Streets and Highway Code Section 263 allows the California Legislature to identify highways as eligible for designation as a scenic highway. The government with jurisdiction over land abutting a highway considered to be scenic is required to adopt a "scenic corridor protection program" that restricts development, outdoor advertising, and earthmoving activities along the affected segment or corridor. Caltrans must also indicate that the highway segment meets established criteria for the roadway or segment to be designated as scenic.

California Building Standards Code

California Building Standards Code Title 24 serves as the basis for the design and construction of buildings in California. In addition to safety, sustainability, new technology and reliability, the California Building Standards Code addresses light pollution and glare hazards through the establishment of maximum allowable backlight, up light, and glare ratings.

LOCAL

County of Orange General Plan

The County of Orange General Plan describes the County as containing open space areas with significant scenic and aesthetics value. As discussed in the County's Resources Element, the County, with its varied topography and proximity to the ocean, abounds in scenic areas. While the General Plan does not specifically identify scenic vistas, it discusses that the preservation of scenic vantage points (visual access) has been limited to a few turnouts along Ortega Highway, Chapman Avenue, and Santiago Canyon Road, and parks on the coastal bluffs at San Clemente and Corona Del Mar State Beach Parks, Dana Point, and Laguna Beach. Other high-priority open space areas identified in the Resources Element include Chino Hills, the Santa Ana River Greenbelt Corridor, the Aliso Creek Corridor, Caspers Wilderness Park, the Laguna Greenbelt, the Orange County Shoreline, Bolsa Chica, the Cleveland National Forest, Upper Newport Bay, and Upper Santiago Canyon.

The County of Orange General Plan designates viewscape corridors and landscape corridors. The County Scenic Highway Plan designates the following landscape corridors within the City: a portion of Alicia Parkway (north of Aliso Creek Road), Camino del Avion, Crown Valley Parkway, La Paz Road, Moulton Parkway, a portion of Niguel Road (from Crown Valley Parkway to Camino del Avion), and Golden Lantern.

City of Laguna Niguel General Plan

The City's existing General Plan Open Space, Parks, and Conservation Element includes a Scenic Corridors Plan. While there are no City designated Scenic Highways, several major existing City thoroughfares are designated as Landscape Corridors (Figure 5-13, Landscape Corridors), valued for their scenic character, and intended to enhance the driving experience and overall visual quality of the community.

City of Laguna Niguel Municipal Code

The City's Zoning Ordinance (or "Zoning Code") is codified in Title 9, *Planning and Zoning*, of the Laguna Niguel Municipal Code. The Zoning Code provides general development standards that influence the City's scenic views, visual character, and restrict lighting. The Zoning Code implements the General Plan goals and policies by classifying and regulating the specific uses of land and structures within the City. The Zoning Code identifies standards that include but are not limited to minimum lot size and lot coverage requirements; maximum building height; minimum building setbacks; automobile storage requirements; signage requirements; open space and landscaping requirements; and lighting requirements. Municipal Code Title 9, Division 1, Article 2, Subarticle 3, *Residential Districts*, provides standards and regulations for residential districts, and Title 9, Division 1, Article 2, Subarticle 4, *Nonresidential Districts*, provides standards and regulations for nonresidential districts.

Municipal Code Title 9, Division 1, Article 2, Subarticle 8, *Hillside Protection*, contains the City's Hillside Protection Ordinance. The stated goal of the Hillside Protection Ordinance is, in part, to ensure that any permitted hillside development conforms to the character of the natural topography and that the visual impacts of grading are softened by requiring designs which incorporate slope undulation, blending and other features to reflect the natural terrain. The Hillside Protection Ordinance contains development standards designed to control and soften the visual impacts of hillside development.

The City's Community Design Guidelines (Title 9, Division 1, Article 2, Subarticle 9) provides architectural, landscape, site planning, and sign criteria for the design and review of proposed commercial, office, industrial, attached residential, and other development within the City. The design guidelines apply to projects that require a site development or use permit. Design guidelines include topics related to site planning (e.g., site access, parking, lighting, pedestrian spaces, loading and trash areas); landscaping; architecture (e.g., architectural style, building mass and form, building materials); and/or cultural depictions. For a project to be approved, the decision-making authority must find that the project is consistent with the overall goal and objectives of the community design guidelines, which are as follows:

> (a) Goal. The overall goal of this subarticle is to enhance the quality of the manmade environment in the City.
>
> (b) Objectives. In order to advance the goal in paragraph (a) of this section, the following objectives are hereby adopted:
>
> > (1) To create a set of explicit design standards to be used by City reviewing bodies to help guide decisions for approval or denial of proposed development projects and thereby protect the general welfare of the community.
> >
> > (2) To create a set of explicit high quality design standards to be used by prospective developers and their site planners, architects, landscape architects, and engineers in designing proposed development projects.
> >
> > (3) To encourage new development projects which:
> >
> > > a. Utilize a variety of architectural styles and site designs;
> > >
> > > b. Incorporate quality design features;
> > >
> > > c. Are both inviting and user-friendly to people;
> > >
> > > d. Offer pleasing and interesting views to pedestrians, motorists, and neighbors; and
> > >
> > > e. Are architecturally distinctive yet in harmony with the surrounding natural and manmade environments.
> >
> > (4) To provide a consistent approach to site planning, building design, signs, graphics, color, materials, lighting, landscaping, and other design elements.
> >
> > (5) To provide for City review of exterior modifications to commercial, industrial, office, and multiple-family residential projects which were in existence prior to the establishment of these Guidelines, while at the same time providing for ease in processing of such review with a minimum of cost and time to the applicant.

Municipal Code Title 9, Division 1, Article 2, Subarticle 11, *Permits and Amendments*, contains regulations related to the permitting process that would apply to subsequent land use and development projects in

the City. This includes specific procedures for the review of individual types of discretionary permits, such as site development permits, use permits, and others.

Laguna Niguel Gateway Specific Plan

The Laguna Niguel Gateway Specific Plan (Gateway Specific Plan) defines the overall vision, goals, policies, land use regulations, development standards, and design guidelines for the Gateway area, which consists of approximately 300 acres along the eastern border of the City. The Gateway Specific Plan contains regulations, development standards, and design guidelines related to land use and urban form, mobility, infrastructure, streetscape, and architectural design.

Local Coastal Program

The California Coastal Act requires each local government lying wholly or partly within the State-designated Coastal Zone to prepare a Local Coastal Program (LCP). The City's LCP is comprised of portions of the South Laguna Specific Plan and the Aliso Creek Specific Plan, both of which were certified by the California Coastal Commission prior to incorporation. After incorporation, the California Coastal Commission certified the Laguna Niguel Local Coastal Program as a single plan. The LCP provides land use and development standards for land within the coastal zone. Projects within the South Laguna Specific Plan or Aliso Creek Specific Plan areas would be required to comply with applicable land use and development standards and guidelines enumerated within the respective specific plan. These include, but are not limited to, regulations, development standards, and design guidelines related to land use and urban form, circulation/transportation, infrastructure, streetscape, and architectural and landscape design.

City of Laguna Niguel CEQA Manual

The City of Laguna Niguel CEQA Manual provides the City and project applicants with local guidelines, procedures, requirements, and thresholds of significance for the environmental review process within the City of Laguna Niguel consistent with the California Environmental Quality Act (Public Resources Code [PRC] Section 21000 et seq.), referred to as "CEQA" or "CEQA Statutes," and the State CEQA Guidelines (Title 14, California Code of Regulations (CCR), Division 6, Chapter 3, Section 15000 et seq.). The City's CEQA Manual applies to all public and private projects under the jurisdiction of the City of Laguna Niguel that constitute a "project" and therefore subject to CEQA review.

The City's CEQA Manual identifies the topic of *Aesthetics and Scenic Resources* to represent the importance of scenic resources to the City, as promoted by the City's Hillside Protection Ordinance and the mapped Landscape Corridors in the Laguna Niguel General Plan.

4.1.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

CEQA Guidelines Appendix G contains the Initial Study Environmental Checklist, which includes questions related to aesthetics and light/glare. The City relies on the questions included in Appendix G as the thresholds of significance for assessing impacts related to aesthetics and scenic resources (City of Laguna Niguel CEQA Manual, Revised February 24, 2023). A significant impact will occur if implementation of the proposed Project will:

- Have a substantial adverse effect on a scenic vista (refer to Impact Statement AES-1);
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway (refer to Impact Statement AES-2);
- In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings and/or in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality (refer to Impact Statement AES-3); and/or
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area (refer to Impact Statement AES-4).

4.1.5 IMPACTS AND MITIGATION MEASURES

AES-1: Would the project have a substantial adverse effect on a scenic vista?

Impact Analysis: While there are currently no officially designated scenic vista points in the Planning Area, the Planning Area contains numerous areas and viewsheds with relatively high scenic value. Views of scenic resources are available from multiple publicly available vantage points within the Planning Area, including public trails, parks and open space areas, and streets. Mid-to-long range views of the San Joaquin Hills and long-range views of the Santa Ana Mountains are generally available throughout much of the Planning Area. Long-range views of the Pacific Ocean are also afforded from public trails, parks, and streets within the southern portion of the Planning Area. Views of these scenic resources are intermittent from within the Planning Area and are highly dependent on topographic features of the area and atmospheric conditions.

The General Plan Update Resource Management Element proposes to designate scenic resources and scenic vistas within the Planning Area; refer to Figure 4.1-1, *Scenic Resources and Vistas*. Proposed designated scenic vistas include Glider Park (Kite Hill), Lilly Shapell Park, Ridge View Park, Vista Plaza Park, Upper Niguel Ranch Park, Reef View Node Park, Sea View Park and Overlook, Bad Lands Park, Long View Park, Laguna Ridge Trail, Long View Park Trail, Colinas Bluff Trail, and Aliso Summit Trail. Proposed designated scenic resources located within the Planning Area include Aliso and Wood Canyons Wilderness Park, Salt Creek Corridor Regional Park, Laguna Niguel Regional Park, and Niguel Botanical Preserve. The General Plan Update itself would not directly alter or remove these designated scenic resources and scenic vistas, as they are not currently designated as such under existing conditions. Further, these designated scenic resources and scenic vistas are located within parks, trails, and open space areas, and the General Plan Update would not convert these areas into urban uses.

Subsequent development with buildout of the General Plan Update Land Use Element could result in new development and intensification of existing development within the Planning Area that may alter views of scenic resources from scenic vistas such that their scenic quality would be diminished. Buildout of the General Plan Update Land Use Element would primarily accommodate new residential and non-residential development within existing urbanized areas of the City, with the majority of potential growth opportunities located within specific areas of the City, including the Laguna Niguel Gateway Specific Plan (Gateway Specific Plan), the Opportunity Areas (e.g., the Marketplace at Laguna Niguel, Chet Holifield Federal Building (CHFB), and Town Center), and Hospitality Overlay sites.

The Gateway Specific Plan and Opportunity Areas are generally developed with urban uses and are not located on hillsides or other elevated areas that may offer scenic vistas or serve as scenic resources. Publicly accessible mid-to-long range views of the San Joaquin Hills and long-range views of the Santa Ana Mountains are generally available from these areas but are intermittently obstructed by existing development and landscaping. Publicly accessible views of the Pacific Ocean are not available from these areas due to intervening topography and development. Subsequent development or redevelopment of these areas would not alter public views of scenic resources from scenic vistas within the Planning Area.

The proposed Hospitality Overlay sites are located at the northwest corner of Golden Lantern and Camino Del Avion and at the northwest corner of Crown Valley Parkway and Pacific Island Drive. The site located at Golden Lantern and Camino Del Avion is currently developed and does not contain a scenic resource or serve as a scenic vista. The site located at Crown Valley Parkway and Pacific Island Drive is within an undeveloped hillside in the southern portion of the City; however, this area does not allow for public access and thus does not offer publicly accessible views. As previously stated, the General Plan Update proposes to designate scenic resources and scenic vistas within the Planning Area. None of the aforementioned growth areas contain scenic resources or scenic vistas that would be designated by the General Plan Update. As such, subsequent development in these areas would not have a substantial adverse effect on a scenic vista. Impacts would be less than significant.

Additionally, the proposed General Plan includes policies that are intended to focus development in and around existing urbanized areas and preserve and protect open space areas and resources that are designated scenic resources. Proposed Land Use Element Policy LU-1.2 directs the City to preserve and enhance open spaces, parks, and landscape corridors to safeguard environmental resources, and enhance overall community well-being and aesthetics. Proposed Resource Management Element Policy RM-1.5 directs the City to implement its Hillside Protection Ordinance to minimize impacts to sensitive hillside and canyon areas. Policy RM-1.8 is aimed at encouraging new development projects to be sited in less sensitive areas to protect sensitive landforms and natural resources as open spaces. Policy RM-2.5 directs the City to provide public trails, recreation areas, and viewing points that are designed to enhance the enjoyment of high value scenic views.

Chet Holifield Federal Building Demolition

The Laguna Niguel General Plan Update identifies Opportunity Area 2 as the CHFB site. Buildout of the General Plan Update Land Use Element would include demolition of the existing CHFB site and redevelopment of the site, prioritizing the establishment of an employment hub which would increase the General Plan building limit for the site to potentially accommodate up to 500 attached residential units, a 120-room boutique hotel, and 910,000 square feet of commercial uses, including more intensive medical related uses if the Opportunity Area Overlay were to be implemented.

As discussed in Section 4.4, *Cultural Resources*, the CHFB is a historic built environment resource and determined eligible for listing on the National Register of Historic Places (NRHP). While the CHFB is not designated as a scenic resource under the proposed General Plan Update Resource Management Element (refer to Figure 4.1-1), the CHFB contributes to the scenic built environment and is visible by the public from surrounding public roadways designated as scenic corridors (Alicia Parkway and Aliso Creek Road) and Glider Park (Kite Hill), which is a proposed designated scenic vista under the General Plan Update. The

assessment of eligibility for listing in the NRHP for the CHFB states that the building's surrounding site and landscaping, and thus visibility of the building, contribute to its significance with open space and complex topography enforcing a feel of monumentality.[4] The setting of the CHFB, including distant views of the historic property from surrounding areas, is a defining feature of the property; as such, its demolition and potential future development within Opportunity Area 2 would constitute a change as compared to existing conditions; refer to Section 4.4, *Cultural Resources*.

As discussed, the CHFB site is visible by the public from Glider Park (Kite Hill), which is a proposed designated scenic vista under the General Plan Update. While demolition of the CHFB site and future redevelopment would change the view of the CHFB site from Glider Park (Kite Hill), views of the CHFB site are not the primary factor for this site being proposed for designation as a scenic vista. The location and elevation of Glider Park provide for long range and panoramic views of proposed designated scenic resources that do not include the CHFB site. Removal of the CHFB site would not compromise or change designation of Glider Park as a scenic vista or limit its existing views of scenic resources. Therefore, demolition and subsequent redevelopment of the CHFB site would not have a substantial adverse effect on a scenic vista and impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

LAND USE ELEMENT

Policy LU-1.2: **Open Space Preservation.** Preserve and enhance open spaces, parks, and landscape corridors within and around urban areas to support recreational opportunities, safeguard environmental resources, and enhance overall community well-being and aesthetics. This includes ensuring that land uses and developments along designated Scenic Corridors align with scenic enhancement and preservation goals, maintaining the visual quality of these areas.

RESOURCE MANAGEMENT ELEMENT

Policy RM-1.5: **Hillside Preservation.** Implement the City's Hillside Protection Ordinance to minimize impacts to sensitive hillside and canyon areas.

Policy RM-2.5: **Scenic Viewing Areas.** Provide public trails, recreation areas, and viewing points that are designed to enhance the enjoyment of high value scenic views.

[4] Potomac-Hudson Engineering, Inc., *Final Environmental Impact Statement for the Chet Holifield Federal Building Tenant Relocation Laguna Niguel, California*, March 2021.

AES-2: Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Impact Analysis: The Planning Area is not located adjacent to or within view of an officially designated State Scenic Highway. Long-range views of the Planning Area's eastern and southeastern hillside areas are intermittently visible from portions of nearby eligible State Scenic Highways, including SR-1, I-5, and SR-74. The areas that are visible from these eligible State Scenic Highways generally consist of open space and low-density hillside residential development, which would be maintained under the General Plan Update. As such, the Project would not substantially damage scenic resources within a State Scenic Highway.

The proposed Mobility Element of the General Plan Update designates several thoroughfares within the City as Scenic Corridors; refer to Figure 4.1-2, *Scenic Corridors*. These locally-designated Scenic Corridors are recognized for their scenic qualities and include Alicia Parkway, Camino del Avion, Crown Valley Parkway, La Paz Road, Moulton Parkway, Niguel Road (between Crown Valley Parkway and Camino del Avion), Pacific Island Drive, and Golden Lantern.

Subsequent development with buildout of the General Plan Update Land Use Element could result in new development and intensification of existing development within the Planning Area adjacent to roadways proposed as scenic corridors. Buildout of the General Plan Update Land Use Element would primarily accommodate new residential and non-residential development within existing urbanized areas of the City, with the majority of potential growth opportunities located within specific areas of the City, including the Gateway Specific Plan, the Opportunity Areas (e.g., the Marketplace at Laguna Niguel, CHFB, and Town Center), and Hospitality Overlay sites.

The Gateway Specific Plan, Opportunity Areas, and Hospitality Overlay site located at Golden Lantern and Camino Del Avion are generally developed with urban uses under existing conditions; the Hospitality Overlay site at Pacific Island Drive and Crown Valley Parkway is undeveloped. These areas are all located adjacent to scenic corridors. Publicly accessible views along these corridors vary and are primarily comprised of a mix of urban development, views of open space resources, and in some instances long range views of the San Joaquin Hills, the Santa Ana Mountains, and open sky toward the Pacific Ocean; publicly accessible views of the Pacific Ocean are not available from scenic corridors within these areas due to intervening topography and development. Overall, views along the corridors are intermittently obstructed by existing development and landscaping adjacent to the corridors and within the immediate area, and due to the varying topography of the Planning Area.

Potential subsequent development within the Gateway Specific Plan is governed by the previously adopted Gateway Specific Plan. The Laguna Niguel Gateway Specific Plan EIR (Gateway Specific Plan EIR) analyzed the potential for future development to substantially damage scenic resources within a state scenic highway and determined impacts to be less than significant. Any subsequent development within the Gateway Specific Plan would be regulated by the development standards and design guidelines established by the Gateway Specific Plan. The General Plan Update would not provide for new sensitive land uses or development potential beyond what is currently allowed by the Gateway Specific Plan and analyzed in the Gateway Specific Plan EIR.

With the exception of the CHFB site, discussed separately below, and the Hospitality Overlay site located at Pacific Island Drive and Crown Valley Parkway, the areas identified for growth and transition by the General Plan Update Land Use Element are developed and urbanized and do not contain scenic resources, such as trees, rock outcroppings, and historic buildings that would be substantially damaged. While one of the Hospitality Overlay sites is undeveloped and includes undisturbed vegetation, it is not identified as a scenic resource and development of the site would not alter Pacific Island Drive, Crown Valley Parkway, and Camino Del Avion to the extent that they would no longer function as scenic corridors.

The General Plan Update has been developed to continue to preserve expansive areas of open space and to ensure that new development is located in and around existing urbanized areas, thus ensuring that new development is primarily an extension of the existing urban landscape and minimizes interruption of views of nearby visual features. Further, the Zoning Ordinance, Gateway Specific Plan, and LCP, as applicable, would regulate development within the City, including maximum building heights, setbacks, massing, building type and intensity, landscaping, and other development characteristics in each zoning district to protect and enhance scenic corridors within the Planning Area. Pursuant to the City's Community Design Guidelines (Title 9, Division 1, Article 2, Subarticle 9), applicable subsequent development projects would be reviewed to ensure that the project is consistent with the overall goal and objectives of the community design guidelines. Subsequent projects within the Gateway Specific Plan and LCP areas would be required to comply with the adopted development standards and development guidelines of those plans. Specific to hillside areas, the City's Hillside Protection Ordinance (Title 9, Division 1, Article 2, Subarticle 8) contains development standards designed to control and soften the visual impacts of hillside development. Additionally, applicable subsequent land use and development review applications would undergo environmental review on a project-by-project basis prior to consideration by the decision-making authority. Development consistent with the General Plan Update Land Use Element would not substantially damage scenic resources within an area identified as a scenic corridor and impacts would be less than significant.

Chet Holifield Federal Building Demolition

The CHFB site is located within Opportunity Area 2. As previously described, buildout of the General Plan Update Land Use Element would include demolition of the existing CHFB site and redevelopment of the site, prioritizing the establishment of an employment hub which would increase the General Plan building limit for the site to potentially accommodate up to 500 attached residential units, a 120-room boutique hotel, and 910,000 square feet of commercial uses, including more intensive medical related uses if the Opportunity Area Overlay were to be implemented.. As previously discussed, the CHFB is a historic built environment resource which has been determined eligible for listing on the NRHP; however, the CHFB is not visible from any designated or eligible State Scenic Highways. Thus, no impact would occur in this regard.

While the CHFB is not designated as a scenic resource under the proposed General Plan Update Resource Management Element (refer to Figure 4.1-1), the CHFB contributes to the scenic built environment. The CHFB is visible from segments of several locally designated scenic corridors, including the segment of Alicia Parkway between Avila Road and El Lazo, the segment of La Paz Road between Aliso Creek Road and Avila Road, and the segment of Aliso Creek Road between Alicia Parkway and La Paz Road. Views of the CHFB

from these locally designated scenic corridors, except for views from Alicia Parkway, which are generally unobstructed, are primarily obscured or intermittent due to intervening development and landscaping. Demolition and future redevelopment of the CHFB site would result in a significant visual change along the locally designated scenic corridors related to the loss of views of the historic property. Although the demolition of the CHFB is considered a significant and unavoidable impact relative to cultural resources (see Section 4.4, *Cultural Resources*), future development on the CHFB site would not impact the overall integrity or enjoyment of views for users of the locally designated scenic corridors with views of the site and surrounding areas. While views of the CHFB site contribute to the visual aspect and character of the scenic corridors from which it is visible, its presence is not the primary contributor for the roadways' designation as a scenic corridor. Publicly accessible views along these corridors vary and include a mix of urban development, views of open space resources, including resources proposed to be designated as scenic by the General Plan Update, and in some instances long range views of the San Joaquin Hills the Santa Ana Mountains. Therefore, demolition of the CHFB site would not have a substantial adverse effect on a locally designated scenic corridor within the Planning Area and impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: There are no policies related to resources within a State scenic highway.

AES-3: In non-urbanized areas, would the project 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?

Impact Analysis: Public Resources Code Section 21071 defines an "Urbanized area" as:

(a) An incorporated city that meets either of the following criteria:

(1) Has a population of at least 100,000 persons.

(2) Has a population of less than 100,000 persons if the population of that city and not more than two contiguous incorporated cities combined equals at least 100,000 persons.

According to the California Department of Finance, the City has a current (2024) population of 64,291.[5] The adjacent City of Aliso Viejo has a population of 50,068. Combined, the cities have a population of 114,359, which exceeds 100,000 persons; thus, the City qualifies as being within an "Urbanized Area." A significant impact would occur if the General Plan Update conflicts with applicable zoning and other regulations governing scenic quality.

[5] California Department of Finance (DOF), *E-5 Population and Housing Estimates for Cities, Counties, and the State, January 2020-2024 with 2020 Census Benchmark*, May 2024.

CONSTRUCTION

While no specific development projects are proposed as part of the Laguna Niguel General Plan Update, except for the assumption that the CHFB site will be demolished as part of a future redevelopment effort, the General Plan Update Land Use Element will accommodate future growth in Laguna Niguel. Visible features associated with subsequent construction activities would include exposed building pads and staging areas for grading, excavation, and construction equipment. In addition, temporary structures could be located on the respective development site during various stages of construction, within materials storage areas, or associated with construction debris piles on site. Exposed trenches, roadway bedding, spoils/debris piles, and steel plates would be visible during construction of street and utility infrastructure improvements.

Construction activities would be temporary in nature, and all construction equipment would ultimately be removed from individual project sites following completion of construction activities. Pursuant to Municipal Code Sections 9-1-35.20 and Section 9-1-45.16, which address residential and nonresidential districts, respectively, construction offices, storage yards, large containers, and temporary fencing and similar structures on an active constriction project may be conditionally permitted with a temporary use permit. Per Section 9-1-114.6, *Temporary Use Permits*, the purpose of a temporary use permit is to regulate certain temporary land uses and activities to ensure that adverse impacts on surrounding properties, residents, and businesses are minimized, that the time limitations for temporary uses are specified and complied with, and that the site of the temporary use is restored to its condition prior to establishment of the use. In approving a temporary use permit, the decision-making authority must find that the project is consistent with the General Plan, Zoning Code, complies with CEQA, and would not create conditions materially detrimental to the public health, safety, and general welfare or injurious to or incompatible with other properties or land uses in the vicinity. Additional conditions of approval may also be established to mitigate or eliminate adverse impacts on surrounding properties, residents, or businesses. Subsequent development and construction activities would be required to comply with the City's Municipal Code. Thus, the proposed General Plan Update would not conflict with applicable zoning and other regulations governing scenic quality, and no impact would occur in this regard.

Chet Holifield Federal Building Demolition

Similarly, short-term activities associated with demolition of the CHFB site could temporarily influence the visual quality of the CHFB site and/or its immediate surroundings. Demolition activities would be temporary in nature, and all construction equipment would ultimately be removed from the CHFB site following completion of demolition activities. The CHFB site is located in an urbanized area primarily separated from surrounding development by existing roadways. As with other construction projects in the City, demolition of the CHFB site would be required to comply with the City's Municipal Code. As discussed above, pursuant to Municipal Code Section 9-1-45.16, construction offices, storage yards, large containers, and temporary fencing and similar structures on an active constriction project may be conditionally permitted with a temporary use permit. Per Section 9-1-114.6, *Temporary Use Permits*, the purpose of a temporary use permit is to regulate certain temporary land uses and activities to ensure that adverse impacts on surrounding properties, residents, and businesses are minimized, that the time limitations for temporary uses are specified and complied with, and that the site of the temporary use is

restored to its condition prior to establishment of the use. Thus, demolition activities associated with the CHFB site would not conflict with applicable zoning and other regulations governing scenic quality, and no impact would occur in this regard.

OPERATION

The General Plan Update Land Use Element proposes land uses and development intensities that are intended to maintain the overall development pattern and quality of development within the Planning Area while identifying specific areas for potential growth and transition. Subsequent development with buildout of the General Plan Update Land Use Element would increase residential densities and non-residential land use intensities in specific areas of the City. In general, buildout of the General Plan Update would result in new growth and infill development in and around existing urbanized areas.

The majority of the potential growth opportunities are located within specific areas of the City, including the Gateway Specific Plan, the Opportunity Areas (e.g., the Marketplace at Laguna Niguel, CHFB site, and Town Center), and Hospitality Overlay sites.

Potential subsequent development within the Gateway Specific Plan is governed by the previously adopted Gateway Specific Plan. The Gateway Specific Plan EIR analyzed the potential for future development to degrade the visual character or quality of the site and its surroundings and determined impacts to be less than significant with implementation of mitigation specific to shade/shadow impacts on nearby light sensitive uses. Mitigation would require projects resulting in potential shade/shadow impacts to perform a shade and shadow analysis. Any subsequent development within the Gateway Specific Plan would be regulated by the development standards and design guidelines established by the Gateway Specific Plan. The General Plan Update would not provide for new sensitive land uses or development potential beyond what is currently allowed by the Gateway Specific Plan and analyzed in the Gateway Specific Plan EIR.

The Opportunity Areas and the Hospitality Overlay site located at Golden Lantern and Camino Del Avion are currently developed and surrounded by existing development. However, the proposed Hospitality Overlay includes a currently undeveloped and undisturbed site at the northwest corner of Crown Valley Parkway and Pacific Island Drive.

All subsequent development would be subject to conformance with applicable requirements in the Municipal Code and/or applicable Specific Plan, which include regulations related to maximum building height, building setbacks, landscaping and screening requirements, and other development characteristics in place in each zoning district that govern scenic quality. Pursuant to the City's Community Design Guidelines (Title 9, Division 1, Article 2, Subarticle 9), applicable subsequent development projects would be reviewed to ensure that the project is consistent with the overall goal and objectives of the community design guidelines. The City's Hillside Protection Ordinance (Title 9, Division 1, Article 2, Sub-article 8) contains development standards designed to control and soften the visual impacts of hillside development. Subsequent projects within the Gateway Specific Plan and LCP areas would be required to comply with the development standards and development guidelines of those adopted plans. Additionally, applicable subsequent land use and development review applications would undergo environmental review on a project-by-project basis prior to consideration by the decision-making

authority. If necessary, project-specific mitigation would be recommended to reduce potential impacts to a less than significant level.

Compliance with existing regulatory requirements would ensure that new development in the Planning Area would be designed to comply with applicable zoning and other regulations that govern scenic quality and to ensure new development is visually compatible with existing development and open space resources. Therefore, the General Plan Update would not conflict with applicable zoning and other regulations governing scenic quality. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

LAND USE ELEMENT

Goal LU-1: **Land Use Planning.** Establish a balanced land use pattern that integrates residential, commercial, and employment uses with open space and public services to support a vibrant, sustainable community that offers a high quality of life.

Policy LU-1.2: **Open Space Preservation.** Preserve and enhance open spaces, parks, and landscape corridors within and around urban areas to support recreational opportunities, safeguard environmental resources, and enhance overall community well-being and aesthetics. This includes ensuring that land uses and developments along designated Scenic Corridors align with scenic enhancement and preservation goals, maintaining the visual quality of these areas.

Policy LU-1.12: **Residential and Non-residential Capacities.** Ensure the levels of population density and non-residential building intensity remain within the limits established by the Community Profile Areas and Sub-profile Areas.

Policy LU-2.1: **Site Planning and Design.** Establish and implement comprehensive design guidelines and standards that emphasize high-quality architecture, visual cohesion, and well-planned functional spaces in consideration of site topography and the surrounding setting. This includes provisions that address varying architectural styles that reflect Laguna Niguel's character, balancing innovation with visual harmony, while allowing flexibility to adapt to individual development contexts and optimizing land use for a sustainable, pedestrian-friendly community.

Policy LU-2.2: **Landscape Design.** Establish and implement comprehensive landscape design guidelines and standards to create visually appealing landscapes that soften and enhance development projects and complement the surrounding environment. Incorporate plant material of varying sizes for layered growth and select species adaptable to the local climate to ensure long-term survival.

Policy LU-2.3: **Streetscape Design.** Establish and implement public realm streetscape guidelines and standards that balance aesthetics and functionality, with a focus on the City's arterial highways and entry gateways. This includes cohesive design elements such as street furniture, lighting, drought-tolerant landscaping in medians and parkways, and monument signage that enhance Laguna Niguel's image and provide a welcoming, visually elevated experience for both residents and visitors.

Policy LU-4.2: **New Development Sensitivity.** Protect established residential neighborhoods by requiring new development projects to be sensitive to low density housing, including through appropriate building massing and scale, and to minimize impacts related to the operation of the use.

RESOURCE MANAGEMENT ELEMENT

Policy RM-1.1: **Open Space Preservation.** Preserve open space lands for recreation, habitat protection and enhancement, resource conservation, flood hazard management, public safety, aesthetic visual appeal, and overall community benefit.

Policy RM-1.5: **Hillside Preservation.** Implement the City's Hillside Protection Ordinance to minimize impacts to sensitive hillside and canyon areas.

Policy RM-2.5: **Scenic Viewing Areas.** Provide public trails, recreation areas, and viewing points that are designed to enhance the enjoyment of high value scenic views.

PUBLIC FACILITIES ELEMENT

Policy PF-3.3: **Utility Coordination (Water and Wastewater).** Collaborate with applicable stakeholders in the placement and design of utility facilities for new developments to minimize their environmental, aesthetic, and safety impacts.

MOBILITY ELEMENT

Goal M-6: **Scenic Corridors.** Preserve the landscaped character and aesthetics of the City's designated Scenic Corridors to strengthen the community's identity and provide a visually appealing experience for residents and visitors.

Policy M-6.1: **Scenic Character.** Preserve and enhance the distinctive aesthetic features of Scenic Corridors, including the surrounding landscapes and properties that contribute to the corridor's visual appeal and provide buffers to development.

Policy M-6.2: **Development Along Scenic Corridors.** Ensure zoning regulations and standards for development projects along Scenic Corridors effectively address key factors that could negatively impact the corridor's visual and aesthetic character, including grading and landform changes, building height and placement, signage, lighting, and landscaping.

Policy M-6.3: **Median and Parkway Design.** Ensure that City design guidelines and standards for the public right-of-way within these corridors effectively enhance the streetscapes. This

should include a focus on coordinated medians, parkways, signage, streetlights, sidewalks, landscaping (including street trees), street furniture, and hardscaping.

Policy M-6.4: **Median and Parkway Maintenance.** Ensure a high standard of regular maintenance of medians and parkways within Scenic Corridors. This includes monitoring for needed improvement or restoration and taking necessary actions to maintain the scenic qualities of these City roadways.

AES-4: Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Impact Analysis:

CONSTRUCTION

The City does not have any requirements regulating nighttime construction lighting. However, the City's Grading and Excavation Code (Municipal Code Section 8-1-822) sets permissible hours for grading and equipment operations for projects within one-half mile of a structure for human occupancy. Similarly, the Noise Ordinance (Municipal Code Section 6-6-7) sets permissible construction hours by only exempting construction noise from the noise ordinance during daytime hours. In conformance with Municipal Code Section 6-6-7, no construction activities, including demolition, would be permitted between the hours of 8:00 p.m. and 7:00 a.m. on weekdays, including Saturday, or any time on Sunday or a federal holiday. Therefore, outside of daytime hours, subsequent construction activities associated with buildout of the General Plan Update Land Use Element, including demolition of the CHFB site, would not be allowed and would not require the use of lighting. Thus, the General Plan Update would create a new source of substantial light or glare which would adversely affect day or nighttime views in the area associated with construction activities and impacts would be less than significant.

OPERATION

Subsequent development with buildout of the General Plan Update Land Use Element could introduce new sources of light or glare with the potential to adversely affect day or nighttime views. Light and glare impacts could result from new light sources such as street lighting, interior and exterior building lighting (including for safety purposes), vehicle headlights, illuminated signage, and new glare sources such as reflective building materials, roofing materials, and windows. These new sources of light and glare would be most visible from development along adjacent roadways, and to receptors, such as residents and traveling motorists. All lighting installed as part of subsequent development projects would be subject to conformance with applicable Zoning Ordinance requirements, including outdoor lighting development standards for residential and nonresidential districts (Sections 9-1-35.15 and 9-1-45.14) and building and exterior lighting and glare standards established in the Community Design Guidelines (Title 9, Division 1, Article 2, Subarticle 9). Therefore, following implementation of Zoning Ordinance requirements, including the Community Design Guidelines, the proposed General Plan Update would not result in adverse light and glare impacts. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

MOBILITY ELEMENT

Policy M-6.2: **Development Along Scenic Corridors.** Ensure zoning regulations and standards for development projects along Scenic Corridors effectively address key factors that could negatively impact the corridor's visual and aesthetic character, including grading and landform changes, building height and placement, signage, lighting, and landscaping.

4.1.6 CUMULATIVE IMPACTS

Section 3.0, *Basis of Cumulative Analysis,* identifies projected regional growth having the potential to interact with the proposed Project to the extent that a significant cumulative effect may occur. The geographic setting for aesthetics and scenic resources is typically localized and considers development within the City adjacent to neighboring jurisdictions.

Would the project, combined with other related cumulative projects, have a substantial adverse effect on a scenic vista?

Impact Analysis: Views of scenic resources are available from numerous public vantage points within the Planning Area, including public trails, parks and open space areas, and streets. Views of these scenic resources are intermittent from within the Planning Area and are highly dependent on topographic features of the area and atmospheric conditions. While most subsequent development with buildout of the General Plan Update Land Use Element would occur in areas that have been previously developed, subsequent development could result in new development and intensification of existing urban uses within the Planning Area that may alter views of scenic resources from scenic vistas. As discussed in AES-1, the majority of potential growth opportunities under buildout of the General Plan Update Land Use Element are located within specific areas of the City, including the Gateway Specific Plan, the Opportunity Areas (e.g., the Marketplace at Laguna Niguel, CHFB, and Town Center), and Hospitality Overlay sites.

The Gateway Specific Plan and Opportunity Areas are generally developed with urban uses and are not located on hillsides or other elevated areas that may offer scenic vistas or serve as scenic resources. The proposed Hospitality Overlay sites are located at the northwest corner of Golden Lantern and Camino Del Avion at the northwest corner of Crown Valley Parkway and Pacific Island Drive. The site located at Golden Lantern and Camino Del Avion is currently developed and does not contain a scenic resource or serve as a scenic vista. The site located at Crown Valley Parkway and Pacific Island Drive is within an undeveloped hillside in the southern portion of the City; however, this area does not allow for public access and thus does not offer publicly accessible views. None of the aforementioned growth areas contain scenic resources or scenic vistas that would be designated by the General Plan Update. As such, subsequent development in these areas would not have a substantial adverse effect on a scenic vista. Impacts would be less than significant.

As discussed, the CHFB site is visible by the public from Glider Park (Kite Hill), which is a proposed designated scenic vista under the General Plan Update. While demolition of the CHFB site and future

redevelopment would change the view of the CHFB site from Glider Park (Kite Hill), views of the CHFB site are not the primary factor for this site being proposed for designation as a scenic vista. The location and elevation of Glider Park provide for long range and panoramic views of proposed designated scenic resources that do not include the CHFB site. Removal of the CHFB site would not compromise or change designation of Glider Park as a scenic vista or limit its existing views of scenic resources. Therefore, demolition and subsequent redevelopment of the CHFB site would not have a substantial adverse effect on a scenic vista and impacts would be less than significant.

Related cumulative development within an adjacent jurisdiction would not combine with the proposed General Plan Update, including the demolition of the CHFB site, with the potential to have a substantial adverse effect on a scenic vista within the Planning Area. The scenic vistas proposed within the Planning Area provide views of scenic resources within the Planning Area and long-range views of mountains and the Pacific Ocean. Projects within adjacent jurisdictions would be reviewed for their potential to have a substantial adverse effect on a scenic vista designated by the jurisdiction in which the project is located. Thus, the General Plan Update's incremental effects associated with a substantial adverse effect on a scenic vista would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan Update goals and policies cited above.

Would the project, combined with other related cumulative projects, substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Impact Analysis: The Planning Area is not located adjacent to or within view of an officially designated State Scenic Highway. Long-range views of the Planning Area's eastern and southeastern hillside areas are intermittently visible from portions of nearby eligible State Scenic Highways, including SR-1, I-5, and SR-74. The General Plan Update does not propose any changes to these eligible State Scenic Highways. Further, the areas that are visible from these eligible State Scenic Highways generally consist of open space and low-density hillside residential development, which would be maintained under the General Plan Update. The General Plan Update assumes that the CHFB site would be demolished as part of a future redevelopment effort however, the site is not visible from an eligible State Scenic Highway. Therefore, the proposed General Plan Update's incremental effect associated with substantial damage of scenic resources within a state scenic highway would not be cumulatively considerable.

Subsequent development with buildout of the General Plan Update Land Use Element could result in new development and intensification of existing development within the Planning Area adjacent to roadways proposed as scenic corridors. Buildout of the General Plan Update Land Use Element would primarily accommodate new residential and non-residential development within existing urbanized areas of the City, with the majority of potential growth opportunities located within specific areas of the City, including

the Gateway Specific Plan, the Opportunity Areas (e.g., the Marketplace at Laguna Niguel, CHFB, and Town Center), and Hospitality Overlay sites.

With the exception of the CHFB site, discussed separately below, and the Hospitality Overlay site located at Pacific Island Drive and Crown Valley Parkway, the areas identified for growth and transition by the General Plan Update Land Use Element are developed and urbanized and do not contain scenic resources, such as trees, rock outcroppings, and historic buildings that would be substantially damaged. While one of the Hospitality Overlay sites is undeveloped and includes undisturbed vegetation, it is not identified as a scenic resource and development of the site would not alter Pacific Island Drive, Crown Valley Parkway, and Camino Del Avion to the extent that they would no longer function as scenic corridors. As discussed in AES-2, the Zoning Ordinance, Gateway Specific Plan, and LCP, as applicable, would regulate development within the City, including maximum building heights, setbacks, massing, building type and intensity, and other development characteristics in each zoning district to protect scenic corridors within the Planning Area. Applicable subsequent development with buildout of the General Plan Update Land Use Element would be reviewed to ensure that site-specific development is consistent with the overall goal and objectives of the community design guidelines. In addition, subsequent development review applications would undergo environmental review on a project-by-project basis prior to consideration by the decision-making authority. If necessary, project-specific mitigation would be recommended to reduce potential impacts to a less than significant level.

Related cumulative development within neighboring jurisdictions could occur adjacent to designated scenic corridors within Laguna Niguel. As discussed, the majority of potential growth opportunities under buildout of the General Plan Update Land Use Element are located within specific areas of the City, including Gateway Specific Plan, the Opportunity Areas (e.g., the Marketplace at Laguna Niguel, CHFB, and Town Center), and Hospitality Overlay sites. Of these areas, the CHFB site and Hospitality Overlay sites are located adjacent to scenic corridors that are also located adjacent to neighboring jurisdictions. The Hospitality Overlay site at Golden Lantern and Camino Del Avion (both identified scenic corridors) is currently developed and surrounded by existing development that do not contain scenic resources. Development of the site consistent with the General Plan Update Land Use Element would not change the scenic character of the adjacent roadways. Although the Hospitality Overlay site located at Pacific Island Drive and Crown Valley Parkway is currently undeveloped, residential development occurs in the neighboring jurisdiction and the site itself is not identified as a scenic resource; development of the site would not alter Pacific Island Drive, Crown Valley Parkway, and Camino Del Avion to the extent that they would no longer function as scenic corridors. Thus, the General Plan Update's incremental effects associated with a substantial adverse effect on a locally designated scenic corridor would not be cumulatively considerable.

Chet Holifield Federal Building Demolition

As discussed in Impact AES-2, while the demolition of the CHFB is considered a significant and unavoidable impact relative to cultural resources (see Section 4.4, *Cultural Resources*), demolition of the CHFB site would not have a substantial adverse effect on a locally designated scenic corridor within the Planning Area and impacts would be less than significant. While the CHFB is visible from segments of several locally designated scenic corridors, only Alicia Parkway is located adjacent to a neighboring jurisdiction.

Development occurs east of Alicia Parkway within the City of Aliso Viejo. Also, immediately east of Alicia Parkway is Aliso Creek and natural open space area, which is designated as Open Space by the City of Aliso Viejo's Conservation/Open Space Policy Map, and therefore, is not identified for development. Thus, the incremental effects associated with a substantial adverse effect on a locally designated scenic corridor from demolition of the CHFB site would not be cumulatively considerable.

Level of Significance: Less Than Significant Impact.

Mitigation Measures: No mitigation measures are required.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan Update goals and policies cited above.

Would the project, combined with other related cumulative projects, conflict with applicable zoning and other regulations governing scenic quality?

Impact Analysis:

CONSTRUCTION

While no specific development projects are proposed as part of the Laguna Niguel General Plan Update, except for the assumption that the CHFB site will be demolished as part of a future redevelopment effort, the General Plan Update will accommodate future growth in Laguna Niguel. Construction activities would be visible during subsequent projects associated with buildout of the General Plan Update Land Use Element, including demolition of the CHFB site. As discussed in Impact AES-3, these conditions would be temporary and projects within the City, including demolition of the CHFB site, would be required to comply with the City's Municipal Code, resulting in a less than significant impact.

Similarly, related cumulative projects would be required to comply with any specific regulations of the jurisdiction in which the site is located relative to construction activities. While construction activities could occur within the Planning Area located adjacent to other jurisdictions, these activities would be limited. Thus, the General Plan Update's incremental effects associated with a conflict with applicable zoning and other regulations governing scenic quality from subsequent construction activities, including demolition of the CHFB site, would not be cumulatively considerable.

OPERATION

As discussed above, subsequent development with buildout of the General Plan Update Land Use Element would result in new development and intensification of urban uses within existing urbanized areas, thus ensuring that new development is primarily an extension of the existing urban landscape. While the General Plan Update does not include any specific development proposals, except for the assumption that the CHFB site will be demolished as part of a future redevelopment effort, the General Plan Update could facilitate subsequent development projects within these areas at higher densities and intensities than currently exist.

The General Plan Update incorporates consistent and compatible development intensities that are intended to maintain the overall development pattern and quality of development within the Planning

Area while identifying specific areas for potential growth and transition. All subsequent development would be subject to conformance with applicable requirements in the Municipal Code and/or applicable Specific Plan, which include regulations related to maximum building height, building setbacks, landscaping and screening requirements, and other development characteristics in place in each zoning district that govern scenic quality. Subsequent projects within the Gateway Specific Plan and LCP areas would be required to comply with the development standards and development guidelines of those adopted plans. Additionally, applicable subsequent land use and development review applications would undergo environmental review on a project-by-project basis prior to consideration by the decision-making authority.

Similar to the Project, related cumulative development projects would be reviewed to ensure the project would not conflict with applicable zoning and other regulations governing scenic quality adopted by the jurisdiction in which the project is located. Thus, the General Plan Update's incremental effects involving potential conflicts with applicable zoning and other regulations governing scenic quality would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan Update goals and policies cited above.

Would the project, combined with other related cumulative projects, create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Impact Analysis:

CONSTRUCTION

The City does not have any requirements regulating nighttime construction lighting. In conformance with Municipal Code Section 6-6-7, no construction activities, including demolition, would be permitted between the hours of 8:00 p.m. and 7:00 a.m. on weekdays, including Saturday, or any time on Sunday or a federal holiday. Therefore, outside of daytime hours, subsequent construction activities associated with buildout of the General Plan Update Land Use Element, including demolition of the CHFB site, would not be allowed and would not require the use of lighting.

Related cumulative projects would be required to comply with any requirements regulating construction lighting and construction activities adopted by the jurisdiction in which the project site is located. While construction activities could occur within the Planning Area located adjacent to other jurisdictions, these activities would be limited. Thus, the incremental effects of the General Plan Update associated with the potential to create a new source of substantial light or glare which would adversely affect day or nighttime views in the area during construction activities, including demolition of the CHFB site, would not be cumulatively considerable.

OPERATION

Subsequent development associated with the General Plan Update could introduce new sources of light or glare with the potential to adversely affect day or nighttime views. All lighting installed in subsequent development projects within Laguna Niguel would be subject to conformance with applicable Zoning Ordinance requirements, including outdoor lighting development standards for residential and nonresidential districts (Sections 9-1-35.15 and 9-1-45.14) and building and exterior lighting and glare standards established in the Community Design Guidelines (Title 9, Division 1, Article 2, Subarticle 9). With implementation of the regulations described above, the proposed General Plan Update would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Similar to the Project, related cumulative projects would be required to comply with any requirements regulating light and glare adopted by the jurisdiction in which the project site is located. The potential for subsequent development within the Planning Area to combine with related cumulative projects would only occur for sites within proximity to each other, which would be limited. Compliance with the regulatory requirements of the jurisdiction in which the cumulative project is located would address the potential for new sources of light or glare to interact with development in the area, including within the Planning Area. Thus, the incremental effects of the General Plan Update associated with the potential to create a new source of substantial light or glare which would adversely affect day or nighttime views in the area would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan Update goals and policies cited above.

4.1.7 SIGNIFICANT UNAVOIDABLE IMPACTS

Aesthetics and scenic resources impacts associated with the implementation of the General Plan Update would be less than significant and no significant unavoidable aesthetics and scenic resources impacts would occur as a result of the General Plan Update.

4.1.8 REFERENCES

California Department of Finance (DOF), *E-5 Population and Housing Estimates for Cities, Counties, and the State, January 2020-2024 with 2020 Census Benchmark*, May 2024.

California Department of Transportation, *California State Scenic Highway System Map*, https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa, accessed March 18, 2025.

County of Orange, *County of Orange General Plan,* 2005-2024.

Potomac-Hudson Engineering, Inc., *Final Environmental Impact Statement for the Chet Holifield Federal Building Tenant Relocation Laguna Niguel*, California, March 2021.

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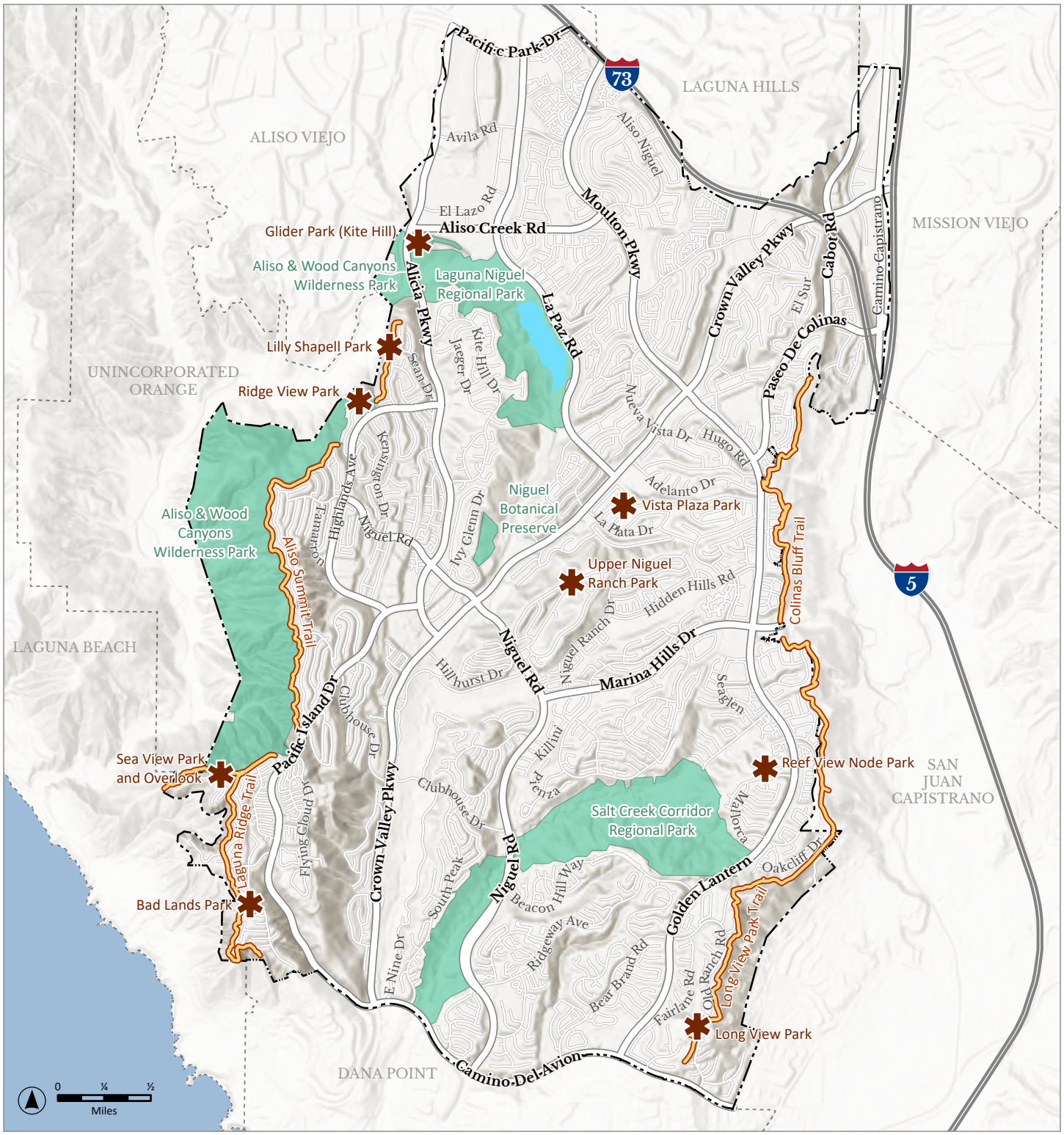

Data sources: City of Laguna Niguel; Orange County GIS.

Prepared for the City of Laguna Niguel by De Novo Planning Group
June 11, 2025.

LEGEND

- Laguna Niguel City Boundary
- Other Jurisdictions
- Laguna Niguel Lake
- Scenic Resources
- Scenic Vista
- Scenic Vista (Trails)

Figure 4.1-1.

Scenic Resources and Vistas

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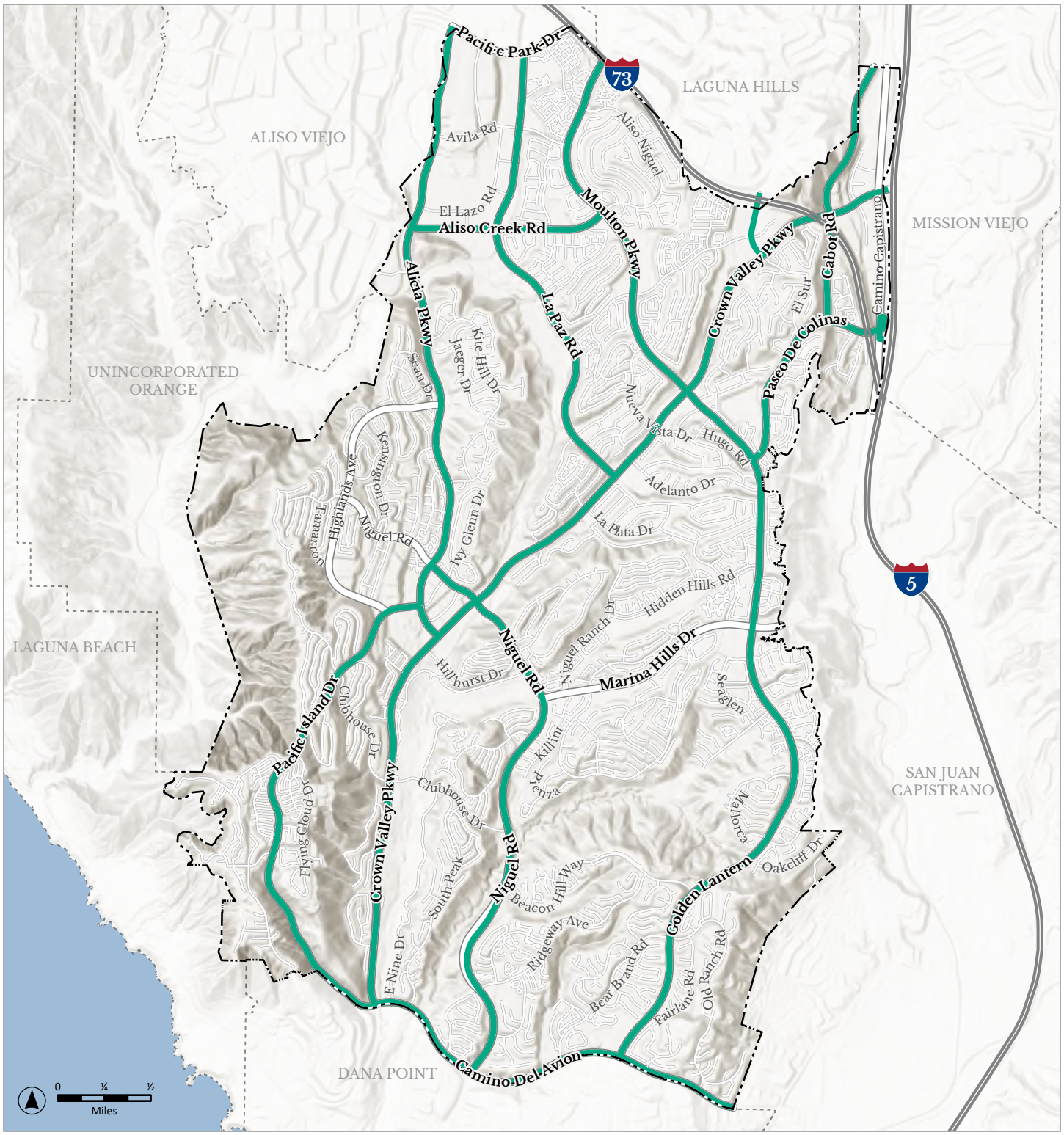

Data sources: City of Laguna Niguel; Orange County GIS.

Prepared for the City of Laguna Niguel by De Novo Planning Group
June 11, 2025.

LEGEND

- Laguna Niguel City Boundary
- Other Jurisdictions
- Scenic Corridors

Figure 4.1-2.

Scenic Corridors

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4.2 AIR QUALITY

4.2.1 PURPOSE

This section identifies the existing air quality conditions within the Planning Area and provides an analysis of potential impacts associated with implementation of the General Plan Update.

This section is primarily based upon the air quality emissions analysis and modeling prepared by De Novo Planning Group, and included as Appendix B, *Air Quality, Energy and Greenhouse Gas Emissions Modeling Data*. This section is also based in part on the *City of Laguna Niguel General Plan Update Vehicle Miles Traveled (VMT) Analysis Report*, and *City of Laguna Niguel General Plan Update Traffic Study*, both prepared by Linscott, Law & Greenspan, Engineers (LLG), dated January 7, 2025, and included as Appendix F, *Transportation Analysis*.

4.2.2 ENVIRONMENTAL SETTING

The California Air Resources Board (CARB) divides the State into 15 air basins that share similar meteorological and topographical features. The Planning Area is located within the South Coast Air Basin (SCAB), a 6,600-square mile area bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The SCAB includes the non-desert portions of Los Angeles, San Bernardino, and Riverside Counties, as well as all of Orange County, in addition to the San Gorgonio Pass area of Riverside County.

The extent and severity of the air pollution problem in the Basin is a function of the area's natural physical characteristics (weather and topography), as well as man-made influences (development patterns and lifestyle). Factors such as wind, sunlight, temperature, humidity, rainfall, and topography, all affect the accumulation and dispersion of air pollutants throughout the Basin.

LOCAL CLIMATE AND METEOROLOGY

The topography and climate of southern California combine to make the SCAB an area highly favorable for forming air pollution. A warm air mass frequently descends over the cool, moist marine layer produced by the interaction between the ocean's surface and the lowest layer of the atmosphere. Within the atmosphere, the warm upper layer forms a cap over the cooler surface layer, which traps the pollutants near the ground. Light winds can further limit ventilation. The region also experiences periods of hot, dry winds from the desert, known as Santa Ana winds. If the Santa Ana winds are strong, they can surpass the sea breeze, which blows from the ocean to the land, and carry the suspended dust and pollutants out to the ocean. If the winds are weak, they are opposed by the sea breeze and cause stagnation, resulting in high pollution events.

With more pronounced oceanic influence, coastal areas, such as where the Project site is located, show less variability in annual minimum and maximum temperatures compared to inland areas. The majority of the annual rainfall in the SCAB occurs between November and April. Summer rainfall is minimal and is

generally limited to scattered thunderstorms in the coastal regions and slightly heavier showers in the eastern portion of the basin along the coastal westerly side of the mountains. Year-to-year patterns in rainfall are unpredictable because of fluctuations in the weather.

Temperature inversions limit the vertical depth through which pollution can be mixed. Among the most common temperature inversions in the SCAB are radiation inversions, which form on clear winter nights when cold air off mountains sink to the valley floor while the air aloft over the valley remains warm. These inversions, in conjunction with calm winds, trap pollutants near the source. Other types of temperature inversions that affect the SCAB include marine, subsidence, and high-pressure inversions.

Periods of hazy visibility and occasionally unhealthful air may occur with strong temperature inversions that limit the vertical depth through which air pollution can be dispersed. This results in a concentration of air pollutants because they cannot rise through the inversion layer and disperse. These inversions are more common and persistent during the summer months. Over time, sunlight produces photochemical reactions within this inversion layer that creates ozone, a particularly harmful air pollutant. Occasionally, strong thermal convections occur which allows the air pollutants to rise high enough to pass over the mountains and ultimately dilute the pollutants.

In the winter, light nocturnal winds result mainly from the drainage of cool air off of the mountains toward the valley floor while the air aloft over the valley remains warm. This forms a type of inversion known as a radiation inversion. Such winds are characterized by stagnation and poor local mixing and trap pollutants such as automobile exhaust near their source.

CRITERIA POLLUTANTS

The air pollutants emitted into the ambient air by stationary and mobile sources are regulated by State and federal laws. These regulated air pollutants are known as “criteria air pollutants” and are categorized into primary and secondary pollutants.

Primary air pollutants are emitted directly from sources. Carbon monoxide (CO), reactive organic gases (ROGs), nitrogen oxide (NO_X), sulfur dioxide (SO_2), coarse particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), and lead are primary air pollutants. Of these, CO, NO_X, SO_2, PM_{10}, and $PM_{2.5}$ are criteria pollutants. ROG and NO_X are criteria pollutant precursors and form secondary criteria pollutants through chemical and photochemical reactions in the atmosphere. For example, the criteria pollutant ozone (O_3) is formed by a chemical reaction between ROG and NO_X in the presence of sunlight. O_3 and nitrogen dioxide (NO_2) are the principal secondary pollutants.

Carbon Monoxide (CO). CO is an odorless, colorless toxic gas that is emitted by mobile and stationary sources as a result of incomplete combustion of hydrocarbons or other carbon-based fuels. In cities, automobile exhaust can cause as much as 95 percent of all CO emissions. CO has a greater affinity in hemoglobin than oxygen and consequently replaces oxygen in the body’s red blood cells and can cause asphyxiation. Individuals with a deficient blood supply to the heart, patients with diseases involving heart and blood vessels, fetuses (unborn babies), and patients with chronic hypoxemia (oxygen deficiency) as seen in high altitudes are most susceptible to the adverse effects of CO exposure. People with heart

disease are also more susceptible to developing chest pains when exposed to low CO levels. High concentrations of CO in enclosed indoor spaces can be fatal.

Ozone (O_3). O_3 occurs in two layers of the atmosphere. The layer surrounding the Earth's surface is the troposphere. The troposphere extends approximately ten miles above ground level, where it meets the second layer, the stratosphere. The stratospheric (the "good" O_3 layer) extends upward from about ten to 30 miles and protects life on Earth from the sun's harmful ultraviolet rays. "Bad" O_3 is a photochemical pollutant, needing volatile organic compounds (VOCs) or ROGs, NO_X, and sunlight to form; therefore, VOCs/ROGs and NO_X are O_3 precursors. To reduce O_3 concentrations, it is necessary to control the emissions of these O_3 precursors. Significant O_3 formation generally requires an adequate amount of precursors in the atmosphere and a period of several hours in a stable atmosphere with strong sunlight. High O_3 concentrations can form over large regions when emissions from motor vehicles and stationary sources are carried hundreds of miles from their origins.

While O_3 in the upper atmosphere (stratosphere) protects the earth from harmful ultraviolet radiation, high concentrations of ground-level O_3 (in the troposphere) can adversely affect the human respiratory system and other tissues. O_3 is a strong irritant that can constrict the airways, forcing the respiratory system to work hard to deliver oxygen. Individuals exercising outdoors, children, and people with pre-existing lung disease such as asthma and chronic pulmonary lung disease are considered to be the most susceptible to the health effects of O_3. Short-term exposure (lasting for a few hours) to elevated O_3 levels can result in aggravated respiratory diseases, such as emphysema, bronchitis and asthma, shortness of breath, increased susceptibility to infections, inflammation of the lung tissue, increased fatigue, as well as chest pain, dry throat, headache, and nausea.

Nitrogen Dioxide (NO_2). NO_X are a family of highly reactive gases that are a primary precursor to the formation of ground-level O_3 and react in the atmosphere to form acid rain. NO_2 (often used interchangeably with NO_X) is a reddish-brown gas that can cause breathing difficulties at elevated levels. Peak readings of NO_2 occur in areas that have a high concentration of combustion sources (e.g., motor vehicle engines, power plants, refineries, and other industrial operations). NO_2 can irritate and damage the lungs and lower resistance to respiratory infections such as influenza. The health effects of short-term exposure are still unclear. However, continued or frequent exposure to NO_2 concentrations that are typically much higher than those normally found in the ambient air may increase acute respiratory illnesses in children and increase the incidence of chronic bronchitis and lung irritation. Chronic exposure to NO_2 may aggravate eyes and mucus membranes and cause pulmonary dysfunction.

Coarse Particulate Matter (PM_{10}). PM_{10} refers to suspended particulate matter less than ten microns or ten one-millionths of a meter. PM_{10} arises from sources such as road dust, diesel soot, combustion products, construction operations, and dust storms. PM_{10} scatters light and significantly reduces visibility. In addition, PM_{10} penetrate into lungs and can potentially damage the respiratory tract. On June 19, 2003, the CARB adopted amendments to the statewide 24-hour particulate matter standards based upon requirements set forth in the Children's Environmental Health Protection Act (Senate Bill 25).

Fine Particulate Matter ($PM_{2.5}$). State and federal $PM_{2.5}$ standards were created due to concerns over health impacts related to fine particulate matter (particulate matter 2.5 microns in diameter or less). Particulate matter impacts primarily affect infants, children, the elderly, and those with pre-existing cardiopulmonary disease.

On January 5, 2005, the Environmental Protection Agency (EPA) published a Final Rule in the Federal Register designating the SCAB as a nonattainment area based on federal $PM_{2.5}$ standards. On June 20, 2002, the CARB adopted amendments for statewide annual ambient particulate matter air quality standards. These standards were revised/established due to increasing concerns by CARB that previous standards were inadequate, as almost everyone in California is exposed to levels at or above the current State standards during some parts of the year, and the statewide potential for significant health impacts associated with particulate matter exposure was determined to be large and wide-ranging. On July 8, 2016, EPA found that the SCAB attained the 1997 24-hour and annual $PM_{2.5}$ standards based on 2011-2013 data. However, the SCAB remains in nonattainment, as the EPA has not determined that California has met the Federal Clean Air Act (FCAA) requirements for redesignating the SCAB nonattainment area to attainment.

Sulfur Dioxide (SO_2). Sulfur dioxide (SO_2) is a colorless, irritating gas with an odor of rotten eggs; it is formed primarily by the combustion of sulfur-containing fossil fuels. Sulfur dioxide is often used interchangeably with SO_X. Exposure of a few minutes to low levels of SO_2 can result in airway constriction in some asthmatics. The SCAB is in a state of attainment for this pollutant.

Volatile Organic Compounds (VOC). VOCs are hydrocarbon compounds (any compound containing various combinations of hydrogen and carbon atoms) that exist in the ambient air. VOCs contribute to the formation of smog through atmospheric photochemical reactions and/or may be toxic. Compounds of carbon (also known as organic compounds) have different levels of reactivity; that is, they do not react at the same speed, or do not form O_3 to the same extent, when exposed to photochemical processes. VOCs often have an odor, and some examples include gasoline, alcohol, and the solvents used in paints. Exceptions to the VOC designation include CO, carbon dioxide (CO_2), carbonic acid, metallic carbides or carbonates, and ammonium carbonate. VOCs are a criteria pollutant since they are a precursor to O_3, which is a criteria pollutant. The terms VOC and ROG, discussed below, are often used interchangeably.

Reactive Organic Gases (ROG). Similar to VOCs, ROGs are also precursors in forming O_3, and consist of compounds containing methane, ethane, propane, butane, and longer chain hydrocarbons, which are typically the result of some type of combustion/decomposition process. Smog is formed when ROG and NO_x react in the presence of sunlight.

TOXIC AIR CONTAMINANTS

Toxic air contaminants (TACs) are airborne substances capable of causing short-term (acute) and/or long-term (chronic) or carcinogenic (i.e., cancer causing) adverse human health effects (i.e., injury or illness). TACs include both organic and inorganic chemical substances. They may be emitted from a variety of common sources including gasoline stations, automobiles, dry cleaners, industrial operations, and

painting operations. The current California list of TACs includes approximately 200 compounds, including particulate emissions from diesel-fueled engines.

Hazardous air pollutant is a term used in the FCAA and includes a variety of pollutants generated or emitted by industrial production activities. Identified as TACs under the California Clean Air Act (CCAA), ten pollutants have been singled out through ambient air quality data as being the most substantial health risks in California. Direct exposure to these pollutants has been shown to cause cancer, birth defects, brain and nervous system damage, and respiratory disorders.

TACs do not have ambient air quality standards, because no safe levels of TACs can be determined. Instead, TAC impacts are evaluated by calculating the health risks associated with a given exposure. The requirements of the Air Toxic "Hot Spots" Information and Assessment Act (Assembly Bill [AB] 2588) apply to facilities that use, produce, or emit toxic chemicals. Facilities subject to the toxic emission inventory requirements of AB 2588 must prepare, submit, and periodically update their toxic emission inventory plans and reports.

Toxic contaminants often result from fugitive emissions during fuel storage and transfer activities, and from leaking valves and pipes. For example, the electronics industry, including semiconductor manufacturing, uses highly toxic chlorinated solvents in semiconductor production processes. Automobile exhaust also contains toxic air pollutants, such as benzene and 1,3-butadiene.

Diesel Particulate Matter

Diesel Particulate Matter (DPM) is emitted from both mobile and stationary sources. In California, on-road diesel-fueled engines contribute approximately 24 percent of the statewide total, with an additional 71 percent attributed to other mobile sources, such as construction and mining equipment, agricultural equipment, and transport refrigeration units. Stationary sources contribute approximately five percent of total DPM in the State. It should be noted that CARB has developed several plans and programs to reduce diesel emissions such as the Diesel Risk Reduction Plan, the Statewide Portable Equipment Registration Program, and the Diesel Off-Road Online Reporting System. The Portable Equipment Registration Program and Diesel Off-Road Online Reporting System allow owners or operators of portable engines and certain other types of equipment to register their equipment, in order to operate them in the State without having to obtain individual permits from local air districts.

Diesel exhaust and many individual substances contained in it (e.g., arsenic, benzene, formaldehyde, and nickel) have the potential to contribute to mutations in cells that can lead to cancer. Long-term exposure to diesel exhaust particles poses the highest cancer risk of any TAC evaluated by the Office of Environmental Health Hazard Assessment (OEHHA). CARB estimates that about 70 percent of the cancer risk faced by the average Californian from breathing toxic air pollutants stems from DPM.

The Multiple Air Toxics Exposure Study V (MATES V) is a comprehensive air quality assessment conducted by the South Coast Air Quality Management District (SCAQMD) in the South Coast Air Basin during 2018–2019. Building upon previous studies, MATES V aimed to evaluate the cancer risk and chronic non-cancer health impacts associated with exposure to toxic air contaminants. The study employed a combination of

fixed-site monitoring, an updated emissions inventory, and advanced modeling techniques to characterize regional air toxics levels. Notably, MATES V expanded its scope to include assessments of multiple exposure pathways and provided an exploratory analysis of chronic non-cancer health effects, marking a significant advancement in understanding the broader health implications of air pollution in the region. The MATES V Study estimates that basin-wide cancer risk is 455 in a million, which has decreased from 997 in a million cancer risk since the MATES IV Study.[1] The majority of this risk is attributed to DPM.

Exposure to DPM can also have immediate health effects. DPM can irritate the eyes, nose, throat, and lungs and can cause coughing, headaches, lightheadedness, and nausea. In studies with human volunteers, DPM made people with allergies more susceptible to the materials to which they are allergic, such as dust and pollen. Exposure to DPM also causes inflammation in the lungs, which may aggravate chronic respiratory symptoms and increase the frequency or intensity of asthma attacks.

Diesel engines are a major source of fine particulate pollution. The elderly and people with emphysema, asthma, and chronic heart and lung disease are especially sensitive to fine-particle pollution. Numerous studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems. Because children's lungs and respiratory systems are still developing, they are also more susceptible than healthy adults to fine particles. Exposure to fine particles is associated with increased frequency of childhood illnesses and can also reduce lung function in children. In California, DPM has been identified as a carcinogen.

ODORS

Typically, odors are regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals have the ability to smell minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; an odor that is offensive to one person (e.g., from a fast-food restaurant) may be perfectly acceptable to another. It is also important to note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person

[1] South Coast Air Quality Management District, *Multiple Air Toxics Exposure Study*, August 2021. https://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-v

may use the word “strong” to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air.

When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

SENSITIVE RECEPTORS

Sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases, such as asthma, emphysema, and bronchitis.

Some people are much more sensitive than others to breathing fine particles (PM_{10} and $PM_{2.5}$). People with influenza, chronic respiratory and cardiovascular diseases, and the elderly may suffer worsening illness and premature death due to breathing these fine particles. People with bronchitis can expect aggravated symptoms from breathing in fine particles. Children may experience decline in lung function due to breathing in PM_{10} and $PM_{2.5}$. Other groups considered sensitive are smokers and people who cannot breathe well through their noses. Exercising athletes are also considered sensitive because many breathe through their mouths during exercise. As a conservative estimate of impacts, sensitive receptors are anticipated to be located directly adjacent to new development.

AMBIENT AIR QUALITY

Both the EPA and the CARB have established ambient air quality standards for common pollutants. These ambient air quality standards represent safe levels of contaminants that avoid specific adverse health effects associated with each pollutant.

The federal and State ambient air quality standards are summarized in Table 4.2-1, *Federal and State Ambient Air Quality Standards* for important pollutants. The federal and State ambient standards were developed independently, although both processes attempted to avoid health-related effects. As a result, the federal and State standards differ in some cases. In general, the California standards are more stringent. This is particularly true for ozone and PM_{10}.

Table 4.2-1
Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	Federal Primary Standard	State Standard
Ozone	1-Hour 8-Hour	-- 0.070 ppm	0.09 ppm 0.070 ppm
Carbon Monoxide	8-Hour 1-Hour	9.0 ppm 35.0 ppm	9.0 ppm 20.0 ppm
Nitrogen Dioxide	Annual 1-Hour	0.053 ppm 0.100 ppm	0.03 ppm 0.18 ppm
Sulfur Dioxide	Annual 24-Hour 1-Hour	0.03 ppm 0.14 ppm 0.075 ppm	-- 0.04 ppm 0.25 ppm
PM_{10}	Annual 24-Hour	-- 150 ug/m^3	20 ug/m^3 50 ug/m^3
$PM_{2.5}$	Annual 24-Hour	9 ug/m^3 35 ug/m^3	12 ug/m^3 --
Lead	30-Day Avg. 3-Month Avg.	-- 0.15 ug/m^3	1.5 ug/m^3 --

ppm = parts per million, ug/m3 = Micrograms per Cubic Meter.
Source: California Air Resources Board, *Ambient Air Quality Standards*, https://ww2.arb.ca.gov/sites/default/files/2024-08/AAQS%20Table_ADA_FINAL_07222024.pdf, accessed January 24, 2025.

Attainment Status

In accordance with the CCAA, the CARB is required to designate areas of the State as attainment, nonattainment, or unclassified with respect to applicable standards. An "attainment" designation for an area signifies that pollutant concentrations did not violate the applicable standard in that area. A "nonattainment" designation indicates that a pollutant concentration violated the applicable standard at least once, excluding those occasions when a violation was caused by an exceptional event, as defined in the criteria.

Depending on the frequency and severity of pollutants exceeding applicable standards, the nonattainment designation can be further classified as serious nonattainment, severe nonattainment, or extreme nonattainment, with extreme nonattainment being the most severe of the classifications. An "unclassified" designation signifies that the data does not support either an attainment or nonattainment status. The CCAA divides districts into moderate, serious, and severe air pollution categories, with increasingly stringent control requirements mandated for each category.

The EPA designates areas for O_3, CO, and NO_2 as "does not meet the primary standards," "cannot be classified," or "better than national standards." For SO_2, areas are designated as "does not meet the primary standards," "does not meet the secondary standards," "cannot be classified," or "better than national standards." However, the CARB terminology of attainment, nonattainment, and unclassified is more frequently used.

Orange County has a State designation of Attainment or Unclassified for all criteria pollutants except for O_3, PM_{10} and $PM_{2.5}$. Orange County has a national designation of either Unclassifiable or Attainment for all criteria pollutants except for Ozone and $PM_{2.5}$.

Table 4.2-2, *South Coast Air Basin Attainment Status*, lists the attainment status for the criteria pollutants in the SCAB.

Table 4.2-2
South Coast Air Basin Attainment Status

Pollutant	Standard[1]	Averaging Time	Designation[2]	Attainment Deadline Date[3]
1-Hour Ozone	NAAQS	1979 1-Hour (0.12 ppm)	Nonattainment (Extreme)	12/31/2022 Originally 11/15/2010 (not attained)[4]
	CAAQS	1-Hour (0.09 ppm)	Nonattainment	N/A
8-Hour Ozone[5]	NAAQS	1997 8-Hour (0.08 ppm)	Nonattainment (Extreme)	6/15/2024
	NAAQS	2008 8-Hour (0.075 ppm)	Nonattainment (Extreme)	7/20/2032
	NAAQS	2015 8-Hour (0.070 ppm)	Nonattainment (Extreme)	8/3/2038
	CAAQS	8-Hour (0.070 ppm)	Nonattainment	Beyond 2032
CO	NAAQS	1-Hour (35 ppm)	Attainment (Maintenance)	6/11/2007 (attained)
	CAAQS	8-Hour (9 ppm)	Attainment	6/11/2007 (attained)
NO_2[6]	NAAQS	1-Hour (0.1 ppm)	Unclassifiable/ Attainment	N/A (attained)
	NAAQS	Annual (0.053 ppm)	Attainment (Maintenance)	9/22/1998 (attained)
	CAAQS	1-hour (0.18 ppm) Annual (0.030 ppm)	Attainment	--
SO_2[7]	NAAQS	1-Hour (75 ppb)	Unclassifiable/ Attainment	1/9/2018
	NAAQS	24-Hour (0.14 ppm) Annual (0.03 ppm)	Unclassifiable/ Attainment	3/19/1979 (attained)
PM_{10}	NAAQS	1987 24-Hour (150 µg/m^3)	Attainment (Maintenance)[8]	7/26/2013 (attained)
	CAAQS	24-Hour (50 µg/m^3) Annual (20 µg/m^3)	Nonattainment	N/A

Table 4.2-2 (continued)
South Coast Air Basin Attainment Status

Pollutant	Standard[1]	Averaging Time	Designation[2]	Attainment Deadline Date[3]
$PM_{2.5}$[9]	NAAQS	2006 24-Hour (35 µg/m^3)	Nonattainment (Serious)	12/31/2023
	NAAQS	1997 Annual (15.0 µg/m^3)	Attainment	8/24/2016
	NAAQS	2012 Annual (12.0 µg/m^3)	Nonattainment (Serious)	12/31/2025
	NAAQS	2024 Annual (9.0 µg/m^3)	TBD	TBD
	CAAQS	Annual (12.0 µg/m^3)	Nonattainment	N/A
Lead	NAAQS	3-Months Rolling (0.15 µg/m^3)	Nonattainment (Partial)[10]	12/31/2015
Hydrogen Sulfide (H2S)	CAAQS	1-Hour (0.03 ppm/42 µg/m^3)	Attainment	--
Sulfates	CAAQS	24-Hour (25 µg/m^3)	Attainment	--
Vinyl Chloride	CAAQS	24-Hour (0.01 ppm/26 µg/m^3)	Attainment	--

Source: South Coast Air Quality Management District, *National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) Attainment Status for South Coast Air Basin*, September 2018.

Notes:

1. NAAQS = National Ambient Air Quality Standards, CAAQS = California Ambient Air Quality Standards
2. EPA often only declares Nonattainment areas; everywhere else is listed as Unclassifiable/Attainment or Unclassifiable.
3. A design value below the NAAQS for data through the full year or smog season prior to the attainment date is typically required for attainment demonstration.
4. 1-hour O_3 standard (0.12 ppm) was revoked, effective June 15, 2005; however, the Basin has not attained this standard based on 2008-2010 data and is still subject to anti-backsliding requirements.
5. 1997 8-hour O_3 standard (0.08 ppm) was reduced (0.075 ppm), effective May 27, 2008; the revoked 1997 O_3 standard is still subject to anti-backsliding requirements.
6. New NO_2 1-hour standard, effective August 2, 2010; attainment designations January 20, 2012; annual NO_2 standard retained.
7. The 1971 annual and 24-hour SO_2 standards were revoked, effective August 23, 2010; however, these 1971 standards will remain in effect until one year after EPA promulgates area designations for the 2010 SO_2 1-hour standard.

Table 4.2-2 (continued)
South Coast Air Basin Attainment Status

Pollutant	Standard[1]	Averaging Time	Designation[2]	Attainment Deadline Date[3]

8. Annual PM_{10} standard was revoked, effective December 18, 2006; 24-hour PM_{10} NAAQS deadline was 12/31/2006; SCAQMD request for attainment redesignation and PM_{10} maintenance plan was approved by EPA on June 26, 2013, effective July 26, 2013.
9. Attainment deadline for the 2006 24-Hour $PM_{2.5}$ NAAQS (designation effective December 14, 2009) is December 31, 2023 (an attainment date extension, as allowed under Clean Air Act Section 189(d), was requested in 2019). Annual $PM_{2.5}$ standard was revised on January 15, 2013, effective March 18, 2013, from 15 to 12 µg/m^3. Designations effective April 15, 2015, so Serious area attainment deadline is December 31, 2025.
10. Partial Nonattainment designation – Los Angeles County portion of Basin only for near-source monitors. Expect redesignation to attainment based on current monitoring data.

Air Pollutant Monitoring

The SCAQMD is the agency responsible for regional air quality planning, monitoring, and stationary source and facility permitting in the SCAB. The SCAQMD is divided into 38 air-monitoring areas with a designated ambient air monitoring station representative of each area. The City of Laguna Niguel is in the Central Orange County Coastal (Area 20) and Capistrano Valley (Area 21) monitoring areas. The nearest air monitoring station is the Saddleback Valley monitoring station in Area 19, located at 26081 Via Pera, Mission Viejo, approximately four miles north of the Planning Area. Because the monitoring station in Area 19 is the closest to the City, available data from this station is presented in Table 4.2-3, *Local Air Quality Levels*, for the years 2020-2022. No data was presented by the SCAQMD after 2022 for this monitoring station.

The monitoring data presented in Table 4.2-3 shows that ozone and particulate matter (PM_{10}) are the air pollutants of primary concern in the Planning Area, which are detailed below.

Table 4.2-3
Local Area Air Quality Levels

Pollutant (Standard)	Year		
	2020	2021	2022
Ozone			
Maximum 1-Hour Concentration (ppm)	0.171	0.105	0.110
Days > CAAQS (0.09 ppm)	20	2	1
Maximum 8-Hour Concentration (ppm)	0.122	0.081	0.088
Days > NAAQS (0.07 ppm)	32	8	5
Days > CAAQS (0.07 ppm)	32	8	6
Carbon Monoxide[1]			
Maximum 1-Hour Concentration (ppm)	1.7	1.0	1.2
Days > NAAQS (20 ppm)	--	--	--
Maximum 8-Hour Concentration (ppm)	0.8	0.8	1.0
Days > NAAQS (9 ppm)	--	--	--
Nitrogen Dioxide			
Maximum 1-Hour Concentration (ppm)	--	--	--
Days > NAAQS (0.25 ppm)	--	--	--
Sulfur Dioxide			
Maximum 1-Hour Concentration (ppm)	--	--	--
Days > CAAQS (0.25 ppm)	--	--	--
Inhalable Particulates (PM_{10})			
Maximum 24-Hour Concentration (ug/m^3)	53	35	31
Days > NAAQS (150 ug/m^3)	0	0	0
Days > CAAQS (50 ug/m^3)	1 (2%)	0	0
Annual Average (ug/m^3)	16.8	15.6	15.3
Annual > NAAQS (50 ug/m^3)	No	No	No
Annual > CAAQS (20 ug/m^3)	No	No	No
Ultra-Fine Particulates ($PM_{2.5}$)			
Maximum 24-Hour Concentration (ug/m^3)	35	28.7	--
Days > NAAQS (35 ug/m^3)	0	0	--
Annual Average (ug/m^3)	8.81	8.27	--
Annual > NAAQS (15 ug/m^3)	No	No	--
Annual > CAAQS (12 ug/m^3)	No	No	--

CAAQS = California Ambient Air Quality Standard; NAAQS = National Ambient Air Quality Standard; ppm = parts per million; -- Pollutant not monitored.
Source: South Coast Air Quality Management District, *Historical Air Quality Data by Year*, https://www.aqmd.gov/home/air-quality/historical-air-quality-data/historical-data-by-year, accessed January 24, 2025.
Notes:
1. Federal and State 8-hour and 1-hour CO standards were not exceeded.

Ozone

The State 1-hour concentration standard for O_3 was exceeded for 20 days in in 2020, two days in 2021, and one day in 2022 at the Saddleback Valley monitoring station during the 2020 to 2022 monitoring period. Similarly, the federal and State eight-hour O_3 standard was exceeded for 32 days in 2020, eight

days in 2021, and five-to-six days in 2022, during the 2020 to 2022 monitoring period at the Saddleback Valley monitoring station.

O_3 is a secondary pollutant, as it is not directly emitted. O_3 is the result of chemical reactions between other pollutants, most importantly hydrocarbons and NO_2, which occur only in the presence of bright sunlight. Pollutants emitted from upwind cities react during transport downwind to produce the oxidant concentrations experienced in the area. Many areas of the SCAQMD contribute to the O_3 levels experienced at the monitoring station, with the more significant areas being those directly upwind.

Carbon Monoxide

CO is another important pollutant that is due mainly to motor vehicles. The State and federal one-hour and eight-hour CO standards were not exceeded at any monitoring station in the SCAQMD over the 2020 to 2022 monitoring period.

Nitrogen Dioxide

This pollutant was not monitored at the Saddleback Valley monitoring station over the 2020 to 2022 monitoring period.

Sulfur Dioxide

This pollutant was not monitored at the Saddleback Valley monitoring station over the 2020 to 2022 monitoring period.

Particulate Matter

The State 24-hour concentration standard for PM_{10} was exceeded for one day (two percent of sampled days) in 2020 at the Saddleback Valley station over the 2020 to 2022 monitoring period. Over the same time period, the federal 24-hour and annual standards for PM_{10} were not exceeded. $PM_{2.5}$ was not monitored at the Saddleback Valley monitoring station during the 2022 monitoring period. The Saddleback Valley monitoring station did not record an exceedance of the State or federal $PM_{2.5}$ standards in 2020 or 2021.

4.2.3 REGULATORY SETTING

FEDERAL

Clean Air Act

The FCAA was first signed into law in 1970. In 1977, and again in 1990, the FCAA was substantially amended. The FCAA is the foundation for a national air pollution control effort, and it is composed of the following basic elements: national ambient air quality standards (NAAQS) for criteria air pollutants, hazardous air pollutant standards, state attainment plans, motor vehicle emissions standards, stationary source emissions standards and permits, acid rain control measures, stratospheric ozone protection, and enforcement provisions.

The EPA is responsible for administering the FCAA. The FCAA requires the EPA to set NAAQS for several problem air pollutants based on human health and welfare criteria. Two types of NAAQS were established: primary standards, which protect public health (with an adequate margin of safety, including for sensitive populations such as children, the elderly, and individuals suffering from respiratory diseases), and secondary standards, which protect the public welfare from non-health-related adverse effects, such as visibility reduction. NAAQS standards have been designed to accurately reflect the latest scientific knowledge and are reviewed every five years by a Clean Air Scientific Advisory Committee.

NAAQS standards define clean air and represent the maximum amount of pollution that can be present in outdoor air without any harmful effects on people and the environment. Existing violations of the O_3 and $PM_{2.5}$ NAAQS indicate that certain individuals exposed to these pollutants may experience certain health effects, including increased incidence of cardiovascular and respiratory ailments.

Although there is some variability among the health effects of the NAAQS pollutants, each has been linked to multiple adverse health effects including, among others, premature death, hospitalizations and emergency department visits for exacerbated chronic disease, and increased symptoms such as coughing and wheezing. NAAQS standards were last revised for each of the six criteria pollutants as listed below, with detail on what aspects of NAAQS changed during the most recent update:

- O_3: On October 1, 2015, the EPA lowered the national eight-hour standard from 0.075 ppm to 0.070 ppm, providing for a more stringent standard consistent with the current California State standard.
- CO: In 2011, the primary standards were retained from the original 1971 level, without revision. The secondary standards were revoked in 1985.
- NO_2: The national NO_2 standard was most recently revised in 2010 following an exhaustive review of new literature pointed to evidence for adverse effects in asthmatics at lower NO_2 concentrations than the existing national standard.
- SO_2: On June 2, 2010, a new one-hour SO_2 standard was established, and the existing 24-hour and annual primary standards were revoked. To attain the one-hour national standard, the three-year average of the annual 99th percentile of the one-hour daily maximum concentrations at each site must not exceed 75 ppb.
- PM: In February 2024, the EPA lowered the federal primary $PM_{2.5}$ annual standard to 9.0 ug/m^3 from the 12.0 ug/m^3 standard set in 2012. The secondary annual standard remains at 15.0 ug/m3.
- Lead: The national standard for lead was revised on October 15, 2008, to a rolling three-month average. In 2016, the primary and secondary standards were retained.

The law recognizes the importance for each state to locally carry out the requirements of the FCAA, as special consideration of local industries, geography, housing patterns, etc. are needed to have full comprehension of the local pollution control problems. As a result, the EPA requires each state to develop a State Implementation Plan (SIP) that explains how each state will implement the FCAA within their jurisdiction. A SIP is a collection of rules and regulations that a particular state will implement to control

air quality within their jurisdiction. The CARB is the State agency that is responsible for preparing and implementing the California SIP.

Transportation Conformity

Transportation conformity requirements were added to the FCAA in the 1990 amendments, and in 1997, the EPA adopted implementing regulations (Section 176 of the FCAA (42 U.S.C. Section 7506) and 40 CFR Part 93, Subpart A). Transportation conformity serves much the same purpose as general conformity: it ensures that transportation plans, transportation improvement programs, and projects that are developed, funded, or approved by the United States Department of Transportation or that are recipients of funds under the Federal Transit Act or from the Federal Highway Administration (FHWA), conform to the SIP as approved or promulgated by EPA.

Currently, transportation conformity applies in nonattainment areas and maintenance areas (maintenance areas are those areas that were in nonattainment that have been redesignated to attainment, under the FCCA). Under transportation conformity, a determination of conformity with the applicable SIP must be made by the agency responsible for the project, such as the Metropolitan Planning Organization, the Council of Governments, or a federal agency. The agency making the determination is also responsible for all the requirements relating to public participation. Generally, a project will be considered in conformance if it is in the transportation improvement plan and the transportation improvement plan is incorporated in the SIP. If an action is covered under transportation conformity, it does not need to be separately evaluated under general conformity.

Transportation Control Measures

One particular aspect of the SIP development process is the consideration of potential control measures as a part of making progress towards clean air goals. While most SIP control measures are aimed at reducing emissions from stationary sources, some are typically also created to address mobile or transportation sources. These are known as transportation control measures (TCMs), which are designed to reduce vehicle miles traveled and trips, or vehicle idling and associated air pollution. These goals are achieved by developing attractive and convenient alternatives to single-occupant vehicle use. Examples of TCMs include ridesharing programs, transportation infrastructure improvements such as adding bicycle and carpool lanes, and expansion of public transit.

STATE

California Clean Air Act (CCAA)

The California Clean Air Act (CCAA) was first signed into law in 1988. The CCAA provides a comprehensive framework for air quality planning and regulation, and spells out, in statute, the State's air quality goals, planning and regulatory strategies, and performance. CARB is the agency responsible for administering the CCAA, establishing ambient air quality standards pursuant to the California Health and Safety Code (section 39606(b)), which are similar to the federal standards.

California Air Quality Standards

Although NAAQS are determined by the EPA, states have the ability to set standards that are more stringent than the federal standards. As such, California established more stringent ambient air quality standards (i.e., CAAQS), which include the NAAQS as well as visibility reducing particulates, hydrogen sulfide, sulfates, and vinyl chloride. Federal and State ambient air quality standards have been established for O_3, CO, NO_2, SO_2, PM_{10} and lead. In addition, California has created standards for pollutants that are not covered by federal standards. Although there is some variability among the health effects of the CAAQS pollutants, each has been linked to multiple adverse health effects including, among others, premature death, hospitalizations and emergency department visits for exacerbated chronic disease, and increased symptoms such as coughing and wheezing. The existing State and federal primary standards for major pollutants are shown in Table 4.2-2.

CARB Mobile-Source Regulation

The State of California is responsible for controlling emissions from the operation of motor vehicles in the State. Rather than mandating the use of specific technology or the reliance on a specific fuel, CARB's motor vehicle standards specify the allowable grams of pollution per mile driven. In other words, the regulations focus on the reductions needed rather than on the manner in which they are achieved. Towards this end, the CARB adopted regulations requiring auto manufacturers to phase in less polluting vehicles.

CARB Air Quality and Land Use Handbook

CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (CARB Handbook) addresses the importance of considering health risk issues when siting sensitive land uses, including residential development, in the vicinity of intensive air pollutant emission sources including freeways or high-traffic roads, distribution centers, ports, petroleum refineries, chrome plating operations, dry cleaners, and gasoline dispensing facilities. The CARB Handbook draws upon studies evaluating the health effects of traffic traveling on major interstate highways in metropolitan California centers within Los Angeles (Interstate [I] 405 and I-710), the San Francisco Bay, and San Diego areas. The recommendations identified by CARB, including siting residential uses a minimum distance of 500 feet from freeways or other high-traffic roadways, are consistent with those adopted by the State of California for location of new schools. Specifically, the CARB Handbook recommends, "Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day."

Tanner Air Toxics Act

California regulates TACs primarily through the Tanner Air Toxics Act (AB 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588). The Tanner Act sets forth a formal procedure for the CARB to designate substances as TACs. This includes research, public participation, and scientific peer review before CARB can designate a substance as a TAC. To date, CARB has identified more than 21 TACs and has adopted EPA's list of hazardous air pollutants as TACs. Most recently, DPM was added to the CARB list of TACs. Once a TAC is identified, CARB then adopts an Airborne Toxics Control Measure (ATCM) for sources that emit that particular TAC. If there is a safe threshold for a substance at which there

is no toxic effect, the control measure must reduce exposure below that threshold. If there is no safe threshold, the measure must incorporate Best Available Control Technology to minimize emissions.

AB 2588 requires that existing facilities that emit toxic substances above a specified level prepare a toxic-emission inventory, prepare a risk assessment if emissions are significant, notify the public of significant risk levels, and prepare and implement risk reduction measures. CARB has adopted DPM control measures and more stringent emission standards for various on-road mobile sources of emissions, including transit buses and off-road diesel equipment (e.g., tractors, generators). The Advanced Clean Fleets (ACF) Regulation represents CARB's ongoing commitment to establishing more rigorous emission standards for mobile sources. These efforts are aimed at safeguarding the health and well-being of Californians. Under the ACF Regulation, vehicle fleets that are optimal candidates for electrification must reduce emissions by transitioning to Zero-Emission Vehicles (ZEVs) within targeted fleet categories. Additionally, starting with the 2036 model year, manufacturers are required to exclusively produce ZEV trucks. The Advanced Clean Cars Program II program was adopted in 2022 and includes regulations to rapidly reduce emissions for light-duty passenger cars, pickup trucks, and SUVs by increasing the number of zero-emission vehicles to meet air quality and climate change emission goals.

Climate Change Scoping Plan

On December 11, 2008, CARB adopted its *Climate Change Scoping Plan* (Scoping Plan), which functions as a roadmap of CARB's plans to achieve greenhouse gas (GHG) emissions reductions in California required by AB 32 through subsequently enacted regulations. The Scoping Plan contains the main strategies California will implement to reduce carbon dioxide-equivalent (CO_2e) emissions by 169 million metric tons (MMT), or approximately 30 percent, from the State's projected 2020 emissions level of 596 MMT of CO_2e under a business-as-usual scenario. This is a reduction of 42 MMT CO_2e, or almost ten percent, from 2002 to 2004 average emissions but requires the reductions in the face of population and economic growth through 2020. The Scoping Plan also breaks down the amount of GHG emissions reductions CARB recommends for each emissions sector of the State's GHG inventory. The Scoping Plan calls for the largest reductions in GHG emissions to be achieved by implementing the following measures and standards:

- Improved emissions standards for light-duty vehicles (estimated reductions of 31.7 MMT CO_2e);
- The Low-Carbon Fuel Standard (15.0 MMT CO_2e);
- Energy efficiency measures in buildings and appliances and the widespread development of combined heat and power systems (26.3 MMT CO_2e); and
- A renewable portfolio standard for electricity production (21.3 MMT CO_2e).

CARB updated the Scoping Plan in 2013 (*First Update to the Scoping Plan*) and again in 2017. The 2013 Scoping Plan Update built upon the initial Scoping Plan with new strategies and recommendations and also set the groundwork to reach the long-term goals set forth by the State. Successful implementation of existing programs (as identified in previous iterations of the Scoping Plan) has allowed California to meet the 2020 target. The 2017 Scoping Plan Update expanded the scope of the previous Scoping Plan further by focusing on the strategy for achieving the State's 2030 GHG target of 40 percent emissions

reductions below 1990 levels (to achieve the target codified into law by SB 32) and substantially advances toward the State's 2050 climate goal to reduce GHG emissions by 80 percent below 1990 levels.

The 2017 Scoping Plan Update relied on the preexisting programs paired with an extended, more stringent Cap-and-Trade Program, to deliver climate, air quality, and other benefits. The 2017 Scoping Plan Update identified new technologically feasible and cost-effective strategies to ensure that California meets its GHG reduction goals.

CARB adopted the 2022 Scoping Plan Update (2022 Scoping Plan) on December 15, 2022. The 2022 Scoping Plan Update assesses progress towards the SB 32 GHG emissions reduction target of at least 40 percent below 1990 emissions by 2030, while laying out a path to achieving carbon neutrality no later than 2045, and a reduction in anthropogenic emissions by 85 percent below 1990 levels.

California Energy Code

The California Energy Code (CCR Title 24, Part 6), which is incorporated into the Building Energy Efficiency Standards, was first established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods.

The most recent Title 24 standards are the 2022 Title 24 standards. Buildings permitted on or after January 1, 2023, must comply with the 2022 Standards. The California Energy Commission updates the standards every three years. When compared to the 2019 Title 24 standards, the 2022 update focuses on: encouraging electric heat pump technology and use; establishing electric-ready requirements when natural gas is installed; expanding solar photovoltaic (PV) system and battery storage standards; and strengthening ventilation standards to improve indoor air quality.

California Green Building Standards Code

The purpose of the California Green Building Standards Code (CALGreen) (CCR Title 24, Part 11) is to improve public health and safety and to promote the general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices in the following categories: 1) planning and design; 2) energy efficiency; 3) water efficiency and conservation; 4) material conservation and resource efficiency; and 5) environmental quality. CALGreen, which became effective on January 1, 2011, instituted mandatory minimum environmental performance standards for all ground-up new construction of commercial, low-rise residential uses, and State-owned buildings, as well as schools and hospitals. The mandatory standards require the following:

- 20 percent mandatory reduction in indoor water use relative to baseline levels;
- 50 percent construction/demolition waste must be diverted from landfills;
- Mandatory inspections of energy systems to ensure optimal working efficiency; and

- Low-pollutant emitting exterior and interior finish materials such as paints, carpets, vinyl flooring, and particle boards.

The voluntary standards require the following:

- Tier I: 15 percent improvement in energy requirements, stricter water conservation requirements for specific fixtures, 65 percent reduction in construction waste, 10 percent recycled content, 20 percent permeable paving, 20 percent cement reduction, and cool/solar reflective roof.
- Tier II: 30 percent improvement in energy requirements, stricter water conservation requirements for specific fixtures, 75 percent reduction in construction waste, 15 percent recycled content, 30 percent permeable paving, 30 percent cement reduction, and cool/solar reflective roof.

The latest version of CALGreen is the 2022 CALGreen Code, which became effective on January 1, 2023. Between 2010 and 2022, continuous updates and additions have been made to CALGreen, including water conservation and recycling, electric vehicle infrastructure and charging, and changes intended to eliminate conflicts with the California Energy Code, which is Part 6 of Title 24.

Title 20

CCR Title 20 requires manufacturers of appliances to meet State and federal standards for energy and water efficiency. The CEC certifies an appliance based on a manufacturer's demonstration that the appliance meets the standards. New appliances regulated under Title 20 include refrigerators, refrigerator-freezers, and freezers; room air conditioners and room air-conditioning heat pumps; central air conditioners; spot air conditioners; vented gas space heaters; gas pool heaters; plumbing fittings and plumbing fixtures; fluorescent lamp ballasts; lamps; emergency lighting; traffic signal modules; dishwaters; clothes washers and dryers; cooking products; electric motors; low-voltage dry-type distribution transformers; power supplies; televisions and consumer audio and video equipment; and battery charger systems. Title 20 presents protocols for testing each type of appliance covered under the regulations, and appliances must meet the standards for energy performance, energy design, water performance, and water design. Title 20 contains three types of standards for appliances: federal and State standards for federally regulated appliances, State standards for federally regulated appliances, and State standards for non-federally regulated appliances.

California Health and Safety Code Sections 17920.10 and 105256

California Health and Safety Code Section 17920.10 defines "lead hazards" as deteriorated lead-based paint, lead-contaminated dust, lead-contaminated soil, or disturbing lead-based paint without containment, when present in amounts equal to or exceeding thresholds established in regulations and likely to endanger public or occupant health due to proximity. The section specifies that in the absence of new regulations from the State Department of Health Services, existing regulations in Title 17 of the California Code of Regulations interpret key terms like "deteriorated lead-based paint" and "lead-contaminated dust".

California Health and Safety Code Section 105256 outlines the authority and penalties related to lead-based paint hazard abatement. It states that when the department or a local enforcement agency determines that a condition at a location or premises, or the activity of any person, is creating or has created a lead hazard, they may order the owner to abate or correct the hazard, or order the person whose activity is creating the hazard to cease and desist, providing a reasonable opportunity to correct the issue. It is unlawful for any person to refuse or disobey such an order, and a violation of this provision is punishable by a fine not exceeding one thousand dollars ($1,000).

California Code of Regulations Title 8, Section 1532.1

California Code of Regulations Title 8, Section 1532.1 outlines the construction-specific regulations for lead in the construction industry, which went into effect on January 1, 2025. These regulations are designed to provide greater protection for workers from the health effects of lead exposure, emphasizing the use of substitution, engineering controls, and administrative controls. Employers are required to assess workers' exposure to lead when conducting abrasive blasting; until this assessment is completed, dry abrasive blasting is limited to five hours per day. After the assessment is completed, there is no time limit for dry abrasive blasting, but exposure must remain below the permissible regulatory limit of 25 micrograms per cubic meter of air. Beginning January 1, 2030, this limit will be reduced to 10 micrograms per cubic meter. The section also specifies requirements for medical monitoring, including discussions on the need for monitoring and disclosure of medical history for lead-related construction work, as well as treatment procedures for lead poisoning cases. Additionally, the section mandates that a lead-related construction work course must include at least 24 contact hours, with at least 12 hours taught using interactive/participatory methods, including at least ten contact hours of hands-on training. This hands-on training must cover exposure assessment, including air monitoring and worker protection practices, and includes a demonstration of respirator fit testing. The section also requires training on job tasks associated with sample collection and analysis procedures, clearance inspections, and project monitoring. The overall goal of these regulations is to maintain employee blood lead levels below 10 micrograms per deciliter (µg/dL).

REGIONAL AND LOCAL

South Coast Air Quality Management District

The SCAQMD shares responsibility with CARB for ensuring that all State and federal ambient air quality standards are achieved and maintained over the SCAQMD area. This area approximately 10,743 square miles and includes all of Orange County and the urban portions of Los Angeles, Riverside and San Bernardino counties.

The SCAQMD reviews projects to ensure that they would not (1) cause or contribute to any new violation of any air quality standard; (2) increase the frequency or severity of any existing violation of any air quality standard; or (3) delay the timely attainment of any air quality standard or any required interim emission reductions or other milestones of any federal attainment plan.

SCAQMD is responsible for controlling emissions primarily from stationary sources. SCAQMD maintains air quality monitoring stations throughout the SCAB. In coordination with the Southern California

Association of Governments (SCAG), SCAQMD is also responsible for developing, updating, and implementing the Air Quality Management Plan (AQMP) for the SCAB. An AQMP is a plan prepared and implemented by an air pollution district for a county or region designated as nonattainment of the NAAQS and/or CAAQS.

In 2003, an AQMP was prepared by SCAQMD to bring the SCAB, as well as portions of the Salton Sea Air Basin under SCAQMD jurisdiction, into compliance with the one-hour O_3 and PM_{10} national standards. The 2003 AQMP also replaced the 1997 attainment demonstration for the federal CO standard and provided a basis for a maintenance plan for CO for the future. It also updated the maintenance plan for the federal NO_2 standard, which the SCAB has met since 1992.

A subsequent AQMP for the SCAB was adopted by SCAQMD on June 1, 2007. The goal of the 2007 AQMP was to lead the SCAB into compliance with the national eight-hour O_3 and $PM_{2.5}$ standards. The 2007 AQMP outlined a detailed strategy for meeting the national health-based standards for $PM_{2.5}$ by 2015 and eight-hour O_3 by 2024 while accounting for and accommodating future expected growth. The 2007 AQMP incorporated significant new emissions inventories, ambient measurements, scientific data, control strategies, and air quality modeling. Most of the reductions were to be from mobile sources, which are currently responsible for about 75 percent of all smog and particulate-forming emissions.

The SCAQMD approved the 2012 AQMP on December 7, 2012. The 2012 AQMP incorporated the latest scientific and technological information and planning assumptions, including the 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and updated emission inventory methodologies for various source categories. The 2012 AQMP outlines a comprehensive control strategy that meets the requirement for expeditious progress toward attainment with the 24-hour $PM_{2.5}$ NAAQS with all feasible control measures and demonstrates attainment of the standard by 2014. The 2012 AQMP also updates the eight-hour O_3 control plan with new emission reduction commitments from a set of new control measures that implement the 2007 AQMP's Section 182 (e)(5) commitments. The goal of the Final 2012 AQMP is to lead the SCAB into compliance with the national eight-hour O_3 and $PM_{2.5}$ standards.

The SCAQMD approved the Final 2016 AQMP on March 3, 2017. The 2016 AQMP included transportation control measures developed by SCAG from the 2016–2040 RTP/SCS, as well as the integrated strategies and measures needed to meet the NAAQS. The 2016 AQMP demonstrated attainment of the one-hour and eight-hour O_3 NAAQS, as well as the latest 24-hour and annual $PM_{2.5}$ standards.

SCAQMD approved the Final 2022 AQMP on December 2, 2022. The Final 2022 AQMP builds upon measures already in place from previous AQMPs to reduce air pollution and meet the federal O_3 standard established by the EPA in 2015. It includes a variety of additional actions and strategies such as regulation, accelerated deployment of available cleaner technologies (e.g., zero emission emissions technologies, when cost-effective and feasible, and low NOx technologies in other applications), best management practices, co-benefits from existing programs (e.g., climate and energy efficiency), incentives, and other FCAA measures to achieve the 2015 eight-hour O_3 standard. The 2022 AQMP is based on the latest scientific and technical information and planning assumptions provided by both CARB and SCAG (SCAG's

2020-2045 RTP/SCS) for motor vehicle emissions and demographic updates and includes updated transportation conformity budgets.

The SCAQMD is responsible for limiting emissions that can be generated throughout the SCAB by various stationary, area, and mobile sources. Specific rules and regulations have been adopted by the SCAQMD Governing Board that limit the emissions that can be generated by various uses and activities and identify specific pollution reduction measures which must be implemented in association with various uses and activities. These rules regulate the emissions of not only the federal and State criteria pollutants, but also TACs and acutely hazardous materials. The rules are also subject to ongoing refinement by SCAQMD.

Among SCAQMD rules that may be applicable to future development projects in the City are Rule 401 (Visible Emissions), Rule 402 (Nuisance), Rule 403 (Fugitive Dust), Rule 1113 (Architectural Coatings), Rule 1138 (Control of Emissions from Restaurant Operations), Rule 1146.2 (Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers and Process Heaters), and Rule 1403 (Asbestos Emissions from Demolition/Renovation Activities). Rule 401 restricts the emissions of air contaminants that significantly reduce air opacity. Rule 402 restricts discharges that cause nuisance to the public. Rule 403 requires the use of stringent best available control measures (BACMs) to minimize PM_{10} emissions during grading and construction activities. Rule 1113 requires reductions in the VOC content of coatings. Rule 1138 specifies PM and VOC emissions and odor control requirements for some kinds of commercial cooking operations. Rule 1146.2 restricts the NO_x emissions from natural gas-fired water heaters, boilers, and process heaters as defined by this rule. Compliance with SCAQMD Rule 1403 requires the owner or operator of any demolition or renovation activity to have an asbestos survey performed prior to demolition and to provide notification to SCAQMD prior to commencing demolition activities. Demolition activities for structures that have asbestos containing materials would need to comply with the requirements of this Rule.

SCAQMD's CEQA guidelines are voluntary initiatives recommended for consideration by local planning agencies. The CEQA *Air Quality Handbook* (Handbook) published by SCAQMD provides local governments with guidance for analyzing and mitigating project-specific air quality impacts. SCAQMD is currently updating some of the information and methods in the Handbook, such as the screening tables for determining the air quality significance of a project and the on-road mobile source emission factors. While this process is underway, SCAQMD recommends using other approved models to calculate emissions from land use projects, such as CalEEMod.

SCAQMD's *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning* considers impacts on air quality sensitive receptors from TAC-emitting facilities. SCAQMD's siting distance recommendations are the same as those provided by the CARB (e.g., a 500-foot siting distance for air quality sensitive receptors proposed in proximity to freeways and high-traffic roads, and the same siting criteria for distribution centers and dry-cleaning facilities).

SCAQMD Rule 1403

SCAQMD Rule 1403 is a regulation established by the SCAQMD to control asbestos emissions from building demolition, renovation, and asbestos removal activities within its jurisdiction. The rule's primary

purpose is to protect public health and the environment by specifying work practice requirements to limit the release of asbestos fibers into the air during these activities. A key requirement of Rule 1403 is the mandatory asbestos survey, which must be conducted by a certified professional before any renovation or demolition begins, regardless of the building's age, size, or the owner's prior knowledge of the materials.

Southern California Association of Governments (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)[2]

SCAG is the metropolitan planning organization (MPO) and regional transportation planning agency that implements the Regional Transportation Plan/Sustainable Communities Strategy [RTP/SCS]) for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties and addresses regional issues relating to transportation, the economy, community development, and the environment. SCAG coordinates with various air quality and transportation stakeholders in southern California to ensure compliance with the federal and State air quality requirements. Pursuant to California Health and Safety Code Section 40460, SCAG has the responsibility of preparing and approving the portions of the AQMP relating to the regional demographic projections and integrated regional land use, housing, employment, and transportation programs, measures, and strategies. The 2020-2045 RTP/SCS includes transportation programs, measures, and strategies generally designed to reduce vehicle miles travelled (VMT), which are contained in the 2022 AQMP. The SCAQMD combines its portion of the AQMP with measures prepared by SCAG.[3] The Transportation Control Measures, included as Appendix IV-C of the 2022 AQMP, are based on Connect SoCal 2020.

The 2022 AQMP forecasts the 2037 emissions inventories ‘‘with growth’’ based on Connect SoCal 2020. The region is projected to see a 12-percent growth in population, a 17-percent growth in housing units, an 11-percent growth in employment, and a 5-percent growth in VMT between 2018 and 2037. Despite regional growth in the past, air quality has improved substantially over the years, primarily because of air quality control programs at the local, State, and federal levels.[4]

SCAG adopted 2024-2050 RTP/SCS on April 4, 2024. The 2024-2050 RTP/SCS carries forward policy direction established in the 2020-2045 RTP/SCS, as well as more recent Regional Council actions that address emerging issues facing the region. The 2024-2050 RTP/SCS outlines a vision for a more resilient and equitable future, with investment, policies, and strategies for achieving the region’s shared goals through 2050. As with the previous RTP/SCS, the 2024-2050 RTP/SCS is a long-term plan for the southern California region that details investment in the transportation system and development in communities. SCAG worked closely with local jurisdictions to develop the 2024-2050 RTP/SCS, which incorporates current demographics and anticipated future population, household, and employment growth patterns

[2] SCAG adopted the *2024-2050 Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS) on April 4, 2024. However, the 2022 AQMP utilizes growth forecasts and measures from The 2020-2045 RTP/SCS. Therefore, for purposes of this EIR and the air quality analysis, the 2020-2045 RTP/SCS is relevant and appliable to consistency with the 2022 AQMP.
[3] South Coast Air Quality Management District, *2022 Air Quality Management Plan*, adopted December 2, 2022.
[4] South Coast Air Quality Management District, *2022 Air Quality Management Plan*, adopted December 2, 2022.

based, in part, upon local growth forecasts, projects and programs, and includes complementary regional policies and initiatives. The Plan outlines a forecasted development pattern that demonstrates how the region can sustainably accommodate needed housing. In addition, the 2024-2050 RTP/SCS is supported by a combination of transportation and land use strategies that outline how the region can achieve California's GHG-emission-reduction goals and federal Clean Air Act requirements.

City of Laguna Niguel CEQA Manual

The City of Laguna Niguel CEQA Manual contains provisions for development and redevelopment projects within the Air Quality topic section. If a project may cause air quality impacts, either from operations or construction, a qualified air quality engineer or consultant is required to prepare an air quality technical study for inclusion in the environmental document. Projects determined exempt from CEQA are also exempt from an air quality analysis. A project that is not exempt from CEQA but limited in scope may also be exempt from an air quality analysis, as described in the CEQA Manual. Projects that require an air quality analysis must evaluate both short-term construction emissions and long-term operational emissions.

4.2.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

CEQA Guidelines Appendix G contains the Initial Study Environmental Checklist, which includes questions related to air quality. The City relies on the questions included in Appendix G as the thresholds of significance for assessing impacts from air quality (City of Laguna Niguel CEQA Manual, Revised February 24, 2023). Since Appendix G does not identify quantifiable thresholds, the City relies on the SCAQMD Air Quality Significance Thresholds and Localized Significance Thresholds for evaluating both short-term construction emissions and long-term operational emissions from a proposed project. A significant impact will occur if implementation of the proposed Project will:

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

METHODOLOGY AND ASSUMPTIONS

A brief discussion of the methodology and assumptions used to estimate the proposed Project's air pollutant emissions is provided below. For further detail on air emissions modeling parameters and assumptions, and other related calculations; refer to Appendix B, *Air Quality, Energy and Greenhouse Gas Emissions Modeling Data*.

Construction

General Plan Buildout

Construction of the growth anticipated by implementation of the General Plan Update Land Use Element would have the potential to temporarily emit criteria air pollutant emissions through the use of heavy-duty construction equipment, such as excavators, cranes, and forklifts, and through vehicle trips generated from workers and haul trucks traveling to and from project sites. In addition, fugitive dust emissions would result from demolition and various soil-handling activities. Construction emissions of VOC, NO_x, CO, SO_2, PM_{10} and $PM_{2.5}$ are included in this analysis. Construction emissions can vary substantially from day-to-day, depending on the intensity and specific type of construction activity. The maximum daily regional emissions are predicted values for the worst-case day and do not represent the emissions that would actually occur during every day of construction.

The proposed Project is a planning-level document, and, as such, there are no specific projects, project construction dates, or specific construction plans identified, except for the assumption that the Chet Holifield Federal Building (CHFB) site will be demolished as part of a future redevelopment effort. Therefore, quantification of construction-related emissions associated with buildout of the General Plan Update Land Use Element (except for the CHFB site) cannot be accurately conducted at this time. A separate analysis has been provided for demolition of the CHFB site.

Chet Holifield Federal Building Demolition

Demolition of the CHFB site would involve crushing, grading, and hauling activities, utilizing off-road construction equipment powered exclusively by diesel and gasoline fuel.[5] Additionally, construction-related traffic would include vehicles used by workers and vendors traveling to and from the site, as well as on-road haul trucks transporting materials from site clearing, demolition, and soil import/export for grading.

Off-road equipment usage associated with demolition of the CHFB site was calculated using data on equipment mix, daily hours of operation, horsepower, load factors, and phase duration; refer to CalEEMod construction output in Appendix B. Other modeling assumptions that were made for the CalEEMod modeling associated with the demolition of the CHFB site, based on available data (including information provided by a demolition contractor) are:

- Demolition activities were assumed to begin in early 2026 and extend to early 2027.[6]
- Demolition would occur for a 1,000,000 square foot building, as well as 2,526,481 square feet of asphalt.
- Demolition activity equipment types and number were provided by a demolition contractor.

[5] The majority of construction equipment that is used for demolition activities are gas or diesel powered. Therefore, demolition activities associated with the CHFB site are not anticipated to use natural gas or electricity.
[6] This is a conservative assumption, since if demolition activities that occur in later years (after 2026), would have lower emissions when compared to the modeled emissions, since construction-related vehicles (both on- and off-road) would improve average vehicle efficiency over time, on average.

- A total of approximately 79,686 tons of demolition debris (which assumes crushing onsite) would be generated during demolition-related activities.
- Worker, hauling, and on-site trips and trip lengths were provided by a demolition contractor:
    - 35 daily one-way worker trips at 18.5 miles in length
    - 7 daily one-way hauling trips at 102.4 miles in length
    - 7 daily on-site truck trips at 0.25 miles in length

Operational

General Plan Buildout

Operation of subsequent development contemplated by the General Plan Update Land Use Element would generate criteria air pollutant emissions from vehicle trips throughout the City, energy sources, such as natural gas combustion, and area sources, such as operation of landscaping equipment and use of consumer products, including solvents used in non-industrial applications which emit VOCs during their product use, such as cleaning supplies, kitchen aerosols, cosmetics and toiletries. Operational impacts were assessed for buildout of the General Plan Update Land Use Element. Daily maximum criteria air pollutant emissions were compared with the SCAQMD operational thresholds to determine the operational impacts associated with buildout of the General Plan Update Land Use Element.

The operational area emissions from the buildout potential associated with the General Plan Update Land Use Element were estimated using the CalEEMod software. Area source emissions are based on fireplace emissions, architectural coatings, landscaping equipment, and consumer product usage rates provided in CalEEMod. CalEEMod default values were used for area source emissions except that wood stoves and wood fireplaces were removed from the emissions calculations as they are not permitted within SCAQMD jurisdiction.

Intersection Hot Spots

Operation of subsequent development has the potential to generate traffic congestion and increase delay times at intersections within the Planning Area. The pollutant of primary concern when assessing buildout of the General Plan Update Land Use Element's impacts at local intersections is CO, because an elevated CO concentration tends to accumulate near areas of heavy traffic congestion and where average vehicle speeds are low. Tailpipe emissions are of concern when assessing localized impacts of CO along paved roads.

An adverse concentration of CO, known as a "hotspot," would occur if there was an exceedance of the NAAQS or CAAQS. The California Department of Transportation (Caltrans) has guidance for evaluating CO hot spots in their Transportation Project-Level Carbon Monoxide Protocol (CO Protocol). Detailed guidance discussing which modeling programs to use, calculating emission rates, receiver placement, calculating one-hour and eight-hour concentrations, and utilizing background concentrations are provided in the Caltrans' CO Protocol.

The potential for subsequent development resulting from the buildout associated with the General Plan Update Land Use Element to cause or contribute to CO hotspots is evaluated by comparing Project

intersections' traffic volume and level of service data from the *Laguna Niguel General Plan Update Traffic Study* (Appendix F) with prior studies conducted by the SCAQMD in support of their AQMPs and considering existing background CO concentrations.

Toxic Air Contaminant Impacts (Construction and Operation)

Construction and operational activities have the potential to result in health risk impacts (cancer, or other acute or chronic conditions) related to TACs exposure from airborne emissions, specifically the emissions of diesel particulate matter. Health risk from TACs exposure is a cumulative localized impact-based exposure of nearby sensitive receptors to specific construction activities as well as on location to the construction and operational activities that emit TACs. HRAs include dispersion modeling of TACs and in order to determine the specific numerical cancer and non-cancer (acute and chronic) risks associated with TACs on nearby individual receptors (including residences and workers). In order to accurately model the magnitude of TAC exposure on individual receptors, the following information is required:

- Type of TACs emitted during construction and operational activities (e.g., diesel particulate matter, benzene, acrolein, aniline, etc.) (note: there are 187 hazardous air pollutants currently regulated by the USEPA that are considered TACs);
- TACs source location(s) and configuration (note: this is typically provided by the project applicant for the operational phase via a site plan and detail on the specific project type, and for the construction phase via construction plans);
- TAC emissions rate(s);
- TAC release height(s); and
- The precise location of nearby residential and workplace receptors.

This information is incorporated into air pollutant dispersion modeling software (such as AERMOD), which is used in conjunction with facility health risk assessment (HRA) software (such as the Hotspots Analysis and Reporting Program, otherwise known as HARP-2). The results of such analysis provide a numerical estimate of maximum health risks, which are incorporated into the HRA (with detailed methodology and a list of assumptions provided).

Since the proposed Project is a long-range planning document and therefore does not provide sufficient detail regarding specific development projects that would be developed as part of subsequent Project implementation (such as providing detailed information on the type, location, and sizing of potential sources of TACs such as gasoline/diesel refueling stations, light industrial facilities, etc.), there is insufficient information available at this level of analysis to conduct a reasonable or scientifically valid analysis of TACs; refer to Impact Statement AIR-3 specific to the CHFB site demolition. Specific development projects in Laguna Niguel that have the potential to generate potentially significant risks associated with the release of TACs are required by SCAQMD to undergo an analysis of their potential

health risks associated with TACs, based upon the specific details of each individual project, in accordance with AB 2588 and the Tanner Air Toxics Act.[7]

4.2.5 IMPACTS AND MITIGATION MEASURES

AQ-1: Would the project conflict with or obstruct implementation of the applicable air quality plan?

Impact Analysis: The following analysis addresses the General Plan Update Land Use Element's consistency with applicable plans and policies that govern air quality. In particular, the analysis addresses consistency with the SCAQMD's AQMP, which is an air quality plan that includes strategies for achieving attainment of applicable O_3, PM_{10}, and $PM_{2.5}$ standards.

As discussed above, the SCAQMD has adopted a series of AQMPs to lead the SCAB into compliance with criteria air pollutant standards and other federal requirements, while taking into account construction and operational emissions associated with population and economic growth projections provided by SCAG's 2020-2045 RTP/SCS. The SCAQMD recommends that, when determining whether a project is consistent with the relevant AQMPs, the lead agency should assess whether the project would directly obstruct implementation of the plans by impeding SCAQMD's efforts to achieve attainment with respect to any criteria air pollutant for which it is currently not in attainment of the NAAQS and CAAQS (e.g., O_3, PM_{10}, and $PM_{2.5}$) and whether it is consistent with the demographic and economic assumptions (typically land use related, such as employment and population/residential units) upon which the plan is based. The SCAQMD guidance indicates that projects whose growth is included in the projections used in the formulation of the AQMP are considered to be consistent with the plan and would not interfere with its attainment.

CEQA requires that general plans be evaluated for consistency with the AQMP. Because the AQMP strategy is based on projections from local general plans, only new or amended general plan elements, specific plans, or individual projects under the general plan need to undergo a consistency review. Projects considered consistent with the local general plan are consistent with the air quality-related regional plan. Indicators of consistency include:

- Control Strategies: Whether implementation of a project would increase the frequency or severity of existing air quality violations; would cause or contribute to new violations; or would delay the timely attainment of Ambient Air Quality Standards (AAQS) or interim emissions reductions within the AQMP.
- Growth Projections: Whether implementation of the project would exceed growth assumptions within the AQMP, which, in part, bases its strategy on growth forecasts from local general plans.

[7] See SCAQMD's *Air Quality Analysis Handbook* for more detail: https://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook

CONSTRUCTION

Control Strategies

General Plan Buildout

The SCAB is designated nonattainment for O_3 and $PM_{2.5}$ under the CAAQS and NAAQS and nonattainment for PM_{10} under the CAAQS. Implementation of the General Plan Update Land Use Element would involve long-term growth with a buildout year of 2045. Therefore, the emissions of criteria pollutants associated with subsequent development under the General Plan Update Land Use Element could exceed the SCAQMD construction thresholds for criteria pollutants.

Subsequent development of individual projects under the General Plan Update Land Use Element would be required to comply with CARB's requirements to minimize short-term emissions from on-road and off-road diesel equipment used for construction, including the ATCM to limit heavy-duty diesel motor vehicle idling to no more than five minutes at any given time, offroad engine emission standards, and with SCAQMD's regulations such as Rule 403 for controlling fugitive dust and Rule 1113 for controlling VOC emissions from architectural coatings. Furthermore, as applicable to the type of development, individual projects implemented under the proposed General Plan Update Land Use Element would comply with fleet rules to reduce on-road truck emissions (i.e., 13 CCR, Section 2025 [CARB Truck and Bus regulation]). Contractors would use low-emission equipment and vehicles for City and private construction projects consistent with CARB's off-road regulations which phases out the oldest and most polluting engines and establishes compliance dates for adding clean vehicles to fleets. CARB truck regulations also regulate diesel particulate matter and other criteria pollutants. Existing regulations also control VOC content for architectural coatings and dust control related to construction activities. Compliance with these measures, as well as other requirements (relating to asphalt emissions, on-road vehicle exhaust, demolition debris diversion/recycling, additional dust suppression, etc.), would be consistent with and meet or exceed the regulatory requirements for control strategies intended to reduce emissions from construction equipment and activities. Further, the General Plan Update proposes policies that would address the effects of air pollutants associated with subsequent development projects. Specifically, under proposed Resource Management Element Policy RM-5.4, the City would review new qualifying development projects to ensure compliance with SCAQMD air quality emissions thresholds. However, subsequent projects with buildout of the General Plan Update Land Use Element may result in exceedances of the SCAQMD's significance thresholds, even with compliance with the above discussed measures and project-specific mitigation measures. There may be unavoidable significant impacts related to some individual projects. Therefore, the construction anticipated by the proposed Project may not be consistent with the AQMP under the first indicator resulting in a significant impact requiring mitigation.

Chet Holifield Federal Building Demolition

The proposed Project assumes that the CHFB site will be demolished as part of a future redevelopment effort. Demolition of the site would involve removal of existing buildings and pavement. This assessment is specific to the demolition of the CHFB site and does not include subsequent construction activities that

may occur with buildout of the General Plan Update Land Use Element, which is included within the overall General Plan Update analysis, discussed above.

As such, consistency with the AQMP is assessed relative to the control strategies used during the demolition phase. Demolition activities occurring at the site are required to comply with SCAQMD Rule 403 for controlling fugitive dust, Rule 1403 for controlling asbestos emissions from demolition/renovation activities, CARB diesel vehicle idling limits, CARB off-road and on-road engine standards, California State dump truck tarping laws, and other applicable rules. Compliance with these SCAQMD, CARB, and Statewide rules, regulations, and laws would be required for demolition of the CHFB site and therefore would be consistent with the control strategies necessary to avoid increasing the frequency or severity of existing air quality violations; causing or contributing to new violations; or delaying the timely attainment of AAQS or interim emissions reductions within the AQMP. As shown below in Table 4.2-4, these demolition activities would not exceed the SCAQMD's significance thresholds for project contributions to regional and local air quality. As such, demolition of the CHFB site would result in less than significant impacts related to consistency with the AQMP.

Growth Projections

Buildout of the General Plan Update Land Use Element would result in an increase in short-term employment (i.e., construction jobs) as compared to existing conditions. Subsequent development consistent with the General Plan Update Land Use Element would involve construction, but would not necessarily create new construction jobs, since construction-related jobs generated by future development would likely be filled by employees of the construction industry within the City of Laguna Niguel and the greater region. Construction industry jobs generally have no regular place of business, as construction workers commute to job sites throughout a given region, which may change several times a year. Moreover, these jobs would be temporary in nature. Therefore, the construction jobs generated by subsequent development consistent with the General Plan Update Land Use Element, inclusive of the demolition of the CHFB site, would not conflict with the long-term employment or population projections upon which the 2022 AQMP is based.

OPERATION

Control Strategies

Subsequent development consistent with the General Plan Update Land Use Element would be required to comply with CARB motor vehicle standards, the SCAQMD regulations for stationary sources and architectural coatings, Title 24 energy efficiency standards, and, to the extent applicable, the 2024-2050 RTP/SCS.

The 2022 AQMP includes land use and transportation strategies that are intended to reduce VMT and resulting regional mobile source emissions. The applicable land use strategies include planning for growth around livable corridors; providing more options for short trips/neighborhood mobility areas; supporting zero emission vehicles and expanding vehicle charging stations; and supporting local sustainability planning. The applicable transportation strategies include managing roadway infrastructure projects through the TDM Program and the Transportation System Management (TSM) Plan including advanced

ramp metering, and expansion and integration of the traffic synchronization network; and promoting active transportation. The majority of the transportation strategies are to be implemented by cities, counties, and other regional agencies such as SCAG and the SCAQMD, although some can be furthered by individual development projects.

As demonstrated in Table 2-17, *General Plan Update Growth Assumptions Compared to Existing Conditions*, the General Plan Update Land Use Element identifies opportunities for new growth and development within the City. The majority of the potential growth opportunities are located within specific areas of the City. These areas include the Laguna Niguel Gateway Specific Plan (Gateway Specific Plan), the Opportunity Areas (e.g., the Marketplace at Laguna Niguel, CHFB site, and Town Center), and Hospitality Overlay sites.

Development within the Gateway Specific Plan would continue to be governed by the Laguna Niguel Gateway Specific Plan Program EIR (Gateway Specific Plan EIR), which provides for a mix of land uses near existing transit opportunities. The development of higher residential density in proximity to existing public transportation would provide the potential to reduce vehicle trips, VMT, and associated transportation-related emissions, consistent with the AQMP strategies.

The General Plan Update Land Use Element identifies the potential for considerable growth within three Opportunity Areas. The Opportunity Areas share similar characteristics in that they are currently developed and underutilized with large areas of parking and are located in proximity to a mix of residential and non-residential development. The General Plan Update Land Use Element envisions redevelopment and intensification of uses within the Opportunity Areas, with the potential to integrate a mix of complementary land uses that would encourage reduced vehicle trips, VMT, and associated transportation-related emissions consistent with AQMP strategies.

Overall, the intent of the proposed General Plan Update Land Use Element is to encourage growth and development within focused areas of the City that provide a complementary and integrated mix of land uses, and to preserve and maintain existing residential communities, parks and recreation, and open space resources. As demonstrated in Section 4.14, *Transportation*, the proposed General Plan Update Land Use Element would result in a lower VMT per capita when compared to existing conditions but would result in a higher VMT per employee and VMT per service population. However, when compared to buildout assumed in the existing General Plan, total VMT at buildout would be less with implementation of the General Plan Update Land Use Element. That is, General Plan Update Land Use Element VMT at buildout would be approximately 3,850,543, while existing General Plan VMT at buildout would be approximately 4,035,359 VMT.[8]

The General Plan Update proposes policies that would address the effects of air pollutants associated with subsequent development projects. Under proposed Resource Management Element Policy RM-5.4, the City would review new qualifying development projects to ensure compliance with SCAQMD air quality emissions thresholds. Under proposed Mobility Element Policy M-1.7, a VMT analysis would be prepared

[8] Correspondence with Zawwar Saiyed, P.E., M.S. of LLG, on June 12, 2025.

for qualifying development projects, in accordance with the City's Transportation Assessment Guidelines and compliance with applicable State law(s) aimed at reducing vehicle travel distances from and within the City. Implementation of the policies would require subsequent development projects to identify and reduce potential impacts to air quality and VMT on an individual project basis, consistent with AQMP strategies. However, the proposed Project would not be consistent with the AQMP under the first indicator since subsequent projects with buildout of the General Plan Update Land Use Element may result in exceedances of the SCAQMD's significance thresholds and mitigation measures may not be sufficient to reduce them below the thresholds. Therefore, operations anticipated by the proposed Project may not be consistent with the AQMP under the first indicator, resulting in a significant impact requiring mitigation.

Growth Projections

The emissions inventory for SCAB is formed, in part, by existing city and county general plans. The AQMP is based on population, employment, and VMT forecasts by SCAG. A project might be in conflict with the AQMP if the development is greater than that anticipated in the local general plan and SCAG's growth projections. As provided in the *City of Laguna Niguel General Plan Update Vehicle Miles Traveled (VMT) Analysis Report* (Appendix F), buildout of the General Plan Update Land Use Element would result in a 0.93 percent decrease of VMT per capita over existing conditions, which would result in a reduction in emissions of O_3 precursors and PM associated with mobile sources of emissions. However, under buildout of the General Plan Update Land Use Element, employee VMT would increase by approximately 0.63 percent and VMT by service population would increase by approximately 1.24 percent over the existing conditions. Individual projects under the General Plan Update Land Use Element would be required to undergo subsequent environmental review pursuant to CEQA on a project-by-project basis, as well as demonstrate compliance with the AQMP as part of the CEQA process. Individual projects would also be required to demonstrate compliance with SCAQMD rules and regulations governing air quality.

The City continues to coordinate with the SCAQMD and SCAG to ensure citywide growth projections, land use planning efforts, and local development patterns are accounted for in the regional planning and air quality planning processes. Furthermore, the proposed General Plan Update includes policies that when implemented would minimize potential impacts to air quality. For example, the proposed General Plan Update Resource Management Element includes Goal RM-5 and related policies to address potential air quality impacts by improving air quality in Laguna Niguel and the region through reductions in air pollutants and GHG emissions. Additionally, the proposed General Plan Update Land Use Element promotes a land use pattern designed to improve land use efficiency and reduce vehicle trips, which would reduce pollution and air quality impacts. However, implementation of the proposed General Plan Update Land Use Element would be considered to conflict with or obstruct the implementation of the applicable air quality plan. This is a significant impact requiring mitigation.

CONCLUSION

General Plan Buildout

Mitigation Measure AQ-1 requires subsequent individual discretionary projects to prepare and submit an air quality technical analysis that evaluates the proposed project's construction- and operation-related air quality impacts for the City's review and approval. The evaluation would be prepared in conformance with the methodologies and significance thresholds identified in the City's CEQA Manual. If the assessment determines the individual project would exceed adopted thresholds, mitigation measures would be required to reduce air quality emissions to below the applicable thresholds.

Although implementation of Mitigation Measure AQ-1 would reduce potential air quality impacts and individual projects may result in less than significant construction- and operation-related air quality impacts, due to the unknown scale and nature of individual developments, subsequent projects may result in unavoidable air quality impacts despite the application of mitigation measures. Therefore, the implementation of the General Plan Update Land Use Element could conflict with or obstruct implementation of the AQMP, and this impact is significant and unavoidable.

The General Plan Update includes a range of policies to minimize air quality impacts. For example, Resource Management Policy RM-5.1 will result in collaboration with federal, state, and regional agencies related to improvement air quality. Under proposed Policy RM-5.4, the City would review new qualifying projects to ensure compliance with State air quality emissions thresholds and greenhouse gas emissions reduction targets. Land Use Policy LU-1.10 encourages the efficient use of land and infrastructure to reduce environmental impacts and support long-term community sustainability.

Chet Holifield Federal Building Demolition

As discussed above, demolition of the CHFB site would not exceed the SCAQMD's significance thresholds for project contributions to regional and local air quality. As such, project-level impacts specific to demolition of the CHFB site would be less than significant related to consistency with the AQMP, and no mitigation is required.

Mitigation Measures:

AQ-1: As part of the development review process for qualifying projects, the Laguna Niguel Community Development Department shall determine if an air quality technical analysis is required, based on the screening criteria provided in the City of Laguna Niguel CEQA Manual. Applicants of individual development projects with the potential to result in a significant air quality impact shall have an air quality technical analysis prepared by a qualified environmental professional. This analysis shall be prepared in accordance with the methodologies and significance thresholds in the City's CEQA Manual and submitted for review and approval by the Laguna Niguel Community Development Department.

If construction or operation related criteria pollutants for any individual development project are determined to exceed the City's adopted thresholds of significance, appropriate mitigation measures shall be identified and implemented to reduce air quality emissions to below the

applicable thresholds. These measures shall be incorporated as conditions of approval for the project. Measures may include, but are not limited to the following:

Construction

- Tier 4 offroad engine exhaust standards or the most stringent exhaust standards for equipment available at the time of project approval.
- Use of commercially available electric on-road and offroad equipment.
- Use local construction contractors.
- Incorporate Best Available Control Technology for engines which may include diesel particulate filters and oxidation catalysts.
- Haul trucks that comply with truck and bus regulation established by California Air Resources Board (CARB). These will include trucks with a gross vehicle weight rating over 26,000 pounds are required to have 2010 or newer engines.
- Super-Compliant Architectural Coatings with VOC content of 10 grams/liter. The South Coast Air Quality Management District (SCAQMD) has a list of manufacturers that provide these coatings.
- Additional fugitive dust control measures detailed under SCAQMD Rule 403. These may include limiting speeds on unpaved surfaces, additional watering, or use of chemical soil binders for unpaved roadways, pre- and post-watering of graded areas, truck clean-up measures (e.g., rumbling plates, wash stations), replanting, and other measures.
- Installation or use of on-site power to avoid use of portable electrical generators.
- Distribute construction equipment across large construction sites to allow for air pollutant dispersal if localized concentrations of emissions were found to exceed significance thresholds at receptors.

Operations

Building Energy

- Exceed the energy efficiency requirements found within CALGreen and the Title 24 requirements.
- Develop alternative energy generation in excess of Title 24 requirements.
- Include energy efficient lighting, appliances, and heat pumps/boilers.
- Develop all electric or zero net energy buildings.
- Install whole-house fans.

Transportation

- Increase residential and job density to reduce air pollutant emissions associated with Vehicle Miles Traveled (VMT).
- Integrate affordable and below market rate housing to facilitate local employment opportunities which would reduce VMT and transportation emissions.
- For warehousing uses provide electric power at loading docks to avoid the use Transport Refrigeration Units needed for cold storage.

- Promote transit-oriented development and bicycle and pedestrian friendly environments to minimize VMT.
- Implement commute trip reduction programs.
- Promote the use of alternatively fueled vehicles through the development of fueling stations and infrastructure for alternatively fueled self-driving vehicles.
- Promote telecommute opportunities to minimize transportation related emissions and congestion.

Water

- Plant drought tolerant and California native plants.
- Use water efficient irrigation systems and timers.
- Use reclaimed non-potable or grey water.
- Require low flow water fixtures.
- Design water efficient landscapes.
- Reduce turf in landscapes and lawns.
- Adopt a water conservation strategy.

Waste

- Provide separate recycling and waste receptacles within each unit to promote waste diversion and recycling.
- Recycle demolished construction materials in exceedance of the requirements established in AB 939.

Level of Significance: Buildout of the General Plan Update Land Use Element could conflict with or obstruct implementation of the applicable air quality plan, resulting in a significant and unavoidable impact. Demolition of the CHFB site would be less than significant.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

LAND USE ELEMENT

Goal LU-1: **Land Use Planning.** Establish a balanced land use pattern that integrates residential, commercial, and employment uses with open space and public services to support a vibrant, sustainable community that offers a high quality of life.

Policy LU-1.1: **Promote Mixed-Use Development.** Encourage mixed-use zoning in strategic locations to combine residential, commercial, and employment uses. This approach aims to create vibrant, walkable neighborhoods that enhance community engagement and drive economic activity.

Policy LU-1.10: **Sustainable Development Practices.** Implement policies that encourage the efficient use of land and infrastructure to reduce environmental impacts and support long-term community sustainability.

Policy LU-1.11: **Mobility and Connectivity.** Prioritize transportation planning and infrastructure that connects residential, commercial, and employment areas efficiently, with a focus on improving transportation options, including pedestrian paths and bicycle lanes to promote sustainable and non-motorized transportation options when evaluating land use options and development projects.

Policy LU-1.12: **Residential and Non-Residential Capacities.** Ensure the levels of residential and non-residential building development remain within the established baseline General Plan buildout limits (Maximum Development Intensities – MDIs) for the Sub-profile Areas.

Policy LU-2.8: **Pedestrian-Friendly Environments.** Prioritize pedestrian-oriented design and connectivity by incorporating thoughtfully planned tree-lined sidewalks, pathways, and active street fronts throughout new developments. This includes a focus on human-scale building frontages that create visually appealing and pedestrian-friendly environments, as well as pedestrian safe connections to surrounding streets.

MOBILITY ELEMENT

Goal M-1: **Transportation Network.** A well-planned and comprehensive multimodal transportation system that connects neighborhoods, jobs, shopping, recreation, and transit hubs.

Policy M-1.1: **Balanced Circulation Network**. Support the design, management, maintenance, and enhancement of a multimodal roadway network that accommodates the City's current and future development as outlined in the Land Use Element. This includes maintaining and adapting the Laguna Niguel's Circulation Plan Figure M-1 and related infrastructure to ensure safe, efficient, and well-connected links between neighborhoods, workplaces, shopping, recreation, and transit hubs.

Policy M-1.2: **Multimodal Transportation**. Support an integrated transportation network as a system that accommodates and promotes various modes of travel, such as walking, bicycling, public transit, enhancing multimodal connectivity throughout the City and contributing to environmental sustainability.

Policy M-1.3: **Mobility Hubs.** Support the development and enhancement of mobility hubs Figure M-8 to serve as centralized, convenient points linking a variety of transportation options.

Policy M-1.5: **Land Use Planning**. Align transportation planning with land use decisions to support a multimodal system that minimizes traffic congestion and reduces environmental impacts from future developments.

Policy M-1.7: **Vehicle Miles Traveled.** For qualifying development projects, ensure the preparation of a Vehicle Miles Traveled analysis in accordance with the City's Transportation

Assessment Guidelines and compliance with applicable state law(s) aimed at reducing vehicle travel distances from and within the City.

Policy M-1.8: **Travel Demand Management.** Encourage the development and implementation of travel demand management programs to reduce peak-hour traffic congestion and help reduce vehicles miles traveled within the community.

Goal M-2: **Active Transportation.** A balanced transportation network that supports walking, bicycling, and other non-motorized modes of travel, fostering active lifestyles, environmental sustainability, and enhancing the overall quality of life for the Laguna Niguel community.

Policy M-2.1: **Active Transportation.** Maintain and enhance the City's pedestrian, bicycle, and multi-use trail networks to support safe, convenient, well-connected, and efficient non-motorized travel for both recreational and commuting purposes. New development projects should make positive contributions towards these active transportation efforts with connected street systems and dedicated pedestrian friendly paths.

Policy M-2.2: **Connectivity and Accessibility**. Prioritize infrastructure improvements that enhance connectivity between neighborhoods, workplaces, schools, recreation, shopping areas, and transit hubs, ensuring safe and accessible routes for all users.

Policy M-2.3: **Active Lifestyles and Environmental Sustainability**. Support active transportation to reduce automobile reliance, promote environmental sustainability, and encourage active lifestyles throughout the community.

Policy M-2.8 **Last-Mile Connectivity.** Coordinate active transportation routes, such as bike paths and pedestrian walkways, with transit stops to improve last-mile connections, promoting greater transit ridership, active lifestyles, and environmental sustainability.

Goal M-3: **Public Transit.** A safe, efficient, and accessible public transit system that enhances connectivity, reduces traffic congestion, supports environmental sustainability, and meets the diverse needs of the community.

Policy M-3.1: **Transit Collaboration.** Collaborate with Orange County Transportation Authority, Metrolink, Southern California Association of Governments, and other regional agencies to expand and enhance public transit service in Laguna Niguel.

RESOURCE MANAGEMENT ELEMENT

Goal RM-5: **Air Quality and Greenhouse Gases.** Support a healthy and sustainable community by thoughtfully considering and addressing the effects of air pollutants and greenhouse gas emissions.

Policy RM-5.1: **Air Quality and Greenhouse Gas Emissions Collaboration.** Collaborate with federal, state, and regional agencies on matters related to improving overall air quality and addressing greenhouse gas emissions reduction goals.

Policy RM-5.2: **Sustainable Infrastructure.** Consider implementing sustainable technologies and practices in the development and maintenance of public infrastructure projects.

Policy RM-5.3: **Air Quality and Greenhouse Gas Public Engagement.** Encourage community participation in air quality and greenhouse gas reduction planning efforts.

Policy RM-5.4: **Sustainable Development.** Review new qualifying development projects to ensure compliance with State air quality emissions thresholds and greenhouse gas emissions reduction targets.

AQ-2: Would the project result in cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under the applicable federal or state ambient air quality standard?

Impact Analysis: O_3, NO_2, VOC and PM_{10} and $PM_{2.5}$ are pollutants of concern, as SCAB has been designated as a nonattainment area for State O_3, PM_{10} and $PM_{2.5}$ and as a federal nonattainment area for O_3 and PM_{10}. SCAB is currently in attainment and/or unclassified for State and federal CO, SO_x, NO_2, lead and federal attainment for PM_{10}. The SCAQMD has established numerical significance thresholds for regional emissions during construction and operation. The numerical significance thresholds are based on the recognition that SCAB is a distinct geographic area with a critical air pollution problem for which ambient air quality standards have been promulgated to protect public health. Implementation of the General Plan Update Land Use Element would potentially cause or contribute to an exceedance of an ambient air quality standard if the following would occur:

- Regional construction emissions from both direct and indirect sources would exceed any of the following SCAQMD prescribed daily emissions thresholds:
    - 550 pounds a day for CO;
    - 75 pounds a day for VOC;
    - 100 pounds per day for NO_x;
    - 150 pounds a day for SOx;
    - 150 pounds per day for PM_{10}; and
    - 55 pounds per day for $PM_{2.5}$.
- Regional operational emissions exceed any of the following SCAQMD prescribed daily emissions thresholds:
    - 550 pounds a day for CO;
    - 55 pounds a day for VOC;

- 55 pounds per day for NO_x;
- 150 pounds a day for SOx;
- 150 pounds per day for PM_{10}; and
- 55 pounds per day for $PM_{2.5}$.

CONSTRUCTION

General Plan Buildout

Construction associated with development anticipated with buildout of the proposed General Plan Update Land Use Element has the potential to temporarily emit criteria air pollutant emissions through the use of heavy-duty construction equipment and from vehicle trips generated by workers and haul trucks. In addition, fugitive dust emissions would result from demolition and various soil-handling activities. Mobile source emissions, primarily NO_x and PM emissions (i.e., PM_{10} and $PM_{2.5}$), would result from the use of diesel-powered on- and off-road vehicles and equipment. Construction emissions can vary substantially from day-to-day, depending on the level of activity and the specific type of construction activity.

Information regarding the specific development projects and location of receptors for those projects is required in order to model specific emissions throughout the buildout horizon. Construction activities are anticipated to occur at various levels throughout the approximately 20-year buildout horizon (2025 to 2045) of the General Plan Update Land Use Element. Since specific projects are unknown at this time, the level of intensity of construction over these 20 years would be speculative and a quantitative evaluation of an individual project's construction related emissions cannot be undertaken accurately; refer to the discussion below specific to the CHFB site demolition. The SCAQMD has developed CEQA significance thresholds for the assessment of individual projects and not at a programmatic level such as for general plans.

Subsequent projects would undergo their own evaluation relative to potential air quality impacts and would be subject to compliance with the SCAQMD rules and regulations. However, because construction-related emissions for individual projects would vary tremendously, some projects could result in exceedances of the SCAQMD's CEQA significance thresholds. Therefore, this is considered a significant impact requiring mitigation.

Mitigation Measure AQ-1 requires subsequent discretionary projects to prepare and submit an air quality technical analysis that evaluates a project's construction-related air quality impacts for the City's review and approval. The evaluation would be prepared in conformance with the methodologies and significance thresholds identified in the City's CEQA Manual. If the assessment determines the project would exceed adopted thresholds, project-specific mitigation measures would be required to reduce air quality emissions to below the applicable thresholds as required by Mitigation Measure AQ-1.

Although implementation of Mitigation Measure AQ-1 would reduce potential air quality impacts and individual projects may result in less than significant construction-related air quality impacts, due to the

unknown scale and nature of individual developments, subsequent projects may result in unavoidable air quality impacts despite the application of mitigation measures. Therefore, construction-related air quality impacts are considered to be significant and unavoidable.

Chet Holifield Federal Building Demolition

Activities associated with demolition of the CHFB site would generate short-term emissions of criteria air pollutants. The pollutants of primary concern within the CHFB site include ozone-precursor pollutants (i.e., VOC and NOx) and PM_{10} and $PM_{2.5}$. Motor vehicle exhaust associated with construction equipment and worker trips, and the movement of construction equipment, especially on unpaved surfaces. Emissions of airborne particulate matter are largely dependent on dust generated from the demolition of buildings and pavement, crushing, loading of demolition debris, and travel on the CHFB site as well as the application of dust control measures.

Demolition-related emissions were calculated using the CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements. Refer to Section 4.2.4 and Appendix B for additional information regarding the assumptions used in this analysis. Demolition-generated emissions are short term and temporary, lasting only while demolition activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the SCAQMD's thresholds of significance.

Maximum daily construction-related emissions attributable to the demolition activities for the CHFB facility are summarized in Table 4.2-4, *CHFB Site Demolition-Related Emissions (Maximum Pounds Per Day)*. As shown, all criteria pollutant emissions would remain below their respective thresholds. While impacts would be considered to be less than significant, demolition activities would be subject to compliance with the SCAQMD's Rules 402 (Nuisance), and 403 (Fugitive Dust). Construction emissions associated with future demolition of the CHFB site would not worsen ambient air quality, create additional violations of federal and State standards, or delay the SCAQMD's goal for meeting attainment standards in the SCAB. Cumulative air quality impacts associated with construction emissions from future demolition of the CHFB site would be less than significant.

Table 4.2-4
CHFB Site Demolition-Related Emissions (Maximum Pounds Per Day)

Construction	VOC	NOx	CO	SO_x	PM_{10}	$PM_{2.5}$
Maximum Emissions	1	12	66	<1	8	1
SCAQMD Threshold	75	100	550	150	150	55
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: CalEEMod v.2022.12
Notes: SCAQMD Rule 403 Fugitive Dust control measures applied based on values within the CalEEMod model.

OPERATION

Operation of future development with buildout of the General Plan Update Land Use Element would generate criteria air pollutant emissions from subsequent project-generated vehicle trips traveling within the City, energy sources such as natural gas combustion, and area sources such as landscaping equipment and consumer products usage. The on-road mobile sources related to the operation of subsequent development accommodated by the General Plan Update Land Use Element include passenger vehicles, onsite use of off-road equipment, and delivery trucks. VMT data takes into account ridership, mode, and distance on freeways and local streets as provided in Section 4.14, *Transportation*. Projected emissions resulting from operational activities of subsequent development with buildout of the General Plan Update Land Use Element are presented in Table 4.2-5, *Regional Operational Emissions (pounds/day)*.

Table 4.2-5
Regional Operational Emissions (pounds/day)

Source	VOC	NOx	CO	SO_2	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions	10,577	1,435	25,414	62	4,628	2,797
SCAQMD Threshold	55	55	550	150	150	55
Above Threshold?	**Yes**	**Yes**	**Yes**	**No**	**Yes**	**Yes**
Source: CalEEMod v.2022.12						

As identified in Table 4.2-5, operational emissions for subsequent development with buildout of the General Plan Update Land Use Element would exceed the project-level significance thresholds for VOC, NO_x, CO, PM_{10}, and $PM_{2.5}$. While these thresholds are the only thresholds available for numerically determining significance, it should be noted that these thresholds were specifically developed for use in determining significance for individual projects and not for program-level documents, such as the General Plan Update. However, as emissions for VOC, NO_x, CO, PM_{10}, and $PM_{2.5}$ exceed these significance thresholds, the regional operational emissions would be potentially significant.

Subsequent projects would undergo their own evaluation relative to potential air quality impacts. Additionally, subsequent projects would be required to comply with the AQMP, SIP, CARB, SCAQMD regulations, and Title 24 energy efficiency standards. While compliance with these regulations would reduce criteria pollutant emissions, the extent to which the impacts would be reduced would have to be determined on a project-by-project basis. However, because operational emissions for individual projects would vary tremendously, some projects could result in exceedances of the SCAQMD's CEQA significance thresholds, resulting in a significant impact requiring mitigation.

Mitigation Measure AQ-1 requires subsequent discretionary projects to prepare and submit an air quality technical analysis that evaluates a project's operational air quality impacts for the City's review and approval. The evaluation would be prepared in conformance with the methodologies and significance thresholds identified in the City's CEQA Manual. If the assessment determines the project would exceed adopted thresholds, project-specific mitigation measures would be required to reduce air quality emissions as required by Mitigation Measure AQ-1.

Although implementation of Mitigation Measure AQ-1 would reduce potential air quality impacts and individual projects may result in less than significant operational air quality impacts, air pollutant emissions associated with individual projects would have the potential to exceed the SCAQMD significance thresholds due to the broad variety of projects as well as the varying scale of potential development. In addition, it would be speculative to determine whether emission reduction measures would result in emissions that would be below the SCAQMD's operations phase emissions thresholds. Therefore, operation air quality impacts would be significant and unavoidable.

As discussed, the General Plan Update includes a range of policies to minimize air quality impacts. For example, Resource Management Policy RM-5.1 will result in collaboration with federal, state, and regional agencies related to improvement air quality. Under Policy RM-5.4, the City would review new qualifying projects to ensure compliance with State air quality emissions thresholds and greenhouse gas emissions reduction targets. Land Use Policy LU-1.10 encourages the efficient use of land and infrastructure to reduce environmental impacts and support long-term community sustainability.

Mitigation Measures: Refer to Mitigation Measure AQ-1.

Level of Significance: Buildout of the General Plan Update Land Use Element could result in cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under the applicable federal or State ambient air quality standard under both construction and operations, resulting in a significant and unavoidable impact. Demolition of the CHFB site would be less than significant.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

MOBILITY ELEMENT

Policy M-1.7: **Vehicle Miles Traveled.** For qualifying development projects, ensure the preparation of a Vehicle Miles Traveled analysis in accordance with the City's Transportation Assessment Guidelines and compliance with applicable state law(s) aimed at reducing vehicle travel distances from and within the City.

RESOURCE MANAGEMENT ELEMENT

Policy RM-5.4: **Sustainable Development.** Review new qualifying development projects to ensure compliance with State air quality emissions thresholds and greenhouse gas emissions reduction targets.

AQ-3: Would the project expose sensitive receptors to substantial pollutant concentrations?

Impact Analysis: Criteria air pollutant emissions have the potential to result in health impacts on sensitive receptors located near new development within the Planning Area. As discussed previously, localized impacts are associated with onsite activities from both the construction and operations phases of subsequent projects associated with buildout of the General Plan Update Land Use Element. In addition to these localized impacts, vehicle travel associated with subsequent development has the potential to

result in exposure of sensitive receptors to CO emissions from intersection congestion. Based on the nature and extent of new development, nearby sensitive receptors could be exposed to levels of TACs that could result in a potential increase in cancer, acute, and/or chronic risk. The proposed General Plan Update Land Use Element would potentially cause a significant impact if one of the following would occur:

- Localized emissions from NO_2 and CO for subsequent development with buildout of the General Plan Update Land Use Element, when combined with existing ambient concentrations, would exceed the CAAQS.
- Localized emissions from PM_{10} and $PM_{2.5}$ for subsequent development with buildout of the General Plan Update Land Use Element would result in exceedance of the following incremental increase thresholds:
    - 10.4 µg/m^3 (24-hour) and 1.0 µg/m^3 of PM_{10} (Annual) for construction;
    - 10.4 µg/m^3 (24-hour) of $PM_{2.5}$ for construction;
    - 2.5 µg/m^3 (24-hour) and 1.0 µg/m^3 (Annual) of PM_{10} for operations; and
    - 2.5 µg/m^3 (24-hour) of $PM_{2.5}$ for operation.

Additionally, buildout of the General Plan Update Land Use Element would be considered to emit significant carcinogenic materials or TACs if development were to exceed the maximum incremental cancer risk of ten in one million or an acute or chronic hazard index of 1.0; or if cancer burden were to correspond to an increase in more than 0.5 excess cancer cases in areas where the Project-related increase in individual cancer risk exceeds one in one million.

LOCAL AIR QUALITY

General Plan Buildout

The SCAQMD recommends the evaluation of localized air quality impacts on sensitive receptors in the immediate vicinity of specific projects (following the SCAQMD Localized Significant Threshold, or LST, methodology). However, the SCAQMD explicitly advises that the LST methodology is not applicable to regional projects such as general plans. Therefore, an analysis of localized emissions during construction activities is not provided herein. Because the exact nature, location, and operation of the subsequent developments are also unknown, quantification of potential localized operational phase health impacts would be speculative. However, as construction and operation of these subsequent projects would occur within close proximity to sensitive receptors, there is the potential for localized emissions to exceed regulatory levels. Therefore, localized construction and operational emissions with respect to buildout of the General Plan Update Land Use Element would be potentially significant requiring mitigation.

Chet Holifield Federal Building Demolition

SCAQMD recommends the evaluation of localized air quality impacts on sensitive receptors in the immediate vicinity of specific projects (following the SCAQMD Localized Significant Threshold, or LST, methodology). Sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and

people with illnesses. The closest sensitive receptors to the CHFB site are Aliso Niguel High School, Laguna Niguel Skate & Soccer Park, and Hillview Park, which are located within 500 feet of the property boundaries of the CHFB site. The nearest residential uses are located approximately 750 feet or greater away. Though the CHFB site is greater than 50 acres, a one-acre disturbance area was used in the assessment of potential localized air quality impacts. One acre is the most conservative disturbance area for the SCAQMD's LST assessment methods. The ambient air quality standards for $PM_{2.5}$ and PM_{10} are based on a 24-hour average, while CO is based on a 1-hour and 8-hour, and NO_x is based on a 1-hour standard. Since commercial, educational, and industrial uses would not have occupants that would be at these uses for 24 hours, only the CO and NO_x LSTs would be applied to these land uses.[9] CO, NO2, $PM_{2.5}$, and PM_{10} LSTs would be applied to residential, hotel, retirement, and hospital uses.

Table 4.2-6, *CHFB Site Localized Significance of Construction Emissions (Maximum Pounds Per Day)*, shows the localized construction-related emissions associated with demolition of the CHFB site. It is noted that the localized emissions presented in Table 4.2-6 are less than those in Table 4.2-4 because localized emissions include only on-site emissions (i.e., from construction equipment and fugitive dust). As shown in Table 4.2-6, emissions would not exceed the LSTs for SRA 21. Construction LST impacts would be less than significant in this regard.

Table 4.2-6
CHFB Site Localized Significance of Construction Emissions (Maximum Pounds Per Day)

Maximum Emissions	NO_x	CO	PM_{10}	$PM_{2.5}$
Nearest Nonresidential Uses				
Maximum Daily Emissions (on-site)	9	64	NA[2]	NA[2]
Localized Significance Threshold[1]	91	726	NA[2]	NA[2]
Thresholds Exceeded?	**No**	**No**	**No**	**No**
Nearest Residential Uses				
Maximum Daily Emissions (on-site)[1]	9	64	7	1
Localized Significance Threshold	147	2,886	55	24
Thresholds Exceeded?	**No**	**No**	**No**	**No**

Source: CalEEMod v.2022.12

Notes:

1. The Localized Significance Threshold was determined using Appendix C of the SCAQMD Final Localized Significant Threshold Methodology guidance document for pollutants NOX, CO, PM10, and PM2.5. The Localized Significance Threshold was based on the anticipated daily acreage disturbance for construction (the thresholds for 1 acre were used) and the source receptor area (SRA 21).

[9] SCAQMD. *Finalized Localized Significance Threshold Methodology, Chapter 3*. 2003. https://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf?sfvrsn=8c641d61_2

INTERSECTION HOT SPOT ANALYSIS

The potential for subsequent development with buildout of the General Plan Update Land Use Element to cause or contribute to CO hotspots is evaluated by comparing Planning Area intersection traffic volumes and level of service with prior studies conducted by the SCAQMD in support of the AQMPs and considering existing background CO concentrations. As discussed below, this comparison demonstrates that the implementation of the General Plan Update Land Use Element would not cause or contribute considerably to the formation of CO hotspots, CO concentrations at Planning Area intersections would remain well below the ambient air quality standards, and that no further CO analysis is warranted or required.

CO levels in the Planning Area are substantially below the federal and State standards. CO levels decreased dramatically in the SCAB with the introduction of the catalytic converter in 1975. No exceedances of CO have been recorded at monitoring stations in the SCAB for decades, and the SCAB is currently designated as a CO attainment area under both the CAAQS and NAAQS. Thus, it is not expected that CO levels at intersections within the Planning Area would rise to the level of an exceedance of these standards.

Additionally, the SCAQMD conducted CO modeling for the 2003 AQMP for the following four worst-case intersections in the SCAB: 1) Wilshire Boulevard and Veteran Avenue; 2) Sunset Boulevard and Highland Avenue; 3) La Cienega Boulevard and Century Boulevard; and 4) Long Beach Boulevard and Imperial Highway. Based on the intersection volumes identified in the 2003 AQMP, if a project's traffic levels exceed 100,000 vehicles per day at any proposed project-impacted intersection, there would be the potential for significant impacts and dispersion modeling would need to be conducted to determine project level impacts.

As provided within the *Laguna Niguel General Plan Update Traffic Study* (Appendix F), there are no intersections that would exceed 100,000 vehicles per day within the Planning Area. The highest daily volumes would be approximately 60,000 trips. In addition, the Level of Service (LOS) for intersections under the General Plan Update Land Use Element would not result in congested intersections (LOS of E or F) which are identified in Caltrans CO Protocol as conducive to the formation of CO hotspots. Lastly, vehicle exhaust emissions have been reduced over time as a result of improved Corporate Average Fuel Economy standards as well as the increasing adoption of low emission and zero emission vehicles. As a result, CO concentrations are expected to be less than those estimated in the 2003 AQMP and would not exceed the applicable thresholds. Thus, this comparison demonstrates that the proposed General Plan Update Land Use Element would not contribute considerably to the formation of CO hotspots, and no further CO analysis is required. Therefore, with respect to CO hotspots, proposed Project impacts would be less than significant.

TOXIC AIR CONTAMINANTS

General Plan Buildout

Construction and operation of subsequent development anticipated with buildout of the General Plan Update Land Use Element would result in emissions of TACs, predominantly from DPM emissions from on- and off-road vehicles during construction and from the operation of diesel fueled equipment or

generators during operational activities. Because the exact nature, location, and operation of the subsequent developments are unknown, and because health risk impacts from TACs are cumulative over the life of the nearby receptors, quantification of potential health risks would be speculative. However, as construction and operation of these subsequent developments would occur within close proximity to sensitive receptors, there is the potential for health risk to exceed the SCAQMD's risk thresholds. However, the human health risks occurring within the SCAB have been substantially decreasing over time as detailed within the Multiple Air Toxics Exposure Study (MATES). The latest MATES study is MATES V and shows that there was approximately an 80 percent reduction in cancer risk within the air basin.[10] Despite the reduction in overall TACs and associated health risk, the development of individual projects associated with buildout of the General Plan Update Land Use Element could potentially result in health risk which exceeds the SCAQMD's risk thresholds. Therefore, health risks with respect to the subsequent development anticipated with buildout of the General Plan Update Land Use Element would be potentially significant and would be required to include mitigation measures for projects that have excessive health risks.

Chet Holifield Federal Building Demolition

Demolition of the CHFB site would result in DPM emissions from on- and off-road vehicles. The amount to which the receptors are exposed (a function of concentration and duration of exposure) is the primary factor used to determine health risk (i.e., potential exposure to toxic air contaminant emission levels that exceed applicable standards). Health-related risks associated with diesel-exhaust emissions are primarily linked to long-term exposure and the associated risk of contracting cancer.

The use of diesel-powered construction equipment would be temporary and episodic with the majority of equipment activity occurring at the CHFB building due to the amount of demolition activity required for removal of the large structure. Substantially less equipment usage is necessary for pavement demolition of the parking lots due to the relative thinness of asphalt pavement and the equipment needed for pavement removal. The duration of exposure would be short (approximately one year) and exhaust from construction equipment would dissipate rapidly with distance. Current models and methodologies for conducting HRAs are associated with longer-term exposure periods of 30 and 70 years for residential uses. As such, demolition activities would occur for a very short period compared to the exposure period used for the assessment of residential health risks. In addition, the location of the CHFB building allows air pollutants produced during the demolition of the building to disperse over distance. The dispersion of air pollutant concentrations over distance is a primary means to reduce exposure of emission sources to sensitive receptors such as schools, elder care facilities, and residential uses. The use of separation distances is documented in numerous documents. The CARB's *Air Quality and Land Use Handbook: A Community Health Perspective Handbook* (2005)[11] identifies 1,000 feet as a sufficient separation distance to disperse pollutants from an emission source. That is, CARB recommends 1,000 feet of separation for

[10] South Coast Air Quality Management District, *Multiple Air Toxics Exposure Study*, August 2021. https://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-v

[11] California Environmental Protection Agency, California Air Resources Board, *Air Quality and Land Use Handbook: A Community Health Perspective*, April 2005.

sensitive land uses and major sources. In addition, the Office of Environmental Health Hazards Assessment's *Air Toxics Hot Spots Program Guidance Manual*[12] states that under Senate Bill 352, Escutia, a HRA needs to be prepared for development of schools within 500 feet of a busy roadway or railway. Roadways and railways would result in substantially more diesel exhaust and particulate emissions compared to temporary construction activities occurring at the CHFB site. In addition, SCAQMD Rule 1401.1[13] is designed to be protective of school children by requiring new or relocated facilities that emit air toxics to provide a HRA if there are any existing schools within 500 feet. If there are no schools within 500 feet, an analysis would need to be done if there is a school under construction within 500-1,000 feet of a proposed facility. Separation distances of 500-1,000 feet are often sufficient to allow an adequate amount of air pollutant dispersion unless the emission source is very substantial such as a seaport, airport, or major railyard.

The nearest sensitive land uses were evaluated relative to distance from the CHFB demolition activities. The closest façade of the CHFB is located in excess of 1,100 feet from the nearest Aliso Niguel High School building and in excess of 1,300 feet from the nearest offsite residential buildings. Because the majority of and most intense demolition activities (including rock crushing activities) associated with the demolition of the CHFB site would occur beyond 1,000 feet, exposure to DPM at offsite sensitive residential land uses would be substantially reduced and would not be considered significant. Although the CHFB building is located greater than 1,100 feet from the nearest sensitive receptor, in order to ensure the rock crushing activities are located at a distance that exceeds 1,000 feet from sensitive receptors, compliance with Mitigation Measure AQ-2 would be required. Mitigation Measure AQ-2 requires the applicant to provide construction plans for review and approval by the Laguna Niguel Community Development Department documenting the location of on-site rock crushing activities to be maintained during the duration of the demolition activities. With implementation of Mitigation Measure AQ-2, potential impacts to sensitive receptors associated with demolition of the CHFB site would be less than significant.

It should also be noted that, unlike a residence where individuals may be located for up to 24 hours per day, individuals would not be located at the school or park for more than approximately six to eight hours per day for the school, and less than that at the park, which also reduces the risk associated with exposure to DPM. The relatively brief exposure from individuals at the Laguna Niguel Skate & Soccer Park for recreation activities would not be considered significant since residential exposure is assessed for 24-hours of exposure over the course of 30-years. Further, the CalEEMod emissions modeling provided under Impact AQ-2 did not assume that Tier 4 engine emissions standards would be used for construction equipment, providing a conservative assessment of potential emissions, which as demonstrated above, would not exceed significance thresholds.

[12] Office of Environmental Health Hazard Assessment. *Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments.* February 2015. https://oehha.ca.gov/sites/default/files/media/downloads/crnr/2015guidancemanual.pdf

[13] South Coast Air Quality Management District. Rule 1401.1. March 3, 2023. https://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1401-1.pdf

The California OEHHA has not identified short-term health effects from DPM. Construction is temporary and would be transient throughout the CHFB site (i.e., move from location to location) and would not generate emissions in a fixed location for extended periods of time. Construction activities would be subject to and would comply with California regulations limiting the idling of heavy-duty construction equipment to no more than five minutes to further reduce nearby sensitive receptors' exposure to temporary and variable diesel particulate matter emissions. In addition, the CARB has established increasingly stringent on-road and off-road engine standards for diesel-fueled engines. For these reasons, DPM generated by construction activities associated with demolition of the CHFB site, in and of itself, would not expose sensitive receptors to substantial amounts of air toxins and would result in a less than significant impact.

Separately, due to the age of the CHFB, lead contaminated surfaces and asbestos-containing materials (ACMs) are known or suspected to be present throughout the CHFB site.[14] As described in Section 4.8, *Hazards and Hazardous Materials*, demolition of the CHFB site could expose construction workers and persons within the vicinity to hazardous debris, including ACM or lead-based paint (LBP). Demolition activities associated with the CHFB site would be conducted according to federal and State regulations which govern the renovation and demolition of structures where ACMs and LBP are present. The National Emission Standards for Hazardous Air Pollutants mandates that building owners conduct an asbestos survey to determine the presence of ACMs prior to the commencement of any remedial work, including demolition. In addition, SCAQMD Rule 1403 requires abatement of ACMs prior to any demolition activities if ACM material is found. If paint is separated from building materials (chemically or physically) during demolition of structures, the paint waste would be evaluated independently from the building material by a qualified Environmental Professional in accordance with California Code of Regulations Title 8. If LBP is found, abatement would be required to be completed by a qualified Lead Specialist prior to any demolition activities. Demolition of the CHFB site would be required to comply with California *Health and Safety Code* Sections 17920.10 and 105256 and California Code of Regulations Title 8, Section 1532.1, as well as SCAQMD Rule 1403, regarding the potential for LBP and ACMs, which would reduce potential impacts relating to asbestos to a less than significant level.

HEALTH IMPACTS

Because regional emissions could exceed the SCAQMD regulatory thresholds during construction and operational activities, there is the potential that these emissions would exceed the CAAQS and NAAQS, potentially resulting in a health impact. Without knowing the exact specifications for all projects that may be developed with buildout of the General Plan Update Land Use Element, it is not possible to accurately calculate the potential for health impacts from the overall General Plan Update. Individual development projects would be required to assess the potential for health impacts from the construction and operation of individual projects. As there is no way to determine the potential for these projects to affect health of sensitive receptors within the City of Laguna Niguel, the proposed Project would result in potentially

[14] Potomac-Hudson Engineering, Inc., *Final Environmental Impact Statement for the Chet Holifield Federal Building Tenant Relocation Laguna Niguel, California*, March 2021.

significant health impacts and require mitigation measures for individual projects that have significant health impacts.

CONCLUSION

General Plan Buildout

Subsequent projects would undergo their own evaluation relative to potential air quality impacts to ensure compliance with State air quality emissions thresholds. Additionally, subsequent projects would be required to comply with the AQMP, SIP, CARB, SCAQMD regulations, and Title 24 energy efficiency standards. While compliance with these regulations would reduce exposure of sensitive receptors to pollutant concentrations, the extent to which the impacts would be reduced would have to be determined on a project-by-project basis. Because the potential local air quality emissions, TAC emissions, and health impacts would vary, some projects could result in exceedances of thresholds, resulting in significant impacts requiring mitigation.

Mitigation Measure AQ-1 requires subsequent discretionary projects to prepare and submit an air quality technical analysis that evaluates the proposed project's operational air quality impacts for the City's review and approval. The evaluation would be prepared in conformance with the methodologies and significance thresholds in the City's CEQA Manual. If the assessment determines the project would exceed adopted thresholds, project-specific mitigation measures would be required to reduce air quality emissions to below the applicable thresholds as required by Mitigation Measure AQ-1.

Although implementation of Mitigation Measure AQ-1 would reduce potential localized operational impacts, construction and operational health, and TAC impacts and individual projects may result in less than significant impacts, it is impossible to determine if potential impacts of all subsequent projects would be reduced to below significance thresholds. The exact location, type, nature, and size of subsequent projects that may expose sensitive receptors to pollutant concentrations cannot be calculated at this time, as the details of potential subsequent projects are not currently known. As such, there is no way to determine the extent to which the mitigation measures would be, or need to be, implemented, and it is impossible to determine if potential impacts would be reduced to below significance thresholds. Therefore, localized operational impacts, construction and operational health and TAC impacts would remain significant and unavoidable.

As discussed, the General Plan Update includes a range of policies to minimize air quality impacts with the potential to result in health impacts. For example, under proposed Resource Management Element Policy RM-5.4, the City would review new qualifying projects to ensure compliance with State air quality emissions thresholds and greenhouse gas emissions reduction targets.

Chet Holifield Federal Building Demolition

Demolition of the CHFB site would not expose sensitive receptors to substantial pollutant concentrations with implementation of Mitigation Measure AQ-2. Impacts would be less than significant.

Mitigation Measures: Refer to Mitigation Measure AQ-1.

AQ-2: Prior to issuance of a demolition permit for the CHFB site, the project applicant shall provide a construction plan identifying the specific location of on-site rock crushing activities and documenting the location is greater than 1,000 feet from sensitive receptors for review and approval by the Laguna Niguel Community Development Department. The location of the approved on-site crushing activities shall be maintained throughout the duration of rock crushing activities unless an updated construction plan is reviewed and approved by the Laguna Niguel Community Development Department.

Level of Significance: Buildout of the General Plan Update Land Use Element could expose sensitive receptors to substantial pollutant concentrations resulting in a significant and unavoidable impact. Demolition of the CHFB site would be less than significant.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan Update goals and policies cited above in AQ-1.

AQ-4: Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Impact Analysis: Potential sources that may emit odors during construction activities include the use of architectural coatings and solvents. SCAQMD Rule 1113 (Architectural Coatings) limits the amount of VOCs from architectural coatings and solvents. According to SCAQMD's CEQA Handbook, construction equipment is not a typical source of odors. Odors from the combustion of diesel fuel would be minimized by complying with the CARB ATCM (adopted in 2004), which limits diesel-fueled commercial vehicle idling to five minutes at any given location. Subsequent development with buildout of the General Plan Update Land Use Element, including demolition of the CHFB site, would also comply with SCAQMD Rule 402 (Nuisance), which prohibits the emissions of nuisance air contaminants or odorous compounds. Through adherence to and mandatory compliance with SCAQMD Rules and State of California vehicle exhaust measures, construction activities and materials would not create objectionable odors that constitute a public nuisance. Construction of subsequent development and demolition of the CHFB site would not be expected to generate nuisance odors at nearby air quality sensitive receptors. Therefore, impacts with respect to odors, for subsequent development associated with the General Plan Update Land Use Element, as well as demolition of the CHFB site, would be less than significant.

According to the SCAQMD's CEQA Handbook, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. Potential operational airborne odors could be created by commercial and industrial uses. However, subsequent development with buildout of the General Plan Update Land Use Element would be required to comply with the City's Municipal Code, including Section 10-1-50, *Animal Waste*, which prohibits animal premises from being sources of offensive odors, and SCAQMD's Rule 402 (Nuisance), which prohibits the emissions of nuisance air contaminants or odorous compounds. The other potential source of odors would be new waste receptacles within the Planning Area. The receptacles would be stored in areas and in containers, as required by the City, and be emptied on a regular basis, before potentially substantial odors have developed.

Consequently, implementation of the General Plan Update Land Use Element, including demolition of the CHFB site, would not create construction or operational objectionable odors affecting a substantial number of people within the City; impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

4.2.6 CUMULATIVE IMPACTS

Section 3.0, *Basis of Cumulative Analysis*, identifies projected regional growth having the potential to interact with the proposed Project to the extent that a significant cumulative effect may occur. The geographic setting for air quality is the SCAB and considers development adjacent to neighboring jurisdictions for localized air quality conditions.

Would the project, combined with other related cumulative projects, conflict with or obstruct implementation of the applicable air quality plan?

Impact Analysis:

CONSTRUCTION

General Plan Buildout

As stated under Impact AQ-1, construction activities associated with subsequent projects with buildout of the General Plan Update Land Use Element may result in exceedances of the SCAQMD's significance thresholds for construction, even with compliance with project-specific mitigation measures. Therefore, construction anticipated by the proposed Project may not be consistent with the AQMP under the first indicator resulting in a significant and unavoidable impact.

Per SCAQMD guidance, the significance thresholds for cumulative impacts are the same as those for project-specific impacts. Related cumulative projects within the SCAB would be assessed on a project-by-project basis to determine if the proposed construction activities would exceed the significance thresholds adopted for the assessment of regional, localized, and toxic air pollutant emissions. For individual projects that exceed these thresholds, mitigation measures would need to be implemented. However, there is the potential that related cumulative projects in the SCAB would result in a significant and unavoidable impact even with the implementation of mitigation measures, resulting in a cumulative impact. The General Plan Update's incremental effects associated with the potential to conflict with or obstruct implementation of the air quality management plan would be cumulatively considerable for construction.

Chet Holifield Federal Building Demolition

As demonstrated in Table 4.2-4, demolition of the CHFB site would not exceed the SCAQMD's significance thresholds for Project contributions to regional and local air quality. As such, impacts associated with demolition of the CHFB site would be less than significant related to consistency with the AQMP. Since significance thresholds for cumulative impacts are the same as those for project-specific impacts, the

incremental effects associated with the potential to conflict with or obstruct implementation of the air quality management plan from the demolition of the CHFB site would not be cumulatively considerable.

OPERATION

As stated under Impact AQ-1, projects envisioned under the General Plan Update Land Use Element have the potential to exceed the significance thresholds adopted for the assessment of regional, localized, and toxic air pollutant operation emissions, and implementation of the proposed General Plan Update Land Use Element would be considered to conflict with or obstruct the implementation of the applicable air quality plan. Individual projects would be required to implement Mitigation Measure AQ-1 to assess the potential for air quality impacts on a project-by-project basis. If thresholds are exceeded at the project level, mitigation measures would need to be implemented. However, despite these mitigation measures, there is a potential for unavoidable significant air quality impacts to occur with buildout of the General Plan Update Land Use Element.

As stated, the significance thresholds for cumulative impacts are the same as those for project-specific impacts. Related cumulative projects within the SCAB would be assessed on a project-by-project basis to determine if the proposed development would exceed the significance thresholds adopted for the assessment of regional, localized, and toxic air pollutant emissions. For individual projects that exceed these thresholds, mitigation measures would need to be implemented. However, there is the potential that related cumulative projects in the SCAB would result in a significant and unavoidable impact even with the implementation of mitigation measures, resulting in a cumulative impact. Thus, the General Plan Update's incremental effects associated with the potential to conflict with or obstruct implementation of the air quality management plan would be cumulatively considerable for operation.

Mitigation Measures: Refer to Mitigation Measure AQ-1.

Level of Significance: Buildout of the General Plan Update Land Use Element and related cumulative development could conflict with or obstruct implementation of the applicable air quality plan, resulting in a significant and unavoidable cumulative impact for both construction and operations. Cumulative impacts associated with demolition of the CHFB site would be less than significant.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan goals and policies cited above.

Would the project, combined with other related cumulative projects, result in cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under the applicable federal or state ambient air quality standard?

Impact Analysis:

CONSTRUCTION

General Plan Buildout

As discussed under impact AQ-2, construction associated with subsequent development with buildout of the proposed General Plan Update Land Use Element has the potential to temporarily emit criteria air pollutant emissions through the use of heavy-duty construction equipment, and through vehicle trips generated by workers and haul trucks. In addition, fugitive dust emissions would result from demolition and various soil-handling activities. Mobile source emissions, primarily NO_x and PM emissions (i.e., PM_{10} and $PM_{2.5}$), would result from the use of diesel-powered on- and off-road vehicles and equipment. Construction emissions can vary substantially from day-to-day, depending on the level of activity and the specific type of construction activity. Some subsequent projects can be expected to exceed the SCAQMD's project-level threshold due to the magnitude of potential development.

Subsequent projects with buildout of the General Plan Update Land Use Element would be required to comply with appliable SCAQMD rules and regulations and implement Mitigation Measure AQ-1 to reduce potential impacts. Per SCAQMD rules and mandates, as well as the CEQA requirement that significant impacts be mitigated to the extent feasible, these same requirements (i.e., SCAQMD compliance and the implementation of all feasible mitigation measures) would also be imposed on construction projects throughout the SCAB, which would include related cumulative projects.

Compliance with existing regulations and implementation of project-specific mitigation measures would reduce potential construction air quality impacts. However, significant construction air quality impacts associated with implementation of the General Plan Update Land Use Element could combine with construction emissions from other related cumulative projects within the SCAB as subsequent projects are developed, with the potential to substantially deteriorate air quality. Thus, the General Plan Update's incremental effects associated with a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment s would be cumulatively considerable for construction.

Chet Holifield Federal Building Demolition

As shown in Table 4.2-4, all criteria pollutant emissions associated with demolition of the CHFB site would remain below their respective thresholds. Additionally, demolition activities would be subject to compliance with the SCAQMD's Rules 402 (Nuisance) and 403 (Fugitive Dust). Construction emissions associated with future demolition of the CHFB site would not worsen ambient air quality, create additional violations of federal and State standards, or delay the SCAQMD's goal for meeting attainment standards in the SCAB. Thus, the incremental effects associated with a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment from demolition of the CHFB site would not be cumulatively considerable.

OPERATION

Operation of subsequent development with buildout of the General Plan Update Land Use Element would generate criteria air pollutant emissions from Project-generated vehicle trips traveling within the City, energy sources such as natural gas combustion, and area sources such as landscaping equipment and consumer products usage. As identified in Table 4.2-5, potential operational emissions for the proposed Project would also exceed regulatory thresholds (for VOC, NO_x, CO, PM_{10}, and $PM_{2.5}$).

Subsequent discretionary projects with buildout of the General Plan Update Land Use Element and related cumulative projects within the SCAB would be required to assess potential operational air quality impacts consistent with SCAQMD methodology and adopted thresholds and would be required to comply with CEQA requirement to mitigate significant impacts to the extent feasible. Compliance with existing regulations and implementation of project-specific mitigation measures would reduce potential operational air quality impacts. However, significant operational air quality impacts associated with implementation of the General Plan Update Land Use Element could combine with operational emissions from other related cumulative projects within the SCAB as subsequent projects are developed and become operational, with the potential to substantially deteriorate air quality. Thus, the General Plan Update's incremental effects associated with a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment would be cumulatively considerable for operation.

Mitigation Measures: Refer to Mitigation Measure AQ-1.

Level of Significance: Buildout of the General Plan Update Land Use Element could result in cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under the applicable federal or state ambient air quality standard under both construction and operations, resulting in a significant and unavoidable cumulative impact. Cumulative impacts associated with demolition of the CHFB site would be less than significant.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan goals and policies cited above.

Would the project, combined with other related cumulative projects, expose sensitive receptors to substantial pollutant concentrations?

Impact Analysis:

General Plan Buildout

As stated under Impact AQ-3, with respect to local air quality emissions, TAC emissions, and health impacts, future development under the General Plan Update Land Use Element would be required to comply with AQMP, SIP, CARB, SCAQMD regulations, Title 24 energy efficiency standards, and implement Mitigation Measure AQ-1. Compliance with existing regulations and implementation of Mitigation Measure AQ-1 would reduce such emissions. However, the exact location, type, nature, and size of future projects that may expose sensitive receptors to pollutant concentrations cannot be calculated at this time,

as the details of potential future projects are not currently known. As such, there is no way to determine the extent to which these regulations will be, or need to be, implemented, and it is impossible to determine if potential impacts would be reduced to below regulatory thresholds.

Similar to the Project, related cumulative projects would be required to assess their potential to result in significant local air quality emissions, TAC emissions, and health impacts on a project-by-project basis. The potential for individual projects to expose sensitive receptors to substantial pollutant concentrations varies based on the location of the site, construction and operation activities, and the site's proximity to sensitive receptors. Potential impacts tend to be localized and therefore specific projects within the City are limited in their ability to combine with related cumulative projects within adjacent jurisdictions. However, there is the potential for significant and unavoidable impacts associated with the exposure of sensitive receptors to substantial pollutant concentrations with the Project to combine with substantial pollutant concentrations from related cumulative development projects within a neighboring jurisdiction. Therefore, the General Plan Update's incremental effects associated with exposure of sensitive receptors to substantial pollutant concentrations would be cumulatively considerable.

Chet Holifield Federal Building Demolition

The CHFB site is located within the northwestern portion of the City adjacent to Alicia Parkway. West of Alicia Parkway are the Aliso Niguel High School and residential uses within the City of Aliso Viejo. The remainder of the City is surrounded by uses within the City of Laguna Niguel. As previously noted, exposure of sensitive receptors to substantial pollutant concentrations is localized and would only combine with other construction and operation activities within the immediate having a substantial exposure potential. As discussed above, demolition of the CHFB site would not expose sensitive receptors to substantial pollutant concentrations with implementation of Mitigation Measure AQ-2. Demolition of the CHFB site would not have the potential to combine with cumulative related development projects that are proximate to the CHFB site within Aliso Viejo. The incremental effects associated with the exposure of sensitive receptors to substantial pollutant concentrations with demolition activities at the CHFB site would not be cumulatively considerable.

Mitigation Measures: Refer to Mitigation Measure AQ-1 and AQ-2.

Level of Significance: Buildout of the General Plan Update Land Use Element could combine with related cumulative development with the potential to expose sensitive receptors to substantial pollutant concentrations resulting in a significant and unavoidable cumulative impact. Cumulative impacts associated with demolition of the CHFB site would be less than significant.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan goals and policies cited above.

Would the project, combined with other related cumulative projects, result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Impact Analysis: As stated under Impact AQ-4, subsequent development associated with buildout of the General Plan Update Land Use Element, including demolition of the CHFB site, would be required to

comply with the CARB requirements, SCAQMD rules, and the City of Laguna Niguel's Municipal Code, reducing potential impacts with respect to potential sources that may emit odors during construction and operations and impacts would be less than significant.

Similar to the Project, individual related cumulative projects with the potential to result in emissions such as those leading to odors would also be required to comply with CARB requirements, SCAQMD rules, and any local requirements and regulations. Potential impacts associated with emissions, such as those leading to odors, would be localized; therefore, specific projects within the City are limited in their ability to combine with related cumulative projects within adjacent jurisdictions. As the General Plan Update would have a less than significant impact relative to emissions such as those leading to odors under both buildout of the General Plan Update Land Use Element and demolition of the CHFB site, the Project's incremental effects to cumulative odor impacts affecting a substantial number of people would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: There are no proposed goals and policies specific to odors.

4.2.7 SIGNIFICANT UNAVOIDABLE IMPACTS

The General Plan Update would result in a significant unavoidable impact in the following areas:

- General Plan implementation would conflict with or obstruct implementation of the applicable air quality plan for construction and operation at the project level.
- General Plan implementation would result in a cumulatively considerable net increase of criteria pollutants for which the project region is non-attainment under an applicable federal or state ambient air quality standard for construction and operation at the project level.
- General Plan implementation would potentially expose sensitive receptors to substantial pollutant concentrations for construction and operation at the project level.
- General Plan implementation combined with other related cumulative projects would conflict with or obstruct implementation of the applicable air quality plan for construction and operation.
- General Plan implementation combined with other related cumulative projects would result in cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under the applicable federal or State ambient air quality standard for construction and operation.
- General Plan implementation combined with other related cumulative projects would result in a cumulatively considerable contribution to significant cumulative air quality impacts with the potential to expose sensitive receptors to substantial pollutant concentrations for construction and operation.

All other air quality impacts associated with implementation of the General Plan Update would be less than significant.

If the City of Laguna Niguel approves the General Plan Update, the City would be required to make findings in accordance with CEQA Guidelines Section 15091 and prepare a Statement of Overriding Considerations for consideration by the City's decisionmakers in accordance with CEQA Guidelines Section 15093.

4.2.8 REFERENCES

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4.3 BIOLOGICAL RESOURCES

4.3.1 PURPOSE

This section describes biological resources within the Planning Area and provides an analysis of potential impacts associated with implementation of the General Plan Update Land Use Element.

KEY TERMS

Sensitive Natural Community: A sensitive natural community is a biological community that is regionally rare, provides important habitat opportunities for wildlife, is structurally complex, or is in other ways of special concern to local, State, or federal agencies. The California Environmental Quality Act (CEQA) identifies the elimination or substantial degradation of such communities as a significant impact. The California Department of Fish and Wildlife (CDFW) tracks sensitive natural communities in the California Natural Diversity Database (CNDDB).

Special-Status Species: Special-status species are those plants and animals that, because of their recognized rarity or vulnerability to various causes of habitat loss or population decline, are recognized by federal, State, or other agencies. Some of these species receive specific protection that is defined by federal or State endangered species legislation. Others have been designated as "sensitive" on the basis of adopted policies and expertise of State resource agencies or organizations with acknowledged expertise, or policies adopted by local governmental agencies such as counties, cities, and special districts to meet local conservation objectives. These species are referred to collectively as "special status species" in this report, following a convention that has developed in practice but has no official sanction. For the purposes of this assessment, the term “special status” includes those species that are:

- Federally listed or proposed for listing under the Federal Endangered Species Act (FESA), as provided in the Code of Federal Regulations (CFR);
- Candidates for listing under FESA;
- State listed or proposed for listing under the California Endangered Species Act (CESA);
- Species listed by the USFWS or the CDFW as a species of concern (USFWS), rare (CDFW), or of special concern (CDFW);
- Fully protected animals, as defined by the State of California (California Fish and Game Code [CFGC] Section 3511, 4700, and 5050);
- Species that meet the definition of threatened, endangered, or rare under CEQA (CEQA Guidelines Section 15380);
- Plants listed as rare or endangered under the California Native Plant Protection Act (CFGC Section 1900 et seq.); and
- Plants listed by the California Native Plant Society (CNPS) as rare, threatened, or endangered.

Wetlands: Wetlands are ecologically complex habitats that support a variety of both plant and animal life. The Federal government defines wetlands as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." Wetlands require wetland hydrology, hydric soils, and hydrophytic vegetation. Examples of wetlands include freshwater marsh, seasonal wetlands, and vernal pool complexes that have a hydrologic link to waters of the U.S.

4.3.2 ENVIRONMENTAL SETTING

BIOREGIONS

The Planning Area lies within the coastal hills of southern Orange County. Biologically, the coastal hills bioregion encompasses a range of Upper Sonoran terrestrial habitats from coastal sage scrub to riparian habitat. Gentle rolling hills covered with grasslands, coastal sage scrub, and chaparral dominate this region. Riparian woodlands are supported by drainage courses that provide a conducive environment for natural wildlife. Large stands of coastal sage scrub exist in the coastal hills south of Aliso Canyon. Non-native annual herbs and grasses dominate lower slopes and areas where scrub vegetation was removed to provide grazing lands. The open space areas contain a mix of native and introduced habitats, including coastal sage scrub, chaparral, and grassland. These remaining open space areas are important biologically because they support flora and fauna that now have limited distributions.

CALIFORNIA WILDLIFE HABITAT RELATIONSHIP SYSTEM

The California Wildlife Habitat Relationship (CWHR) habitat classification scheme has been developed to support the CWHR System, a wildlife information system and predictive model for California's regularly occurring birds, mammals, reptiles, and amphibians. At present, there are 59 wildlife habitats in the CWHR System, including: 27 tree, 12 shrub, six herbaceous, four aquatic, eight agricultural, one developed, and one non-vegetated.[1]

According to the CWHR System, there are eight cover types (wildlife habitat classification) in the Planning Area out of 59 found throughout the State. The vast majority of the Planning Area is designated as an Urban cover type (76 percent). The second largest cover type is Coastal Scrub (12 percent), followed by Annual Grassland (nine percent). The remainder of the Planning Area (three percent) is made up of Mixed Chaparral, Eucalyptus, Lacustrine, Valley Foothill Riparian, and Barren. The cover types are shown in Figure 4.3-1, *Land Cover Types*.

A brief description of the Planning Area cover types, as identified by the CWHR System, is provided below:

Developed Cover Types

Urban habitats are not limited to any particular physical setting. The three urban categories relevant to wildlife are downtown, urban residential, and suburbia. The heavily developed downtown is usually at the center, followed by concentric zones of urban residential and then suburbia. There is a progression

[1] California Dept. of Fish and Wildlife, 2023. "*Special Vascular Plants, Bryophytes, and Lichens List."* Natural Diversity Database.

outward of decreasing development and increasing vegetative cover. Species richness and diversity is extremely low in the inner cover. The structure of urban vegetation varies, with five types of vegetative structure defined as tree grove, street strip, shade tree/lawn, lawn, and shrub cover. A distinguishing feature of the urban wildlife habitat is the mixture of native and exotic species. Approximately 7,203.02 acres of the Planning Area are identified as Urban habitat.

Shrub Dominated Cover Types

Coastal Scrub habitats are typified by low- to moderate-sized shrubs with mesophytic leaves, flexible branches, semi-woody stems growing from a woody base, and a shallow root system. Coastal Scrub seems to tolerate drier conditions than its associated habitats. It is typical of areas with steep, south-facing slopes; sandy, mudstone or shale soils; and average annual rainfall of less than 30 centimeters (cm) (approximately 12 inches). However, it also regularly occurs on stabilized dunes, flat terraces, and moderate slopes of all aspects where average annual rainfall is up to 60 cm (approximately 24 inches). Approximately 1,165.4 acres of the Planning Area are identified as Coastal Scrub habitat.

Mixed Chaparral is a structurally homogeneous brushland habitat dominated by shrubs with thick, stiff, heavily cutinized evergreen leaves. It is floristically rich and supports approximately 240 species of woody plants. Dominant species in cismontane Mixed Chaparral include scrub oak, chaparral oak, and several species of ceanothus and manzanita. Individual sites may support pure stands of these shrubs or diverse mixtures of several species. Commonly associated shrubs include chamise, birchleaf mountain mahogany, silk-tassel, toyon, yerba-santa, California buckeye, poison-oak, sumac, California buckthorn, hollyleaf cherry, Montana chaparral-pea, and California fremontia. Approximately 148.4 acres of the Planning Area are identified as Mixed Chaparral habitat.

Herbaceous Dominated Cover Types

Annual Grassland habitats are open grasslands composed primarily of annual plant species and occur mostly on flat plains to gently rolling foothills. Introduced annual grasses are the dominant plant species in this habitat, including wild oats, soft chess, ripgut brome, red brome, wild barley, and foxtail fescue. Approximately 860.6 acres of the Planning Area are identified as Annual Grassland habitat.

Tree Dominated Cover Types

Eucalyptus habitats range from single-species thickets with little or no shrubby understory to scattered trees over a well-developed herbaceous and shrubby understory. In most cases, eucalyptus forms a dense stand with a closed canopy. Overstory composition is typically limited to one species of the genus, or mixed stands composed of other species of the same genus; few native overstory species are present within eucalyptus planted areas, except in small, cleared pockets. Where trees of this genus are established as small groves in native plant communities, understory species typically include coastal sage, chamise, manzanita, buckwheat, toyon, scrub oak, mountain mahogany, and assorted annuals. Eucalyptus is also known to become established along stream courses, encroaching upon existing riparian vegetation. Approximately 28.4 acres of the Planning Area are identified as Eucalyptus habitat.

Valley Foothill Riparian Canopy height is approximately 30 m (98 ft) in a mature riparian forest, with a canopy cover of 20 to 80 percent. Most trees are winter deciduous. There is a subcanopy tree layer and an understory shrub layer. Herbaceous vegetation constitutes about one percent of the cover, except in

openings where tall forbs and shade-tolerant grasses occur. Generally, the understory is impenetrable and includes fallen limbs and other debris. The dominant species in the canopy layer are cottonwood, California sycamore and valley oak. Subcanopy trees are white alder, boxelder, and Oregon ash. Typical understory shrub layer plants include wild grape, wild rose, California blackberry, blue elderberry, poison oak, buttonbrush, and willows. The herbaceous layer consists of sedges, rushes, grasses, miner's lettuce, Douglas sagewort, poison-hemlock, and hoary nettle. Approximately 13.01 acres of the Planning Area are identified as Valley Foothill Riparian habitat.

Aquatic Cover Types

Lacustrine habitats are inland depressions or dammed riverine channels containing standing water. They may vary from small ponds of less than one hectare to large areas covering several square kilometers. The plants and animals found in the littoral zone vary with water depth, and a distant zonation of life exists from deeper water to shore. A blanket of duckweed may cover the surface of shallow water. Desmids and diatoms, protozoans and minute crustaceans, hyrdras, and snails live on the under-surface of the blanket; mosquitoes and collembolans live on top. Submerged plants such as algae and pondweeds serve as support for smaller algae and as cover for swarms of minute aquatic animals. As sedimentation and accumulation of organic matter increases toward the shore, floating rooted aquatics such as water lilies and smartweeds often appear. Floating plants offer food and support for numerous herbiverous animals that feed both on phytoplankton and the floating plants. Approximately 25.8 acres of the Planning Area are identified as Lacustrine habitat.

Non-vegetated Cover Types

Barren habitat is defined by the absence of vegetation. Any habitat with less than two percent total vegetation cover by herbaceous, desert, or non-wildland species and less than 10 percent cover by tree or shrub species is defined this way. Urban settings covered in pavement and buildings may be classified as barren as long as vegetation, including non-native landscaping, does not reach the percent cover thresholds for vegetated habitats. Approximately 19.2 acres of the Planning Area are identified as Barren habitat.

SPECIAL-STATUS SPECIES

The following discussion is based on a search of special status species that are documented in the California Natural Diversity Database (CNDDB), the California Native Plant Survey (CNPS) Inventory of Rare and Endangered Plants, and the USFWS endangered and threatened species lists. The search was regional in scope and focused on the documented occurrences within the following U.S. Geological Survey quadrangles: Tustin, El Toro, Santiago Peak, Laguna Beach, San Juan Capistrano, Canada Gobernadora, Dana Point, and San Clemente (referred to herein as nine-quad search area), Laguna Niguel, and a one-mile search area of the Planning Area; refer to Appendix C, *Biological Resources*.

Special-Status Plants

The search revealed documented occurrences of over 400 special status plant species within the nine-quad search area. Of these special status plant species, 13 species are located within one mile of the Planning Area; refer to Appendix C.

Table 4.3-1, *Special-Status Plants Present or Potentially Present*, provides a list of special-status plant species that are documented within a one-mile search area of the Planning Area and their current protective status.

Table 4.3-1
Special-Status Plants Present or Potentially Present

Scientific Name	Common Name	Federal Status	State Status	CRPR[1]
Atriplex coulteri	Coulter's Saltbush	None	None	1B.2
Brodiaea filifolia	Thread-Leaved Brodiaea	Threatened	Endangered	1B.1
Calochortus weedii var. intermedius	Intermediate Mariposa-Lily	None	None	1B.2
Chaenactis glabriuscula var. orcuttiana	Orcutt's Pincushion	None	None	1B.1
Comarostaphylis diversifolia ssp. diversifolia	Summer Holly	None	None	1B.2
Dudleya blochmaniae ssp. blochmaniae	Blochman's Dudleya	None	None	1B.1
Dudleya stolonifera	Laguna Beach Dudleya	Threatened	Threatened	1B.1
Euphorbia misera	Cliff Spurge	None	None	2B.2
Pentachaeta aurea ssp. allenii	Allen's Pentachaeta	None	None	1B.1
Pseudognaphalium leucocephalum	White Rabbit-Tobacco	None	None	2B.2
Quercus dumosa	Nuttall's Scrub Oak	None	None	1B.1
Verbesina dissita	Big-Leaved Crownbeard	Threatened	Threatened	1B.1

1B.1: plants rare, threatened, or endangered in California and elsewhere, seriously threatened in California (over 80 percent of occurrences threatened/high degree and immediacy of threat)
1B.2: plants rare, threatened, or endangered in California and elsewhere, moderately threatened in California (20-80 percent occurrences threatened/moderate degree and immediacy of threat)
2B.2: plants rare, threatened, or endangered in California but more common elsewhere, moderately threatened in California (20-80 percent occurrences threatened/ moderate degree and immediacy of threat)
Source: CDFW, CNDDB, 2023.
Notes:
1. California Native Plant Society (CNPS) California Rare Plant Rank (CRPR).

Special-Status Animals

Table 4.3-2, *Special-Status Animals Present or Potentially Present*, provides a list of the special-status animal species that are documented within one mile of the Planning Area and their current protective status; refer to Appendix C.

Table 4.3-2
Special-Status Animals Present or Potentially Present

Scientific Name	Common Name	Federal Status	State Status	CDFW Status
Amphibian				
Spea Hammondii	Western Spadefoot	None	None	SSC
Bird				
Vireo Bellii Pusillus	Least Bell's Vireo	Endangered	Endangered	--
Polioptila Californica Californica	Coastal California Gnatcatcher	Threatened	None	SSC
Agelaius Tricolor	Tricolored Blackbird	None	Threatened	SSC
Aimophila Ruficeps Canescens	Southern California Rufous-Crowned Sparrow	None	None	WL
Campylorhynchus Brunneicapillus Sandiegensis	Coastal Cactus Wren	None	None	SSC
Elanus Leucurus	White-Tailed Kite	None	None	FP
Fish				
Oncorhynchus Mykiss Irideus Pop. 10	Steelhead - Southern California DPS	Endangered	Candidate Endangered	---
Eucyclogobius Newberryi	Tidewater Goby	Endangered	None	---
Gila Orcuttii	Arroyo Chub	None	None	SSC
Insect				
Bombus Crotchii	Crotch Bumble Bee	None	Candidate Endangered	--
Mammal				
Myotis Yumanensis	Yuma Myotis	None	None	---
Eumops Perotis Californicus	Western Mastiff Bat	None	None	SSC
Chaetodipus Californicus Femoralis	Dulzura Pocket Mouse	None	None	---
Reptile				
Arizona Elegans Occidentalis	California Glossy Snake	None	None	SSC
Phrynosoma Blainvillii	Coast Horned Lizard	None	None	SSC
Anniella Stebbinsi	Southern California Legless Lizard	None	None	SSC
Emys Marmorata	Western Pond Turtle	None	None	SSC

Table 4.3-2 (continued)
Special-Status Animals Present or Potentially Present

Scientific Name	Common Name	Federal Status	State Status	CDFW Status
Amphibian				
Aspidoscelis Tigris Stejnegeri	Coastal Whiptail	None	None	SSC
Aspidoscelis Hyperythra	Orange-Throated Whiptail	None	None	WL
SSC: CDFW Species of Special Concern; FP: California Fully Protected; WL: CDFW Watch List Source: CDFW, CNDDB, 2023.				

Sensitive Natural Communities

The CDFW considers sensitive natural communities to have significant biotic value, with species of plants and animals unique to each community. The CNDDB search found no sensitive natural communities within the nine-quad search area. The Planning Area is largely developed with a dominating Urban cover type, reducing its hospitability to many natural communities that exist in southern California.

Aquatic Resources

Vernal Pools

Vernal pools are temporary wetlands that occur as a result of rainwater failing to drain into subsoils and provide habitat for several sensitive plant and animal species in the area. In California, vernal pools fill in the winter and spring, as water collects in depressions. The water eventually evaporates, leaving a dry depression in the summer and fall. Vernal pools support a range of unique plant and animal species. On some occasions, vernal pools can be connected by small drainages. These connected vernal pools are known as vernal complexes. According to the USGS National Wetlands Inventory there are no vernal pools within the Planning Area.

4.3.3 REGULATORY SETTING

FEDERAL

Federal Endangered Species Act

Federally listed threatened and endangered species and their habitats are protected under provisions of FESA of 1973. FESA Section 9 prohibits “take” of threatened or endangered species. “Take” under the FESA is defined as to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any of the specifically enumerated conduct.” The presence of any Federally threatened or endangered species that are in a project area generally imposes severe constraints on development, particularly if development would result in “take” of the species or its habitat. Under the regulations of the FESA, the USFWS may authorize “take” when it is incidental to, but not the purpose of, an otherwise lawful act.

"Harm" has been defined by the regulations of the USFWS to include types of "significant habitat modification or degradation." The U.S. Supreme Court, in *Babbit v. Sweet Home*, 515 U.S. 687, ruled that "harm" may include habitat modification "...where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering." Activities that may result in "take" of individuals are regulated by USFWS.

Under the FESA, "Critical Habitat" is also designated at the time of listing or within one year of listing. "Critical Habitat" refers to habitat or a specific geographic area that contains the elements and features that are essential for the survival and recovery of the species. In the event a project may result in take or in adverse effects to a species' designated Critical Habitat, the project proponent may be required to provide mitigation. If the project has a federal nexus (i.e., occurs on federal land, is issued federal permits, or receives any other federal oversight or funding), the proponent would be required to enter into Section 7 informal and/or formal consultations with the USFWS to obtain, if possible, a biological opinion allowing for incidental take of the species in question. If the project is on private land or would not require any federal permits, the proponent would be required to prepare a habitat management plan to address the impacts.

The FESA defines as "endangered" any plant or animal species that is in danger of extinction throughout all or a significant portion of its range. A "threatened" species is a species that is likely to become endangered in the foreseeable future. A "proposed" species is one that has been officially proposed by USFWS for addition to the federal threatened and endangered species list.

USFWS produced an updated list of candidate species for listing in June 2002. Candidate species are regarded by USFWS as candidates for addition to the "List of Endangered and Threatened Wildlife and Plants." Although candidate species are not afforded legal protection under the FESA, they typically receive special attention from Federal and State agencies during the environmental review process.

USFWS also uses the label "species of concern," an informal term that refers to species which might be in need of concentrated conservation actions. As the species of concern designated by USFWS do not receive formal legal protection, the use of the term does not necessarily ensure that the species would be proposed for listing as a threatened or endangered species.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) makes it unlawful to pursue, capture, kill, or possess or attempt to do the same to any migratory bird or part, nest, or egg of any such bird listed in wildlife protection treaties between the United States, Great Britain, Mexico, Japan, and the countries of the former Soviet Union, and authorizes the U.S. Secretary of the Interior to protect and regulate the taking of migratory birds. It establishes seasons and bag limits for hunted species and protects migratory birds, their occupied nests, and their eggs.

Section 404 of the Clean Water Act

Clean Water Act (CWA) Section 404 requires that a permit be obtained from the USACE prior to the discharge of dredged or fill materials into any "waters of the United States or wetlands." Waters of the United States are broadly defined in the USACE regulations to include navigable waterways, their

tributaries, lakes, ponds, and wetlands. Wetlands are defined as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that normally do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas." Wetlands that are not specifically exempt from Section 404 regulations (such as drainage channels excavated on dry land) are considered to be "jurisdictional wetlands." In *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*, the Court acted to limit the regulatory jurisdiction of the Corps under CWA Section 404 as it applies to adjacent waters. Specifically, the Court ruled that waters that are non-navigable, isolated, and intrastate are not subject to the USACE jurisdiction. USACE is required to consult with the USFWS, Federal Environmental Protection Agency, and State Regional Water Quality Control Board (RWQCB), among other agencies, in carrying out its discretionary authority under Section 404.

USACE grants two types of permits, individual and nationwide. Project-specific individual permits are required for certain activities that may have a potential for more than a minimal impact and necessitate a detailed application. The most common type of permit is a nationwide permit. Nationwide permits authorize activities on a nationwide basis unless specifically limited and are designed to regulate with little delay or paperwork certain activities having minimal impacts. Nationwide permits typically take two to three months to obtain whereas individual permits can take a year or more. To qualify for a nationwide permit, specific criteria must be met. If the criteria restrictions are met, permittees may proceed with certain activities without notifying the USACE. Some nationwide permits require a pre-construction notification before activities can begin.

Section 401 of the Clean Water Act

Applicants for a federal license or permit for activities which may discharge to waters of the U.S. must seek Water Quality Certification from the State or Indian tribe with jurisdiction. The Water Quality Certification is based on a finding that the discharge would meet water quality standards and other applicable requirements. In California, RWQCBs issue or deny Certification for discharges within their geographical jurisdiction. Water Quality Certification must be based on a finding that the proposed discharge would comply with water quality standards, which are defined as numeric and narrative objectives in each RWQCB's Basin Plan. Where applicable, the State Water Resources Control Board (SWRCB) has this responsibility for projects affecting waters within the jurisdiction of multiple RWQCBs. The RWQCB's jurisdiction extends to all waters of the State and to all waters of the U.S., including wetlands.

CWA Section 401 requires that "any applicant for a Federal permit for activities that involve a discharge to waters of the State, shall provide the Federal permitting agency a certification from the State in which the discharge is proposed that states that the discharge would comply with the applicable provisions under the federal Clean Water Act." Therefore, before USACE would issue a Section 404 permit, applicants must apply for and receive a Section 401 water quality certification from the RWQCB.

STATE

California Endangered Species Act (California Fish and Game Code Section 2050 et seq.)

State-listed threatened and endangered species are protected under provisions of the CESA. Activities that may result in "take" of individuals (defined in CESA as to "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") are regulated by the CDFW. Habitat degradation or modification is not included in the definition of "take" under CESA. Nonetheless, CDFW has interpreted a "take" to include the destruction of nesting, denning, or foraging habitat necessary to maintain a viable breeding population of protected species.

The State of California considers an endangered species as one whose prospects of survival and reproduction are in immediate jeopardy. A threatened species is considered 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. A candidate species is one that is under review by the CDFW for addition to either the list of endangered species or the list of threatened species. A rare species is one that is considered present in such small numbers throughout its range that it may become endangered if its present environment worsens. State threatened and endangered species are fully protected against take, as defined above.

CDFW has also produced a Species of Special Concern list to serve as a species watch list. Species on this list are either of limited distribution or their habitats have been reduced substantially, such that a threat to their populations may be imminent. Species of special concern may receive special attention during environmental review, but they do not have formal statutory protection.

California Environmental Quality Act

CEQA Guidelines Section 15380 independently defines "endangered" and "rare" species separately from the definitions in the CESA. Under CEQA, "endangered" species of plants or animals are defined as those whose survival and reproduction in the wild are in immediate jeopardy, while "rare" species are defined as those who are in such low numbers that they could become endangered if their environment worsens.

Lake and Streambed Alteration Program (California Fish and Game Code Sections 1600 through 1616)

California Fish and Game Code Sections 1600 through 1616 establish a fee-based process to ensure that projects conducted in and around lakes, rivers, or streams do not adversely impact fish and wildlife resources, or, when adverse impacts cannot be avoided, ensures that adequate mitigation and/or compensation is provided.

Fish and Game Code Section 1602 requires any person, state, or local governmental agency or public utility to notify the CDFW before beginning any activity that would do one or more of the following:

- Substantially obstruct or divert the natural flow of a river, stream, or lake;
- Substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or
- Deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake.

Fish and Game Code Section 1602 applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the state. CDFW's regulatory authority extends to include riparian habitat (including wetlands) supported by a river, stream, or lake regardless of the presence or absence of hydric soils and saturated soil conditions. Generally, the CDFW takes jurisdiction to the top of bank of the stream or to the outer limit of the adjacent riparian vegetation (outer drip line), whichever is greater. Notification is generally required for any project that would take place in, or in the vicinity of, a river, stream, lake, or their tributaries. This includes rivers or streams that flow at least periodically or permanently through a bed or channel with banks that support fish or other aquatic life and watercourses having a surface or subsurface flow that support or have supported riparian vegetation.

Native Plant Protection Act (Fish and Game Code Sections 1900 through 1913)

CFGC Sections 1900 through 1913 were developed to preserve, protect, and enhance Rare and Endangered plants in the State of California. The Native Plant Protection Act requires all State agencies to use their authority to carry out programs to conserve Endangered and Rare native plants. Provisions of the Native Plant Protection Act prohibit the taking of listed plants from the wild and require notification of the CDFW at least ten days in advance of any change in land use which would adversely impact listed plants. This allows CDFW to salvage listed plant species that would otherwise be destroyed.

California Fish and Game Code Sections 3503, 3503.5, 3511, 3513, 4700, 5050, and 5515

CDFW administers the CFGC, and there are particular sections of the CFGC that are applicable to natural resource management. For example, CFGC Section 3503 makes it unlawful to destroy the nests or eggs of any birds that are protected under the MBTA. Furthermore, any birds in the orders Falconiformes or Strigiformes (Birds of Prey, such as hawks, eagles, and owls) are protected under CFGC Section 3503.5 which makes it unlawful to take, possess, or destroy their nest or eggs. A consultation with CDFW would be required prior to the removal of any bird of prey nest that may occur on a project site. CFGC Sections 3511, 4700, 5050, and 5515 list fully protected bird, mammal, reptile and amphibian, and fish species, respectively. CDFW is unable to authorize the issuance of permits or licenses to take these species. Examples of species that are State fully protected include golden eagle and white-tailed kite (*Elanus leucurus*). CFGC Section 3513 makes it unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

California Native Plant Society Rare or Endangered Plant Species

Vascular plants listed as rare or endangered by the CNPS, but which have no designated status under state and federal endangered species legislation are defined as follows:

- California Rare Plant Rank
    - 1A. Plants Presumed Extirpated in California and either Rare or Extinct Elsewhere
    - 1B. Plants Rare, Threatened, or Endangered in California and Elsewhere
    - 2A. Plants Presumed Extirpated in California, but More Common Elsewhere
    - 2B. Plants Rare, Threatened, or Endangered in California, but More Common Elsewhere

- Threat Ranks
    1. Seriously threatened in California (over 80 percent of occurrences threatened/high degree and immediacy of threat)
    2. Moderately threatened in California (20 to 80 percent occurrences threatened/moderate degree and immediacy of threat)
    3. Not very threatened in California (less than 20 percent of occurrences threatened/low degree and immediacy of threat or no current threats known)

LOCAL

County of Orange (Central/Coastal) Natural Community Conservation Plan/Habitat Conservation Plan

The Natural Community Conservation Plan (NCCP) program began under the State's Natural Community Conservation Planning Act of 1991. The Natural Communities Coalition (NCC) was established in 1996 as one of the first implementation steps following the signing of a landscape-scale habitat planning and conservation effort—the Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP) for the County Central and Coastal Subregion of the Southern California NCCP Coastal Sage Scrub (CSS) program. The plan provides long-term protection for wildlife and their critical habitats, and regulatory assurances and economic benefits for participating landowners. The main purpose of NCC is to coordinate the land management, monitoring, and research with partners across the nearly 38,000-acre Reserve System. The NCCP Act contains statutory provisions authorizing the take of species that would be prohibited or limited by the California Endangered Species Act. The City of Laguna Niguel is not a participant in the NCCP program.

Urban Forestry Program

The City of Laguna Niguel Public Works Department maintains 7,500 City trees and 13 wetlands, with the goal of protecting the public and surrounding environment while managing long-term stability, health, and sustainability of the Aliso Creek Watershed. For every one tree removed, the City plants three new trees.[2]

City of Laguna Niguel Municipal Code

The City of Laguna Niguel Municipal Code Title 11, Division 8, Article 7, *Tree Protections*, outlines the protection and maintenance guidance for street trees on public property. Municipal Code Section 9-1-81, *Hillside Protection Regulations*, minimize impacts in hillside areas to endangered, threatened or rare species of flora and fauna. Municipal Code Section 9-1-92.3, *Nonresidential Landscaping*, requires new development to be designed to protect existing trees to the greatest extent possible.

City of Laguna Niguel CEQA Manual

The City of Laguna Niguel CEQA Manual provides the City and project applicants with local guidelines, procedures, requirements, and thresholds of significance for the environmental review process within the City of Laguna Niguel consistent with the California Environmental Quality Act (Public Resources Code

[2] City of Laguna Niguel, n.d. *Urban Forestry Program*. Available at: https://cityoflagunaniguel.org/1611/Urban-Forestry-Program. Accessed March 2025.

[PRC] Section 21000 et seq.), referred to as "CEQA" or "CEQA Statutes," and the State CEQA Guidelines (Title 14, California Code of Regulations (CCR), Division 6, Chapter 3, Section 15000 et seq.). The City's CEQA Manual applies to all public and private projects under the jurisdiction of the City of Laguna Niguel that constitute a "project" and therefore subject to CEQA review.

4.3.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

CEQA Guidelines Appendix G contains the Initial Study Environmental Checklist, which includes questions related to biological resources. The City relies on the questions included in Appendix G as the thresholds of significance for assessing impacts related to biological resources (City of Laguna Niguel CEQA Manual, Revised February 24, 2023). A significant impact will occur if implementation of the proposed Project will:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service (refer to Impact Statement BIO-1);
- 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 (refer to Impact Statement BIO-2);
- Have a substantial adverse effect on Federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means (refer to Impact Statement BIO-3);
- 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 (refer to Impact Statement BIO-4);
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (refer to Impact Statement BIO-5); and
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan (refer to Section 7.0, *Effects Found Not To Be Significant*).

CEQA Guidelines Section 15065(a), Mandatory Findings of Significance, states that a project may have a significant effect on the environment if it would have "... *the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare or threatened species* ..."

An evaluation of whether an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional and/or local context. Substantial impacts would be those that would substantially diminish or result in the loss of an important biological resource or those that would obviously conflict with federal, State, or local resource conservation plans, goals, or regulations. Impacts are sometimes locally adverse but not significant because, although they would

result in an adverse alteration of existing conditions, they would not substantially diminish or result in the permanent loss of an important resource on a population- or region-wide basis.

CEQA Guidelines Section 15380, *Endangered, Rare or Threatened Species*, states that a Lead Agency can consider a non-listed species to be rare, threatened, or endangered for the purposes of CEQA if the species can be shown to meet the criteria in the definition of rare, threatened, or endangered. For the purposes of this discussion, the current scientific knowledge on the population size and distribution for each special-status species was considered according to the definitions for rare, threatened, and endangered listed in CEQA Guidelines Section 15380.

4.3.5 IMPACTS AND MITIGATION MEASURES

BIO-1: Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Impact Analysis: The Planning Area lies within the coastal hills of southern Orange County. Biologically, the coastal hills bioregion encompasses a range of Upper Sonoran terrestrial habitats from coastal sage scrub to riparian habitat. Pursuant to the special-status species searches presented in Table 4.3-1 and Table 4.3-2, there are 13 special-status plant species and 20 special-status animal species that have been identified within one mile of the Planning Area and are considered candidate, sensitive, or special status under FESA, CESA and/or CNPS/CRPR designation. A CNDDB search revealed no sensitive natural communities within the nine-quad search area (refer to Appendix C).

The proposed Project is a planning-level document, and, as such, there are no specific projects identified, except for the assumption that the Chet Holifield Federal Building (CHFB) will be demolished as part of a future redevelopment effort. A separate analysis has been provided below for demolition of the CHFB site.

While most new development in the City would occur in areas that have been previously developed, subsequent development with buildout consistent with the General Plan Update Land Use Element could result in new development and intensification of existing development within areas with the potential for candidate, sensitive, or special status species. As shown in Table 2-17, *General Plan Update Growth Assumptions Compared to Existing Conditions* and Figure 2-7, *General Plan Update Community Profile and Sub-Profile Areas*, buildout consistent with the General Plan Update Land Use Element would primarily accommodate new residential and non-residential development generally within the Laguna Niguel Gateway Specific Plan (Gateway Specific Plan) (Community Profile Area 4, located in the northeast portion of the City), the Marketplace at Laguna Niguel and CHFB site (Community Profile Area 1, located in the northwest portion of the City), and the Town Center (Community Profile Area 14, located in the central portion of the City). These areas are generally developed with urban uses and do not typically support candidate, sensitive, or special status species. As shown on Figure 4.3-1, these areas are identified as having "Urban" land cover types and their subsequent development are not anticipated to have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species.

In addition to the Gateway Specific Plan and the Opportunity Areas discussed above, the proposed Land Use Element identifies two sites for a Hospitality Overlay with the potential to accommodate future high-quality hotel uses. One of the sites, located at the northwest corner of Golden Lantern and Camino Del Avion is currently developed and is also identified as having "Urban" land cover types (Figure 4.3-1). However, the proposed Hospitality Overlay includes a currently undeveloped and undisturbed site at the northwest corner of Pacific Island Drive and Crown Valley Parkway that could potentially support candidate, sensitive, or special status species. As seen on Figure 4.3-1, the land use cover type for the site is "Coastal Scrub". Subsequent development of the site could have a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special status species. As discussed, subsequent site-specific development projects with buildout consistent with the General Plan Land Use Element, could result in the direct and indirect disturbance of special status plant or animal species or their habitats that are known to occur or have potential to occur within the Planning Area. Potential impacts to special status plant and animal species or their habitat could result in a substantial reduction in local population size, lowered reproductive success, or habitat fragmentation.

Subsequent development projects would be required to adhere to applicable federal and State regulations that provide for sensitive species as part of the discretionary approval process for site-specific development projects. Mitigation Measure BIO-1 requires preparation of a Biological Resources Assessment for subsequent projects based on the screening criteria provided in the City's CEQA Manual. If sensitive species, or the potential for sensitive species, or habitats are identified, the Biological Resources Assessment would document the extent of the impacts and identify project-specific mitigation measures to reduce the impacts. The required mitigation measures would be dependent upon the species impacted and the extent of the impact. Project-specific mitigation measures could include, but are not limited to, adjusting the construction footprint to avoid sensitive habitat, implementing best practices during construction, repairing, or restoring impacted habitat, controlling invasive species, and long-term monitoring programs. Additionally, subsequent development and redevelopment activities, including on currently developed sites, may involve the removal of buildings or trees with the potential for nesting birds. Mitigation Measure BIO-2 requires that if vegetation, tree removal, and/or building demolition would occur during the bird nesting season, a pre-construction nesting bird survey be conducted and if active nests are observed within the project site or buffer area, the biologist would map the location and document the species, status of the nest, and surrounding conditions; prepare a Nesting Bird Plan to determine avoidance or minimization measures; and be present to delineate the boundaries of the buffer area and monitor the active nest.

As described in Section 2.0, *Project Description*, and shown in Figure 2-3, *Existing General Plan Land Use Map*, and Figure 2-5, *General Plan Update Land Use Map*, although the General Plan Update Land Use Element redesignates a portion of currently designated Open Space (OS) to Parks and Recreation (PR), the General Plan Update Land Use Element would not convert any open space lands to urban uses, since the PR designation is intended to provide for active recreational uses. The proposed redesignation would reflect existing conditions, that is the redesignation is proposed to sites that are currently developed with active recreational uses, and would not impact candidate, sensitive or special status species. The General Plan Update Land Use Element would continue to retain the OS land use designation, which is intended to preserve natural and conservation areas, undeveloped hillsides and canyons, landscaped slopes,

buffers, and trails. Compliance with federal and State regulations and compliance with Mitigation Measures BIO-1 and BIO-2 would minimize potential adverse impacts to sensitive species. Therefore, impacts would be less than significant in this regard.

The proposed Resource Management Element includes policies that would further minimize potential impacts associated with biological resources within the Planning Area. Proposed Policy RM-3.2 promotes habitat conservation with priority given to rare and endangered species in accordance with state and federal resource agency requirements. Policy RM-3.4 would involve implementation of strategies and programs that protect and preserve biological resources.

Chet Holifield Federal Building Demolition

As noted above, the proposed Project assumes that the CHFB site will be demolished as part of a future redevelopment effort. Demolition of the site would involve removal of existing buildings and pavement and could include the removal of existing landscaping and trees. This assessment is specific to the demolition of the site and does not include subsequent construction activities that may occur with buildout of the General Plan Update Land Use Element, which is included within the overall General Plan Update analysis, discussed above.

The CHFB site has been previously developed and consists entirely of hardscape and limited ornamental plantings. Demolition activities would therefore not be required to prepare a Biological Resources Assessment, consistent with Mitigation Measure BIO-1. However, the removal of trees and buildings could potentially impact nesting birds. If building and tree removal occurs during bird nesting season (February 1 to August 31), the applicant would be required to comply with Mitigation Measure BIO-2. The project applicant would be required to retain a qualified biologist to conduct a nesting bird survey no more than three days prior to the commencement of construction activities, and if active nests are observed within the CHFB site or buffer area, the biologist would map the location and document the species, status of the nest, and surrounding conditions; prepare a Nesting Bird Plan to determine avoidance or minimization measures; and be present to delineate the boundaries of the buffer area and monitor the active nest. Compliance with federal and State regulations and compliance with Mitigation Measure BIO-2 would minimize potential adverse impacts to nesting birds associated with demolition of the CHFB site. Therefore, impacts would be less than significant in this regard.

Mitigation Measures:

BIO-1: As part of the development review process for qualifying projects, and/or prior to the issuance of grading permits, whichever occurs first, the Laguna Niguel Community Development Department shall determine if a Biological Resources Assessment is required, based on the screening criteria provided in the City of Laguna Niguel CEQA Manual. A project site that has been previously developed and consists entirely of hardscape and limited ornamental planting shall be exempt from preparing an assessment. A project site with areas of vegetation (ornamental or native) and/or bare ground, but void of jurisdictional drainage features, sensitive or listed habitats and without any potential for sensitive of listed species may rely on a biological summary memo prepared by a qualified biologist. The memo shall document baseline conditions and provide justification for a determination of less than

significant biological impacts. The summary memo is subject to the review and approval by the Laguna Niguel Community Development Department.

If preparation of a Biological Resources Assessment is determined by the Community Development Department to be required, applicants of qualifying development projects shall provide a Biological Resources Assessment prepared by a qualified biologist for review and approval by the Community Development Department. The Biological Resources Assessment shall include:

- Biological field survey(s) of the project site that characterize the occurrence, extent, and quality of habitat and/or species that would be impacted by development.
- Focused survey(s) for special status species, following protocols established by State and federal Wildlife Agencies and conducted by a biologist with corresponding permits authorizing protocol surveys.
- A determination if any jurisdictional drainage features are present, and if so, a jurisdictional delineation shall be conducted to determine the presence of Waters of the United States and Waters of the State.
- If the project requires a fuel modification plan, the applicant shall have a preliminary fuel modification plan approved by Orange County Fire Authority prior to the preparation of the Biological Resources Assessment.

Based on the results of the Biological Resources Assessment, if no sensitive habitat or species are observed during the field survey, and there is no potential for species identified as candidate, sensitive or special status to occur, then no further mitigation will be required.

If sensitive species, or the potential for sensitive species, or habitats are identified on the project site, the Biological Resources Assessment shall document the extent of the impacts and identify project-specific mitigation measures to reduce the potential impacts. Identification of the required mitigation measures would be dependent upon the species impacted and the extent of the impact. Documentation of the project-specific mitigation measures shall be provided to the Community Development Department.

The biological resources assessment shall document the mitigation measures identified to reduce the project-specific impact and be provided to the Community Development Department for review and approval.

Biological mitigation shall not occur within any required fuel modification zone.

BIO-2 If vegetation, tree removal, and/or building demolition is proposed at a project site during bird nesting season (February 1 to August 31), the applicant shall retain a qualified biologist to conduct a pre-construction nesting bird survey of the project site and a 500-foot buffer no more than three days prior to the commencement of construction activities, building demolition and/or vegetation clearing.

If no active bird nests are observed within the project site or buffer area during the pre-construction clearance survey, the biologist shall document the findings in a brief letter

report, submitted to the Laguna Niguel Community Development Department prior to construction, building demolition, and/or vegetation clearing.

If an active bird nest is observed within the project site or buffer area during the pre-construction clearance survey, the biologist shall:

- Map the location and document the species, the status of the nest (e.g., incubation of eggs, feeding of young, near fledging), and surrounding conditions.
- Prepare a Nesting Bird Plan to determine avoidance or minimization measures that shall be undertaken to avoid potential project-related impacts, as well as agency notification requirements and submitted to the Community Development Department for review and approval. Measures may include establishment of an avoidance buffer until nesting has been completed and periodic nest monitoring by the biologist. The width of the avoidance buffer around each nest shall be determined by the biologist based on the species present, surrounding habitat, and type of construction activities proposed in the area. No construction or ground disturbance activities shall occur within the buffer area until the biologist has determined the nest is no longer active.
- A biological monitor shall be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure the nesting behavior is not adversely affected by construction activity occurring outside of the established buffer area, pursuant to the Migratory Bird Treaty Act (MBTA).

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

Proposed General Plan Update Goals and Policies:

RESOURCE MANAGEMENT ELEMENT

Policy RM-3.2: **Habitat Conservation.** Support efforts to identify and conserve suitable habitats, with priority given to those for rare and endangered species in Laguna Niguel, in accordance with state and federal resource agency requirements.

Policy RM-3.3: **Invasive Species.** Encourage landscape planting that excludes known invasive plant species.

Policy RM-3.4: **Local Coordination.** Collaborate with local and regional public and private organizations to implement strategies and programs that protect and preserve biological resources in Laguna Niguel.

Policy RM-3.5: **Ecosystem Enhancement.** Encourage landscaping that minimizes the need for herbicides and pesticides and that provides food, water, shelter, and nesting sites for birds, butterflies, beneficial insects, and other creatures that support the larger ecosystem.

Policy RM-3.6: **Biological Resources Awareness.** Collaborate with agencies, non-profit organizations, and other community groups to promote awareness about steps residents can take to help preserve and enhance biological resources in the area.

Policy RM-3.7: Botanical Preserve. Support the Laguna Niguel Botanical Preserve in its efforts to educate and promote the use of native and nectar-producing plant species in landscapes.

BIO-2: Would the project 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 US Fish and Wildlife Service?

Impact Analysis: The CDFW considers sensitive natural communities to have significant biotic value, with species of plants and animals unique to each community. The CNDDB search found no sensitive natural communities within the nine-quad search area. According to the CWHR System, there are eight cover types (wildlife habitat classification) in the Planning Area out of 59 found throughout the State; refer to Figure 4.3-1. The Planning Area is largely developed with a dominating Urban land cover type, reducing its hospitability to many natural communities that typically exist in southern California. The second largest cover type is Coastal Scrub (12 percent), followed by Annual Grassland (nine percent). The remainder of the Planning Area (three percent) is made up of Mixed Chaparral, Eucalyptus, Lacustrine, Valley Foothill Riparian, and Barren.

The General Plan Update Land Use Element does not include any site-specific development proposals, except for the assumption that the CHFB site will be demolished as part of a future redevelopment effort; therefore, adoption of the General Plan Update would not directly impact 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 US Fish and Wildlife Service.

As previously discussed, subsequent development with buildout of the General Plan Update Land Use Element could result in new development and intensification of existing development within the Planning Area. In particular, the majority of the potential growth opportunities are located within specific areas of the City, including the Gateway Specific Plan, the Opportunity Areas, and the Hospitality Overlay sites. With the exception of one of the Hospitality Overlay sites discussed below, these areas, including the CHFB site, are developed and identified as “Urban” land cover types. The CNDDB search found no sensitive natural communities within the nine-quad search area and none of the sites contain riparian habitat. In general, buildout consistent with the General Plan Update Land Use Element would result in new development in and around existing urbanized areas and would not occur within areas of potential riparian habitat. Therefore, subsequent development, including demolition of the CHFB site, consistent with buildout of the Land Use Element would not have a substantial adverse effect on any riparian habitat or other sensitive natural community.

The proposed Hospitality Overlay includes a currently undeveloped and undisturbed site at Pacific Island Drive and Crown Valley Parkway. As seen on Figure 4.3-1, the land use cover type for the site is “Coastal Scrub”. The CNDDB search found no sensitive natural communities within the nine-quad search area and the National Wetlands Inventory does not identify the site as having riparian habitat. However, due to the undisturbed characteristics of the site, subsequent development of the site would be required to comply with Mitigation Measure BIO-1.

Mitigation Measure BIO-1 would require preparation of a Biological Resources Assessment on sites within the Planning Area having the potential to contain biological resources, as determined by the Laguna Niguel

Community Development, which would include the identification of any riparian habitat and determination if any drainages are present, and if so, preparation of a jurisdictional delineation would be required. The jurisdictional delineation would define the extent of local, State, and federal jurisdiction. Pursuant to California Fish and Game Code 1600 et seq., and CWA Sections 401 and 404, the assessment is required to map and identify any wetland/or riparian/riverine resources present, evaluate the plant species composition, provide a soils analysis (where appropriate), and include avoidance and mitigation measures to reduce impacts to these resources. Subsequent development that may alter any water course or wetland, located either on-site or within any off-site improvement areas, would be required to obtain applicable permits from the appropriate resource agencies. Implementation of Mitigation Measure BIO-1 and compliance with federal, State, and local regulations would reduce potential adverse impacts to riparian habitat or other sensitive natural communities. Therefore, impacts would be less than significant in this regard.

The proposed Resource Management Element includes policies that would further minimize potential impacts associated with biological resources within the Planning Area. Proposed Policy RM-3.2 promotes habitat conservation with priority given to rare and endangered species in accordance with state and federal resource agency requirements. Policy RM-3.4 would involve implementation of strategies and programs that protect and preserve biological resources.

Mitigation Measures: Refer to Mitigation Measure BIO-1.

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

Proposed General Plan Update Goals and Policies:

RESOURCE MANAGEMENT ELEMENT

Policy RM-3.2: **Habitat Conservation.** Support efforts to identify and conserve suitable habitats, with priority given to those for rare and endangered species in Laguna Niguel, in accordance with state and federal resource agency requirements.

Policy RM-3.4: **Local Coordination.** Collaborate with local and regional public and private organizations to implement strategies and programs that protect and preserve biological resources in Laguna Niguel.

Policy RM-3.6: **Biological Resources Awareness.** Collaborate with agencies, non-profit organizations, and other community groups to promote awareness about steps residents can take to help preserve and enhance biological resources in the area.

Policy RM-3.7: **Botanical Preserve.** Support the Laguna Niguel Botanical Preserve in its efforts to educate and promote the use of native and nectar-producing plant species in landscapes.

BIO-3: Would the project 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?

Impact Analysis: According to the City's Interactive Wetlands Map, the Planning Area has 13 established wetland sites throughout the Aliso Creek watershed within City maintained areas, consisting primarily of freshwater marsh and riparian areas.[3] The possibility exists that additional wetlands or jurisdictional waters are located within the Planning Area but not shown on the City's Interactive Wetlands Map. The Aliso Creek watershed, including Sulphur Creek, were highly degraded in the recent past, leading to the need to establish these constructed wetland sites. The wetlands range in size from one to 16 acres and were designed in order to reestablish historic habitat functions and values associated with riparian and freshwater marsh systems and to improve water quality functions within the City. The wetlands and surrounding buffer areas support habitat for several federally listed species, including the southwestern willow flycatcher (*Empidonax traillii*), least Bell's vireo (*Vireo bellii pusillus*), and coastal California gnatcatcher (*Polioptila californica californica*). The City manages these created wetlands with the following goals: (1) Provide public safety through implementation of flood control and vector control; (2) Maintain the integrity of the restored ecosystems; and (3) Manage for long-term stability, health, and sustainability of the Aliso Creek watershed.

The 13 known and/or mapped wetland sites are within designated open space areas, surrounded by urban uses (residential and commercial developments), undeveloped open space, schools, pedestrian and bicycle trails, and parks. The General Plan Update Land Use Element does not propose direct physical modifications to the existing known and/or mapped wetlands or changes to the existing OS designation. As described in Section 2.0, *Project Description*, and shown in Figure 2-3, *Existing General Plan Land Use Map*, and Figure 2-5, *General Plan Update Land Use Map*, although the General Plan Update Land Use Element redesignates a portion of currently designated OS to PR, the General Plan Update Land Use Element would not convert any open space lands to urban uses, since the PR designation is intended to provide for active recreational uses and the sites are currently developed with active recreational uses. Furthermore, the General Plan Update Land Use Element does not include any site-specific development proposals, except for the assumption that the CHFB site will be demolished as part of a future redevelopment effort. Therefore, adoption of the General Plan Update would not directly impact unidentified State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.).

As previously discussed, subsequent development with buildout of the General Plan Update Land Use Element could result in new development and intensification of existing development within the Planning Area. In particular, the majority of the potential growth opportunities are located within specific areas of the City, including the Gateway Specific Plan, the Opportunity Areas, and the Hospitality Overlay sites. With the exception of one of the Hospitality Overlay sites discussed below, these areas, including the CHFB site, are developed and identified as "Urban" land cover types. The Gateway Specific Plan and Opportunity Areas do not contain State or federally protected wetlands. In general, buildout consistent

[3] City of Laguna Niguel, n.d. *Wetlands*. Available at: https://www.cityoflagunaniguel.org/1211/Wetlands. Accessed March 2025.

with the General Plan Update Land Use Element would result in new development in and around existing urbanized areas and would not occur within State or federally protected wetlands. Therefore, subsequent development, including demolition of the CHFB site, consistent with buildout of the Land Use Element would not have a substantial adverse effect on State or federally protected wetlands through direct removal, filling, hydrological interruption, or other means.

The proposed Hospitality Overlay includes a currently undeveloped and undisturbed site at Pacific Island Drive and Crown Valley Parkway. The National Wetlands Inventory does not identify the site as having wetlands. However, due to the undisturbed characteristics of the site, subsequent development of the site would be required to comply with Mitigation Measure BIO-1. Mitigation Measure BIO-1 would require preparation of a Biological Resources Assessment on sites within the Planning Area having the potential to contain biological resources, which would include the identification of any riparian habitat and determination if any drainages are present, and if so, preparation of a jurisdictional delineation would be required. The jurisdictional delineation would define the extent of local, State, and federal jurisdiction. Pursuant to California Fish and Game Code 1600 et seq., and CWA Sections 401 and 404, the assessment is required to map and identify any wetland/or riparian/riverine resources present, evaluate the plant species composition, provide a soils analysis (where appropriate), and include avoidance and mitigation measures to reduce impacts to these resources. Subsequent development that may alter any water course or wetland, located either on-site or within any off-site improvement areas, would be required to obtain applicable permits from the appropriate resource agencies.

Subsequent development consistent with the General Plan Land Use Element would require site-specific review to determine the presence or absence of water features. Section 404 of the CWA requires any project that involves disturbance to a wetland or Waters of the U.S. to obtain a permit that authorizes the disturbance. If a wetland or jurisdictional waters are determined to be present, then permits must be obtained from the RWQCB and/or USACE to authorize a disturbance to the wetland. Although it is not anticipated that subsequent projects would disturb protected wetlands and/or jurisdictional waters, the regulatory process that is established through Section 404 of the CWA would ensure that there is “no net loss” of wetlands or jurisdictional waters. If, through the design process, it is determined that a subsequent development project cannot avoid wetlands, perennial, and intermittent drainages, then the USACE would require that there be an equal amount of wetland created elsewhere to mitigate any loss of wetland. Compliance with Mitigation Measures BIO-1, as well as federal, State, and local regulations would minimize potential adverse impacts to State or federally protected wetlands. Therefore, impacts would be less than significant with mitigation incorporated in this regard.

Additionally, the General Plan Update includes policies to preserve and protect water features within the Planning Area. Proposed Resource Management Element Policy RM-1.1 directs the City to preserve open space lands for recreation, habitat protection and enhancement, resource conservation, flood hazard management, public safety, aesthetic visual appeal, and overall community benefit. Policy RM-1.6 directs the City to collaborate with neighboring jurisdictions on the conservation management of appropriate portions, including wetland areas, of Aliso Creek, Salt Creek, and Sulphur Creek as a sustainable natural habitat. Policy RM-1.10 promotes public awareness about the importance of conserving open spaces like the Aliso Creek Greenbelt, Aliso and Wood Canyons Regional Park, and the Salt Creek Corridor. Policy RM-3.2 directs the City to support efforts to identify and conserve suitable habitats, with priority given to

those for rare and endangered species in Laguna Niguel, in accordance with state and federal resource agency requirements.

Mitigation Measures: Refer to Mitigation Measure BIO-1.

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

Proposed General Plan Update Goals and Policies:

RESOURCE MANAGEMENT ELEMENT

Policy RM-1.1: **Open Space Preservation.** Preserve open space lands for recreation, habitat protection and enhancement, resource conservation, flood hazard management, public safety, aesthetic visual appeal, and overall community benefit.

Policy RM-1.3: **New Development.** Encourage new development projects, where appropriate, to preserve open space through deed restrictions and private long-term management.

Policy RM-1.6: **Creek Conservation.** Collaborate with neighboring jurisdictions on the conservation management of appropriate portions, including wetland areas, of Aliso Creek, Salt Creek, and Sulphur Creek as a sustainable natural habitat.

Policy RM-1.10: **Open Space Education.** Promote public awareness about the importance of conserving open spaces like the Aliso Creek Greenbelt, Aliso and Wood Canyons Regional Park, and the Salt Creek Corridor.

Policy RM-3.2: **Habitat Conservation.** Support efforts to identify and conserve suitable habitats, with priority given to those for rare and endangered species in Laguna Niguel, in accordance with state and federal resource agency requirements.

Policy RM-3.4: **Local Coordination.** Collaborate with local and regional public and private organizations to implement strategies and programs that protect and preserve biological resources in Laguna Niguel.

Policy RM-3.6: **Biological Resources Awareness.** Collaborate with agencies, non-profit organizations, and other community groups to promote awareness about steps residents can take to help preserve and enhance biological resources in the area.

BIO-4: Would the project 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?

Impact Analysis: Habitat loss, fragmentation, and degradation resulting from land use changes or habitat conversion can alter the use and viability of wildlife movement corridors (i.e., linear habitats that naturally connect and provide passage between two or more otherwise disjunct larger habitats or habitat fragments). Wildlife habitat corridors maintain connectivity for: daily movement, travel, mate-seeking, and migration; plant propagation; genetic interchange; population movement in response to environmental change or natural disaster; and recolonization of habitats subject to local extirpation or

removal. The suitability of habitat as a wildlife movement corridor is related to, among other factors, the habitat corridor's dimensions (length and width), topography, vegetation, exposure to human influence, and the species in question.

The Planning Area lies within the coastal hills of southern Orange County. Biologically, the coastal hills bioregion encompasses a range of Upper Sonoran terrestrial habitats from coastal sage scrub to riparian habitat, that provide ecological value and connectivity. The County-owned regional open space areas located within the Planning Area, including Aliso & Woods Canyon Wilderness Park, Badlands Park, Laguna Niguel Regional Park, Salt Creek Corridor, and Seaview Park, serve as critical links to wilderness areas and may function as wildlife corridors. These interconnected open spaces, particularly the canyons and adjacent habitats, facilitate regional habitat connectivity, supporting the movement of wildlife species across the area.

The General Plan Update Land Use Element does not include any site-specific development, except for the assumption that the CHFB site will be demolished as part of a future redevelopment effort and would continue to maintain existing open space areas intended to preserve and protect natural areas, including potential wildlife movement corridors and habitat linkages; refer to the Hospitality Overlay discussion below. Since the proposed General Plan Update Land Use Element continues to designate these areas as OS, which would not allow for subsequent development, the Project would not directly impact natural areas that serve as wildlife movement corridors and habitat linkages.

In general, buildout consistent with the General Plan Update Land Use Element would result in new development in and around existing urbanized areas and would not occur within wildlife corridors or lands designated OS. In particular, the majority of the potential growth opportunities are located within specific areas of the City, including the Gateway Specific Plan, the Opportunity Areas, and the Hospitality Overlay sites. With the exception of one of the Hospitality Overlay sites discussed below, these areas are developed and surrounded by existing development; they do not provide wildlife movement corridors and habitat linkages. Therefore, demolition of the CHFB site and subsequent development consistent with buildout of the Land Use Element would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.

The proposed Hospitality Overlay includes a currently undeveloped and undisturbed site at Pacific Island Drive and Crown Valley Parkway. Although existing development occurs within the surrounding area, the site is located adjacent to existing and designated OS areas to the north of Pacific Island Drive which may, combined with the larger area, provide a movement corridor for wildlife. Due to the undisturbed nature of the site, any subsequent development would be required to prepare a Biological Resources Assessment in compliance with Mitigation Measure BIO-1 and address the potential for the site to provide habitat for wildlife and to serve as a wildlife corridor pursuant to CEQA. Compliance with Mitigation Measure BIO-1 would ensure the potential for substantial interference 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 associated with subsequent development of the site would be reduced to a less than significant level.

Additionally, the General Plan Update includes policies to preserve and protect potential wildlife movement corridors and habitat linkages within the Planning Area. Proposed Resource Management Element Policy RM-1.1 directs the City to preserve open space lands for recreation, habitat protection and enhancement, resource conservation, flood hazard management, public safety, aesthetic visual appeal, and overall community benefit. Policy RM-1.10 promotes public awareness about the importance of conserving open spaces like the Aliso Creek Greenbelt, Aliso and Wood Canyons Regional Park, and the Salt Creek Corridor. Policy RM-3.2 directs the City to support efforts to identify and conserve suitable habitats, with priority given to those for rare and endangered species in Laguna Niguel, in accordance with state and federal resource agency requirements.

Mitigation Measures: Refer to Mitigation Measure BIO-1.

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

Proposed General Plan Update Goals and Policies:

RESOURCE MANAGEMENT ELEMENT

Policy RM-1.1: **Open Space Preservation.** Preserve open space lands for recreation, habitat protection and enhancement, resource conservation, flood hazard management, public safety, aesthetic visual appeal, and overall community benefit.

Policy RM-1.3: **New Development.** Encourage new development projects, where appropriate, to preserve open space through deed restrictions and private long-term management.

Policy RM-1.10: **Open Space Education.** Promote public awareness about the importance of conserving open spaces like the Aliso Creek Greenbelt, Aliso and Wood Canyons Regional Park, and the Salt Creek Corridor.

Policy RM-3.2: **Habitat Conservation.** Support efforts to identify and conserve suitable habitats, with priority given to those for rare and endangered species in Laguna Niguel, in accordance with state and federal resource agency requirements.

Policy RM-3.4: **Local Coordination.** Collaborate with local and regional public and private organizations to implement strategies and programs that protect and preserve biological resources in Laguna Niguel.

Policy RM-3.6: **Biological Resources Awareness.** Collaborate with agencies, non-profit organizations, and other community groups to promote awareness about steps residents can take to help preserve and enhance biological resources in the area.

BIO-5: Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Impact Analysis: Subsequent development with buildout consistent with the General Plan Update Land Use Element would be subject to all applicable federal, State, and local policies and regulations related to the protection of biological resources, as outlined above. The City does not have a tree preservation policy or ordinance; however, the City of Laguna Niguel Municipal Code Title 11, Division 8, Article 7, *Tree*

Protections, outlines the protection and maintenance guidance for street trees on public property. The City's Public Works Department maintains the street trees and plants on public property. Subsequent development projects would be assessed for consistency with the City's Municipal Code. Therefore, the General Plan Update Land Use Element would not conflict with any local policies or ordinances protecting biological resources, and impacts would be less than significant in this regard.

In addition, the proposed General Plan Resource Management Element includes policies intended to provide additional trees within the City. Proposed Resource Management Element RM-3.1 directs the City to encourage tree planting both on public and private properties to expand and enhance the urban forest.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies:

RESOURCE MANAGEMENT ELEMENT

Policy RM-3.1: Urban Forest. Encourage tree planting both on public and private properties to expand and enhance the urban forest.

4.3.6 CUMULATIVE IMPACTS

Section 3.0, *Basis of Cumulative Analysis*, identifies projected regional growth having the potential to interact with the proposed Project to the extent that a significant cumulative effect may occur. The geographic setting for biological resources would be the Orange County region.

Would the project, combined with other related cumulative projects, have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Impact Analysis: As discussed, the General Plan Update Land Use Element does not include any site-specific development proposals, except for the assumption that the CHFB site will be demolished as part of a future redevelopment effort and would not result in significant direct impacts to existing special status plant or animal species. However, subsequent development with buildout consistent with General Plan Update Land Use Element could result in the direct and indirect disturbance of special status plant or animal species or their habitats that are known to occur, or have the potential to occur, in the Planning Area. Additionally, subsequent development and redevelopment activities, including on currently developed sites, may involve the removal of trees with the potential for nesting birds. Compliance with federal, State, and local regulations, implementation of General Plan Update policies, and compliance with Mitigation Measures BIO-1 and BIO-2 would reduce potential impacts on special status plant or animal species to a less than significant level.

As with the Project, related cumulative projects within the region would also be required to assess the potential to impact special status plant or animal species or their habitats, including nesting birds. Individual projects would be required to comply with federal, State, and local regulations to protect

biological resources, including implementing mitigation measures to reduce potential impacts on a project-by-project basis. Therefore, the General Plan Update's incremental effects associated with any species identified as a candidate, sensitive, or special status species would not be cumulatively considerable.

Mitigation Measures: Refer to Mitigation Measures BIO-1 and BIO-2.

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

Proposed General Plan Update Goals and Policies: Refer to the General Plan policies cited above.

Would the project, combined with other related cumulative projects, a have 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 Wildlife or U.S. Fish and Wildlife Service?

Impact Analysis: As described above, there are no sensitive natural communities within the Planning Area. If subsequent site-specific development projects with buildout consistent with the General Plan Update Land Use Element have the potential to affect riparian habitats, Mitigation Measure BIO-1 would require preparation of a Biological Resources Assessment, which would include the identification of any riparian habitat and determination if any drainages are present, and if so, preparation of a jurisdictional delineation would be required. The jurisdictional delineation would define the extent of local, State, and federal jurisdiction. If the site supports jurisdictional wetlands, the project applicant would be required to initiate the applicable permitting process, which would require avoidance and mitigation measures to reduce impacts to these resources. Implementation of Mitigation Measures BIO-1 and compliance with the applicable federal, State, and local regulations would ensure potential impacts on riparian habitat would remain less than significant.

Similarly, related cumulative projects within the region with the potential to impact riparian habitat or other sensitive natural community would also be required to comply with California Fish and Game Code 1600 et seq. and CWA Sections 401 and 404, including avoidance and mitigation measures to reduce impacts to these resources on a project-by-project basis. Therefore, the General Plan Update's incremental effects related to riparian habitats or other sensitive natural community would not be cumulatively considerable.

Mitigation Measures: Refer to Mitigation Measure BIO-1.

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

Proposed General Plan Update Goals and Policies: Refer to the General Plan policies cited above.

Would the project, combined with other related cumulative projects, 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?

Impact Analysis: Implementation of the proposed General Plan Update Land Use Element would not change or alter the existing 13 known and/or mapped wetland areas within the Planning Area or alter the existing OS land use designation. Although the General Plan Update Land Use Element redesignates a portion of currently designated OS to PR, the General Plan Update Land Use Element would not convert any open space lands to urban uses, since the PR designation is intended to provide for active recreational uses and the sites are currently developed with active recreational uses.

As discussed, the proposed Hospitality Overlay includes a currently undeveloped and undisturbed site at Pacific Island Drive and Crown Valley Parkway. The National Wetlands Inventory does not identify the site as having wetlands. However, due to the undisturbed characteristics of the site, subsequent development of the site would be required to comply with Mitigation Measure BIO-1, which would include identification of any riparian habitat and determination if any drainages are present, and if so, preparation of a jurisdictional delineation. The jurisdictional delineation would define the extent of local, State, and federal jurisdiction. Subsequent development that may alter any water course or wetland, located either on-site or within any off-site improvement areas, would be required to obtain applicable permits from the appropriate resource agencies.

Although it is not anticipated that subsequent projects would disturb protected wetlands and/or jurisdictional waters, the regulatory process that is established through Section 404 of the CWA would ensure that there is “no net loss” of wetlands or jurisdictional waters. If, through the design process, it is determined that a subsequent development project cannot avoid wetlands, perennial, and intermittent drainages, then the USACE would require that there be an equal amount of wetland created elsewhere to mitigate any loss of wetland. Compliance with Mitigation Measures BIO-1, as well as federal, State, and local regulations would minimize potential adverse impacts to State or federally protected wetlands.

Similarly, related cumulative projects within the region with the potential to impact State or federally protected wetlands would be required to comply with the regulatory process to ensure that there is “no net loss” of wetlands or jurisdictional waters and that potential impacts are mitigated. Therefore, the General Plan Update’s incremental effects related to wetlands would not be cumulatively considerable.

Mitigation Measures: Refer to Mitigation Measure BIO-1.

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

Proposed General Plan Update Goals and Policies: Refer to the General Plan policies cited above.

Would the project, combined with other related cumulative projects, 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?

Impact Analysis: The General Plan Update Land Use Element does not include any site-specific development and would continue to maintain existing open space areas intended to preserve and protect natural areas, including potential wildlife movement corridors and habitat linkages. In general, buildout consistent with the General Plan Update Land Use Element would result in new development in and around existing urbanized areas and would not occur within wildlife corridors or lands designated OS.

Subsequent site-specific development of the proposed Hospitality Overlay site at Pacific Island Drive and Crown Valley Parkway would be required to prepare a Biological Resources Assessment in compliance with Mitigation Measure BIO-1 and address the potential for the site to provide habitat for wildlife and to serve as a wildlife corridor pursuant to CEQA. Compliance with Mitigation Measure BIO-1 would ensure the potential impacts to wildlife corridors would be reduced to a less than significant level.

Similarly, if related cumulative development were to occur within the region with the potential to interfere with wildlife corridors, compliance with the existing regulatory requirements and potential implementation of project-specific mitigation measures would be required to reduce potential impacts. The General Plan Update's incremental effects related to wildlife corridors would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies: Refer to the General Plan policies cited above.

Would the project, combined with other related cumulative projects, conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Impact Analysis: The proposed General Plan Update would not conflict with any local policies or ordinances protection biological resources. Subsequent development with buildout consistent with the General Plan Update Land Use Element would be assessed for consistency with local policies and ordinances, including Laguna Niguel Municipal Code Title 11, Division 8, Article 7, *Tree Protections*, which outlines the protection and maintenance guidance for street trees on public property. Thus, the General Plan Update would not conflict with any local policies or ordinances protecting biological resources.

Subsequent development within the Planning Area would not combine with related cumulative development within the region with the potential to conflict with any local policies or ordinances protecting biological resources. Related cumulative development within the region would be required to comply with any agency-specific policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Thus, the General Plan Update's incremental effects associated with

potential conflicts with any local policies or ordinances protecting biological resources would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies: Refer to the General Plan policies cited above.

4.3.7 SIGNIFICANT UNAVOIDABLE IMPACTS

Impacts on biological resources associated with the implementation of the General Plan Update would be less than significant. No significant unavoidable impacts to biological resources would occur as a result of the General Plan Update.

4.3.8 REFERENCES

California Dept. of Fish and Game, 2023. "*Special Animals List." Natural Diversity Database.*

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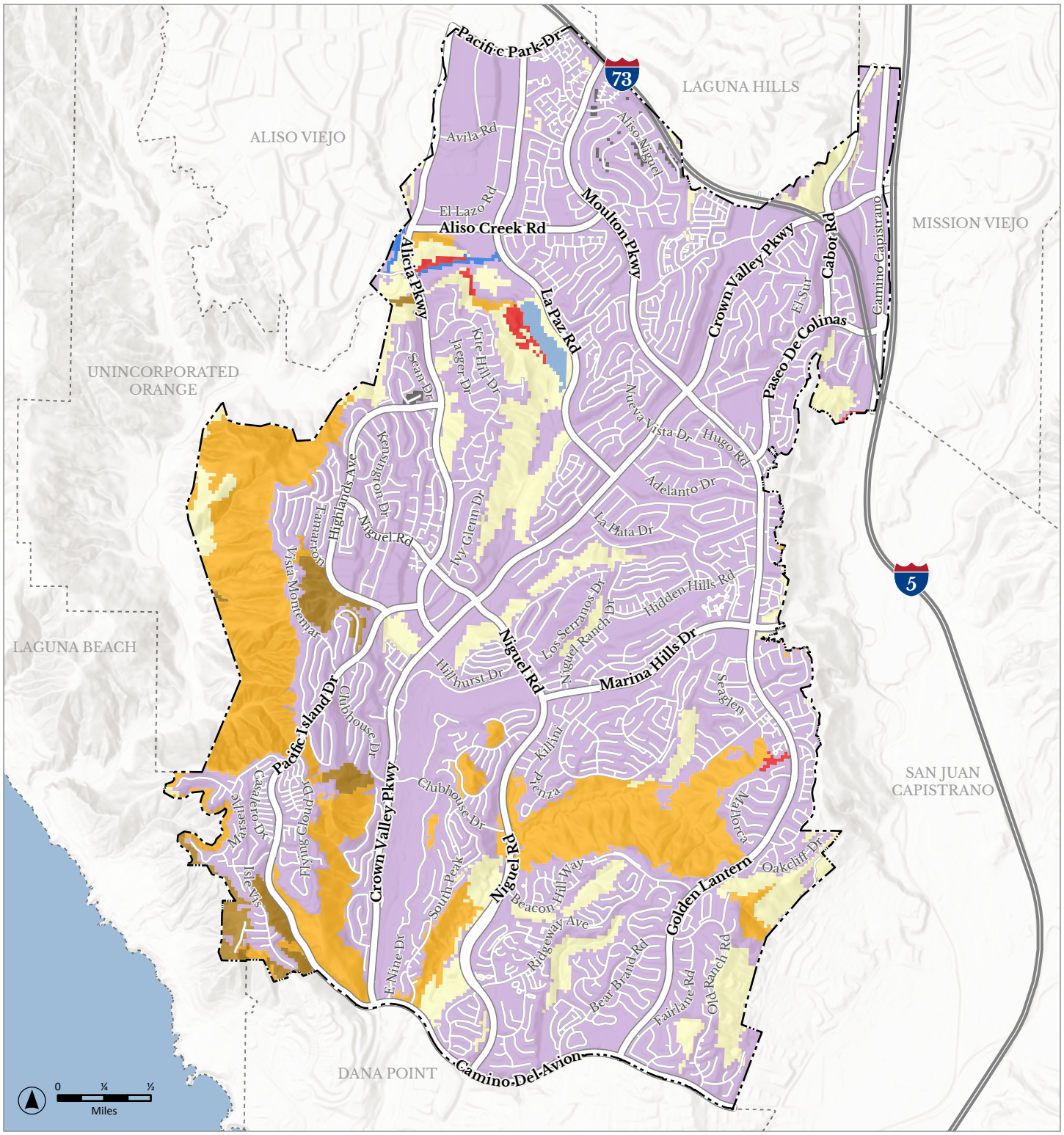
United States Environmental Protection Agency, *Section 404 of the Clean Water Act: How Wetlands are Defined and Identified*, https://www.epa.gov/cwa-404/how-wetlands-are-defined-and-identified-under-cwa-section-404, accessed March 2025.



Data sources: CALFIRE/FRAP 2015; City of Laguna Niguel; Orange County GIS.

Prepared for the City of Laguna Niguel by De Novo Planning Group
March 14, 2025.

LEGEND

- Laguna Niguel City Boundary
- Other Jurisdictions
- Annual Grassland
- Coastal Scrub
- Mixed Chaparral
- Eucalyptus
- Lacustrine
- Valley Foothill Riparian
- Urban
- Barren

Figure 4.3-1.
Land Cover Types

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4.4 CULTURAL RESOURCES

4.4.1 PURPOSE

This section identifies existing cultural (including historic and archeological resources) resources within the Planning Area and provides an analysis of potential impacts associated with implementation of the General Plan Update.

This section is primarily based upon the *Cultural and Paleontological Resources Assessment for the Laguna Niguel General Plan Update Project* (Cultural Resources Study), prepared by Cogstone Resource Management, and revised August 2025; refer to Appendix D, *Cultural and Paleontological Resources Study*. For impacts specific to tribal cultural resources, refer to Section 4.15, *Tribal Cultural Resources*.

4.4.2 ENVIRONMENTAL SETTING

The Planning Area is located in the San Joaquin Hills in the southeastern corner of Orange County. The Planning Area is approximately 14.7 square miles in land area and surrounded by several local jurisdictions including the City of Dana Point to the south; the City of San Juan Capistrano to the east; the County of Orange (Aliso and Woods Canyon Regional Park) and the City of Laguna Beach to the west; and the cities of Aliso Viejo, Laguna Hills, and Mission Viejo to the north. The Planning Area and surrounding area are located within the traditional territory of the Gabrielino-Tongva, Juaneño, Luiseño, Cupeño, and Cahuilla peoples.

PREHISTORIC CONTEXT

Approaches to prehistoric frameworks have changed over the years from being based on material attributes to radiocarbon chronologies to association with cultural traditions. Archaeologists defined a material complex consisting of an abundance of milling stones (for grinding food items) with few projectile points or vertebrate faunal remains dating from about 7,000 to 3,000 years before the present as the "Millingstone Horizon." Later, the "Millingstone Horizon" was redefined as a cultural tradition named the Encinitas Tradition with various regional expressions including Topanga and La Jolla. Use by archaeologists varied as some adopted a generalized Encinitas Tradition without regional variations, some continued to use "Millingstone Horizon," and some used Middle Holocene (the time period) to indicate this observed pattern.

Recently, the fact that generalized terminology is suppressing the identification of cultural, spatial, and temporal variation and the movement of peoples throughout space and time was noted. These factors are critical to understanding adaptation and change.

The latest cultural revisions for the Planning Area define traits for time phases of the Greven Knoll pattern of the Encinitas Tradition applicable to the Pasadena area. This pattern is replaced in the Planning Area by the Angeles pattern of the Del Rey Tradition later in time. Each pattern has subdivisions as identified by specific changes in cultural assemblages through time. Phases are identified by their archaeological signatures in components within sites.

Greven Knoll sites tend to be in valleys similar to areas like Laguna Niguel. These inland peoples did not switch from manos/metates to pestles/mortars like coastal peoples (c. 5,000 years before present); this may reflect their closer relationship with desert groups who did not exploit acorns. The Greven Knoll toolkit is dominated by manos and metates throughout its extent.

The Angeles pattern generally is restricted to the mainland and appears to have been less technologically conservative and more ecologically diverse, with a largely terrestrial focus and greater emphases on hunting and nearshore fishing. See Table 4.4-1, *Culture Chronology*, for more detail of both the Greven Knoll and Angeles patterns.

Table 4.4-1
Culture Chronology

Phase	Dates Before Present	Material Traits	Other Traits
Encinitas Pattern			
Greven Knoll I	8,500 to 4,000	Abundant manos and metates, Pinto dart points for atlatls or spears, charmstones, cogged stones and discoidals rare, no mortars or pestles, general absence of shell artifacts.	No shellfish, hunting important, flexed inhumations, cremations rare.
Greven Knoll II	4,000 to 3,500	Abundant manos and metates, Elko dart points for atlatls or spears, core tools, late discoidals, few mortars and pestles, general absence of shell artifacts.	No shellfish, hunting and gathering important, flexed inhumations, cremations rare.
Angeles Pattern			
Angeles I	3,500 to 2,600	Appearance of Elko dart points and an increase in the overall number of projectile points from Encinitas components; beginning of large-scale trade in small steatite artifacts (effigies, pipes, and beads) and Olivella shell beads from the southern Channel Islands; appearance of single-piece shell fishhooks and bone harpoon points; Coso obsidian becomes important; appearance of donut stones.	Appearance of a new biological population (Takic proto-Gab/Cupan language), apparent population increase; fewer and larger sites along the coast; collector strategy; less overall dependence on shellfish but fishing and terrestrial hunting more important; appearance of flexed and extended inhumations without cairns, cremations uncommon.

Table 4.4-1 (continued)
Culture Chronology

Phase	Dates Before Present	Material Traits	Other Traits
Angeles Pattern (continued)			
Angeles II	2,600 to 1,600	Continuation of basic Angeles I material culture with the addition of mortuary features containing broken tools and fragmented cremated human bone; fishhooks become more common.	Continuation of basic Angeles I settlement and subsistence systems; appearance of a new funerary complex.
Angeles III	1,600 to 1,250	Appearance of bow and arrow technology (e.g., Marymount or Rose Spring points); changes in Olivella beads; asphaltum becomes important; reduction in obsidian use; Obsidian Butte obsidian largely replaces Coso.	Larger seasonal villages; flexed primary inhumations but no extended inhumations and an increase in cremations; appearance of obsidian grave goods; possible expansion into eastern Santa Monica Mountains, replacing Topanga III groups.
Angeles IV	1,250 to 800	Cottonwood points appear; some imported pottery appears; birdstone effigies at the beginning of the phase and "spike" effigies dropped by the end of the phase; possible appearance of ceramic pipes.	Change in settlement pattern to fewer but larger permanent villages; flexed primary inhumations continue, cremations uncommon; expansion into the San Gabriel Mountains, displacing Greven Knoll III groups.
Angeles V	800 to 450	Trade of steatite artifacts from the southern Channel Islands becomes more intensive and extensive, with the addition or increase in more and larger artifacts, such as vessels and comals; larger and more elaborate effigies.	Strengthening of ties, especially trade, with southern Channel Islands; expansion into the northern Santa Ana Mountains and San Joaquin Hills; development of mainland dialects of Gabrielino.
Angeles VI	450 to 150	Addition of Euroamerican material culture (e.g., glass beads and metal tools), locally made pottery, metal needle-drilled Olivella beads.	Change of settlement pattern, movement close to missions and ranches; use of domesticated species obtained from Euroamericans; flexed primary inhumations continue, cremations uncommon to the north (nearer the Chumash) but somewhat more common to the south (nearer the Luiseño); apparent adoption of Chingichngish religion.

Source: Cogstone Resource Management, revised August 2025. *Cultural and Paleontological Resources Assessment for the Laguna Niguel General Plan Update Project, City of Laguna Niguel, Orange County, California.*

The ethnographic mainland Gabrielino subsistence system was based primarily on terrestrial hunting and gathering, although nearshore fish and shellfish played important roles. Sea mammals, especially whales (likely from beached carcasses), were prized. In addition, a number of European plant and animal domesticates were obtained and exploited. Ethnographically, the mainland Gabrielino practiced interment and some cremation.

ETHNOGRAPHIC OVERVIEW

Juaneño Acjachemen

About 1,300 years ago the Acjachemen (Juaneño), who were hunters and gatherers of the San Luis Rey Cultural Pattern, moved into southern Orange County. The Acjachemen speak a language that is part of the Takic language family. Their traditional tribal territory was situated partly in northern San Diego County and partly in southern Orange County. The boundaries were Las Pulgas Creek (south), Aliso Creek (north), the Pacific Ocean (west), and the Santa Ana Mountains (east). Villages were mostly along San Juan Creek, Trabuco Creek, and San Mateo Creek.

In prehistory, the Acjachemen had a patrilineal society and lived in groups with other relatives. These groups had established claims to places including the sites of their villages and resource areas. Marriages were usually arranged from outside villages establishing a social network of related peoples in the region. There was a well-developed political system including a hereditary chief. Religion was an important aspect of their society. Religious ceremonies included rites of passage at puberty and mourning rituals.

Houses were typically conical in shape and thatched with locally available plant materials. Work areas were often shaded by rectangular brush-covered roofs (ramada). Each village had a ceremonial structure in the center enclosed by a circular fence where all religious activities were performed.

Women are known to have been the primary gatherers of plant foods but also gathered shellfish and trapped small game animals. Men hunted large game, most small game, fished, and assisted with plant food gathering, especially of acorns. Adults were actively involved in making tools including nets, arrows, bows, traps, food preparation items, pottery, and ornaments. Tribal elders had important political and religious responsibilities and were involved in the education of younger members.

HISTORIC SETTING

Spanish Period (1769-1820)

The earliest exploration of Orange County by Europeans was the land expedition of Gaspar de Portola. He set out from Mission San Diego to find a land route to the Bay of Monterey. His expedition passed through Orange County in northward (1769) and southward (1770) bound directions. He named Trabuco Creek, Santiago Creek, and other geographic features he encountered.

Mexican Period (1821-1847)

Mexico gained independence from Spain in 1821, and the new liberal politics of the Mexican Constitution of 1824 were embraced by the emerging generation of Californios and Californias (persons of Mexican heritage born in California). Most of these young people's parents were soldiers from Sonora and Sinaloa

who had risen to positions of authority within the military. The opportunities for upward mobility for themselves and their families were significant.

In 1846, the Mexican-American war erupted following the Bear Flag Revolt in California. Both the 1848 Treaty of Guadalupe Hidalgo in which Mexico ceded California to the United States and the unprecedented events of the Gold Rush that same year destabilized California, producing rapid, dramatic change.

American Period (1848-Present)

The Mexican-American war followed on the heels of the Bear Flag Revolt of June 1846. General Andrés Pico and John C. Frémont signed the Articles of Capitulation in December 1847, and with the signing of the Treaty of Guadalupe Hidalgo in February 1848, hostilities ended and Mexico relinquished California to the United States. Under the treaty, Mexico ceded the lands of present-day California, New Mexico, and Texas to the U.S. for $15 million. Within two years following the treaty, California applied for admission as a state.

Laguna Niguel History

Juan Avila received the 13,316-acre Laguna Niguel land grant in 1842 and re-established the title in 1848 after California become part of the United States. He remained the owner of Rancho Niguel until 1865. By 1884, Chicago-born Lewis Moulton rented Rancho Niguel from then owner Cyrus B. Rawson to rear sheep and cattle. In 1895, Moulton and his business partner, French Basque born Jean Pierre Daguerre, purchased the rancho and established the Moulton-Daguerre Ranch. Following the death of Daguerre in 1911 and Moulton in 1938, the surviving Moulton family maintained the ranch until 1950. The land was then divided amongst the Moulton and Daguerre families.

In 1954, the Daguerre daughters sold their massive 7,000+ acre parcel to Eugene Shumaker. Four years later, in 1958, Schumaker sold the land to the development company Cabot, Cabot, and Forbes. The company immediately formed the Laguna Niguel Corporation in 1959 with the intent of using the land to create a master planned community. A large team of architects, engineers, artists, and landscapers were assembled to undertake the monumental planning task. Essential utility development began in 1959 with continuous community expansion up through the 1980s.

In 1962, the Laguna Niguel Corporation officially opened the residential communities of Monarch Bay and Niguel Terrace which comprised 565 homes. Two years later, the residential population had grown to 1,000 and by 1966 the Laguna Niguel Homeowner's Association was formed. In 1986, a community services district was formed following a residential vote. In November of 1988, voters overwhelmingly supported incorporation which became official on December 1, 1989, making Laguna Niguel the 29th city in Orange County.

By 1990, the local population had grown to 45,000 which spurred future development of neighborhood parks and additional public facilities. In 2011, a new City Hall was opened.

CULTURAL RESOURCES

A search of the California Historic Resources Inventory System (CHRIS) at the South Central Coastal Information Center (SCCIC) located at California State University, Fullerton was conducted on August 14, 2023. The records search covered the entire Planning Area. Approximately 36 cultural resources have been recorded within Laguna Niguel. Of these, 27 are prehistoric archaeological sites, four are prehistoric archaeology isolates, and five are historic-aged built environment resources. The prehistoric archaeology resources range from habitation sites, lithic scatters, middens, and bedrock milling sites. None of the archaeology sites have been evaluated for National Register of Historic Places (NRHP)/California Register of Historical Resources (CRHR) listing. Of the five historic-aged built environment resources previously recorded within the Planning Area, four of the resources have been evaluated for NRHP eligibility.

P-30-176950 was originally recorded in 2009 by Roderic McClean as a historic cylindrical steel water storage tank known as Pacific Island Reservoir No. 2. The tank was built in 1963 with a capacity of one million gallons which services the City of Laguna Niguel. The tank was recommended ineligible for listing on the NRHP. In 2014, the tank was revisited by K. A. Crawford and the associated water system was recorded as part of the site. The concrete foundation, steel exterior, metal ladders, piping system and ancillary equipment building were all added to the site record. The tank was again recommended to be ineligible for listing on the NRHP.

P-30-177041 was recorded in 2010 by K. A. Crawford as a historic cylindrical steel water storage tank reservoir of recycled water. The water tank is in a complex of three total water storage tanks with associated equipment buildings. The tank was recommended to be ineligible for listing on the NRHP.

P-30-177064 was recorded in 2011 by Roderic McClean as a historic cylindrical steel water storage tank reservoir of potable water. The tank was built in 1964 and services the City of Laguna Niguel. The tank was recommended to be ineligible for listing on the NRHP.

P-30-177527 was recorded in 2014 by K. A. Crawford as a historic cylindrical steel water storage tank reservoir. The tank has associated equipment storage areas and perimeter fence. The tank was recommended to be ineligible for listing on the NRHP.

P-30- 176663 is described as the 14.7 miles segment of railroad track of the Burlington Northern Santa Fe Railway. This historic-aged built environment resource has not been evaluated.

In addition to CHRIS, a variety of other sources were consulted, including the California State Historic Property Data File (which includes the National Register of Historic Places, California Register of Historical Resources, California Historical Landmarks, and California Points of Historical Interest), the Built Environment Resource Directory (BERD), California Office of Historic Preservation's Historic Resources Inventory (HRI) directory, as well as a review of known cultural resource surveys, excavation reports, and historic aerial photos and maps. No resources were identified in the Planning Area in the NRHP, CRHR, California Historic Landmark (CHL), or Caltrans Historic Bridge Inventory.

Figure 4.4-1, *Potential Historic Built Environment Resource Areas Map*, displays the areas of development that were present on 1972 United States Department of Agriculture (USDA) aerial photographs representing areas in which buildings or structures are 50 years or older and are therefore, considered

historic in age. Figure 4.4-1 also shows the portions of the Planning Area that are considered sensitive for historic built environment resources and the locations of the Chet Holifield Federal Building (CHFB) and Rancho Niguel Water Tank Clearwire, discussed further below.

Built Environment Resource Directory (BERD)

Chet Holifield Federal Building (OTIS ID: 665856)

The most current version of the Built Environment Resource Directory (BERD) assigns the CHFB (OTIS ID: 665856) the California Historical Resource Status Code: 2S2 (Individual property determined eligible for National Register by a consensus through Section 106 process. Listed in the California Register).

Built between 1968 and 1971, the CHFB was designed to resemble a ziggurat by William L. Pereira & Associates. The architectural design of this building is rare in the United States with key features including seven-stepped tiers, precast concrete panels, textured finish, and incorporates some elements of Brutalism style (exposed concrete surfaces, massive forms, and recessed windows) (GSA 2023). The building was originally constructed for North American Aviation and Rockwell International, however, ownership changed to the General Services Administration in 1974. Primary tenants today include various federal agencies.

Rancho Niguel Water Tank Clearwire (CA-ORC5083A; OTIS ID 517624)

No additional information could be located regarding the history of this resource. This resource is assigned the California Historical Resource Status Code: 2S (Individual property determined eligible for National Register by the Keeper. Listed in the California Register).

Pacific Island Reservoir No.2 (OTIS ID 5714593)

No additional information could be provided regarding the history of this resource. This resource is assigned the California Historical Resource Status Code: 6Y (Determined ineligible for National Register (NR) by consensus through Section 106 process – Not evaluated for California Register (CR) or local listing).

Niguel Water Tank No. 2 (OTIS ID 517625)

No additional information could be provided regarding the history of this resource. This resource is assigned the California Historical Resource Status Code: 6Y (Determined ineligible for NR by consensus through Section 106 process – Not evaluated for CR or local listing).

Niguel Water Tank No. 3 (OTIS ID 517625)

No additional information could be provided regarding the history of this resource. This resource is assigned the California Historical Resource Status Code: 6Y (Determined ineligible for NR by consensus through Section 106 process – Not evaluated for CR or local listing).

Archaeological Sensitivity

The archaeological sensitivity of the Planning Area was assessed based on the cultural records search results from the SCCIC, the documented history and geology of the Planning Area, water resources and the positive Sacred Lands File (SLF) search results. In order to support archaeological resources, sediments must have neither been deposited in the last 50 years nor pre-date human occupation. Areas proximate

to water resources whether natural (affecting prehistoric and historic aged resources) or artificial (affecting historic aged resources) are more likely to have nearby archaeological resources. Based on these data sources, the Planning Area is assessed to have sensitivity for buried prehistoric and historic-aged archaeological resources that varies from very low to high.

4.4.3 REGULATORY SETTING

FEDERAL

National Historic Preservation Act

Enacted in 1966 and amended in 2000, the National Historic Preservation Act (NHPA) declared a national policy of historic preservation and instituted a multifaceted program, administered by the Secretary of the Interior, to encourage the achievement of preservation goals at federal, State, and local levels. The NHPA authorized the expansion and maintenance of the NRHP, established the position of State Historic Preservation Officer (SHPO) and provided for the designation of State Review Boards, set up a mechanism to certify local governments to carry out the purposes of the NHPA, assisted Native American tribes to preserve their cultural heritage, and created the Advisory Council on Historic Preservation (ACHP).

Section 106 Process

Through regulations associated with the NHPA, an impact to a cultural resource would be considered significant if government action would affect a resource listed in or eligible for listing in the NRHP. The NHPA codifies a list of cultural resources found to be significant within the context of national history, as determined by a technical process of evaluation. Resources that have not yet been placed on the NRHP, and are yet to be evaluated, are afforded protection under the Act until shown not to be significant.

Section 106 of the NHPA and its implementing regulations (36 Code of Federal Regulations Part 800) state that for a cultural resource to be determined eligible for listing in the NRHP, the resource must meet specific criteria associated with historic significance and possess certain levels of integrity of form, location, and setting. The criteria for listing on the NRHP are applied within an analysis when there is some question as to the significance of a cultural resource. The criteria for evaluation are defined as the quality of significance in American history, architecture, archeology, engineering, and culture. This quality must be present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association. A property is eligible for the NRHP if it is significant under one or more of the following criteria:

Criterion A: It is associated with events that have made a significant contribution to the broad patterns of our history; or

Criterion B: It is associated with the lives of persons significant in our past; or

Criterion C: It embodies the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

Criterion D: It has yielded, or may be likely to yield, information important in prehistory or history.

Criterion (D) is usually reserved for archaeological resources. Eligible cultural resources must meet at least one of the above criteria and exhibit integrity, measured by the degree to which the resource retains its historical properties and conveys its historical character.

The Section 106 evaluation process does not apply to projects undertaken under City environmental compliance jurisdiction. However, should the undertaking require funding, permits, or other administrative actions issued or overseen by a Federal agency, analysis of potential impacts to cultural resources following the Section 106 process would likely be necessary. The Section 106 process typically excludes cultural resources created less than 50 years ago unless the resource is considered highly significant from the local perspective. Finally, the Section 106 process allows local concerns to be voiced, and the Section 106 process must consider aspects of local significance before a judgment is rendered.

Secretary of the Interior's Standards for the Treatment of Historic Properties

Evolving from the Secretary of the Interior's Standards for Historic Preservation Projects with Guidelines for Applying the Standards that were developed in 1976, the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings were published in 1995 and codified as 36 Code of Federal Regulations Part 67. Neither technical nor prescriptive, these standards are "intended to promote responsible preservation practices that help protect our Nation's irreplaceable cultural resources." "Preservation" acknowledges a resource as a document of its history over time, and emphasizes stabilization, maintenance, and repair of existing historic fabric. "Rehabilitation" not only incorporates the retention of features that convey historic character but also accommodates alterations and additions to facilitate continuing or new uses. "Restoration" involves the retention and replacement of features from a specific period of significance. "Reconstruction," the least used treatment, provides a basis for recreating a missing resource. These standards have been adopted, or are used informally, by many agencies at all levels of government to review projects that affect historic resources.

STATE

California Environmental Quality Act

CEQA requires a lead agency to determine whether a project may have a significant effect on historical resources (Public Resources Code Section [PRC] 21084.1). A historical resource is a resource listed in, or determined to be eligible for listing, in the CRHR, a resource included in a local register of historical resources, or any object building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant.

A resource is considered historically significant if it meets any of the following criteria:

1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2) Is associated with the lives of persons important in our past;
3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

4) Has yielded, or may be likely to yield, information important in prehistory or history.

In addition, if it can be demonstrated that a project would cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (Public Resources Code Section 21083.2[a], [b], and [c]). Public Resources Code Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

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

California Register of Historical Resources (CRHR)

Created in 1992 and implemented in 1998, the California Register of Historical Resources (CRHR) is "an authoritative guide in California to be used by State and local agencies, private groups, and citizens to identify the State's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change." The CRHR is codified in PRC Section 5024.1. Certain properties, including those listed in or formally determined eligible for listing in the NRHP and California Historical Landmarks numbered 770 and higher, are automatically included in the CRHR. Other properties recognized under the California Points of Historical Interest program, identified as significant in historical resources surveys, or designated by local landmarks programs, may be nominated for inclusion in the CRHR. A resource, either an individual property or a contributor to a historic district, may be listed in the CRHR if the State Historical Resources Commission determines that it meets one or more of the criteria modeled on the NRHP criteria.

Public Resources Code Section 5097 (Related to Cultural Resources)

California PRC Section 5097 addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project; and establishes the California Native American Heritage Commission (NAHC) to resolve disputes regarding the disposition of such remains. It has been incorporated into CEQA Guidelines Section 15064.5(e).

The NAHC, created by statute in 1976 (AB 4239), is a nine-member body, appointed by the governor to identify, catalog, and protect cultural resources (i.e., places of special religious or social significance to Native Americans, and known graves and cemeteries of Native Americans on private lands) in California. The NAHC is charged with the duty of preserving and ensuring accessibility of sacred sites and burials, the disposition of Native American human remains and burial items, maintaining an inventory of Native

American sacred sites located on public lands (i.e., Sacred Lands File), and reviewing current administrative and statutory protections related to these sacred sites.

PRC Sections 5097.9 through 5097.991 establish that no public agency or private party using or occupying public property (or operating on under a public license, permit, grant, lease or contract made after July 1, 1977) shall in any manner interfere with the free expression or exercise of Native American religion as provided in the U.S. Constitution and the California Constitution. It also prohibits such agencies and parties from causing severe or irreparable damage to any Native American sanctified cemetery, place of worship, religious or ceremonial site or sacred shrine located on public property, except on a clear and convincing showing that the public interest and necessity so require it.

These sections also establish the state's NAHC, which is tasked with working to ensure the preservation and protection of Native American human remains, associated grave goods and cultural resources. Towards this end, the NAHC has a strategic plan for assisting the public, development communities, local and federal agencies, educational institutions, and California Native Americans to better understand problems relating to the protection and preservation of cultural resources and to serve as a tool to resolve these problems. In 2006, PRC Sections 5097.91 and 5097.98 were amended by Assembly Bill 2641 to authorize the NAHC to bring legal action when necessary to prevent damage to Native American burial grounds or places of worship. It also established more specific procedures to be implemented in the event that Native American remains are discovered.

California Health and Safety Code (Sections 7050.5, 7051, and 7054)

Sections 7050.5, 7051, and 7054 of the California Health and Safety Code collectively address the illegality of interference with human burial remains (except as allowed under applicable sections of the PRC), as well as the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project, treatment of the remains prior to, during and after evaluation, and reburial procedures.

Mills Act

Under California Government Code Section 50280 et seq., the City is authorized to enter into contracts with the owners of qualified historical properties to provide for the appropriate use, maintenance, and rehabilitation so that such properties retain their historic characters. As an incentive to entering the contract, the provisions of the Mills Act allow the County Tax Assessor to assess the property using a different formula which typically results in a lower tax bill.

City of Laguna Niguel CEQA Manual

The City of Laguna Niguel CEQA Manual provides the City and project applicants with local guidelines, procedures, requirements, and thresholds of significance for the environmental review process within the City of Laguna Niguel consistent with the California Environmental Quality Act (Public Resources Code [PRC] Section 21000 et seq.), referred to as "CEQA" or "CEQA Statutes," and the State CEQA Guidelines (Title 14, California Code of Regulations (CCR), Division 6, Chapter 3, Section 15000 et seq.). The City's CEQA Manual applies to all public and private projects under the jurisdiction of the City of Laguna Niguel that constitute a "project" and therefore subject to CEQA review.

4.4.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

CEQA Guidelines Appendix G contains the Initial Study Environmental Checklist, which includes questions related to cultural resources. The City relies on the questions included in Appendix G as the thresholds of significance for assessing impacts related to cultural resources (City of Laguna Niguel CEQA Manual, Revised February 24, 2023). A significant impact will occur if implementation of the proposed Project will:

- Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5 (refer to Impact Statement CUL-1);
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5 (refer to Impact Statement CUL-2); and/or
- Disturb any human remains, including those interred outside of formal cemeteries (refer to Impact Statement CUL-3).

4.4.5 IMPACTS AND MITIGATION MEASURES

CUL-1: Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?

Impact Analysis: According to the Cultural Resources Study, 36 cultural resources have been recorded within the Planning Area. Of these, 27 are prehistoric archaeological sites, four are prehistoric archaeology isolates, and five are historic-aged built environment resources. Of the five historic-aged built environment resources previously recorded within the Planning Area, four of the resources (P-30-176950, P-30-177041, P-30-177064, and P-30-177527) were evaluated for NRHP eligibility by SHPO through the Section 106 evaluation process and were recommended to be ineligible for listing on the NRHP. The fifth resource (P-30-176663) consists of a 14.7-mile segment of railroad track of the Burlington Northern Santa Fe Railway. Although this resource has not been evaluated, the proposed General Plan Update Land Use Element does not involve or propose modifications to the railroad track. Two historic built environment resources, the CHFB (completed in 1971) and the Rancho Niguel Water Tank Clearwire (built in 1963) are eligible for listing in the NRHP and CRHR.

Buildout consistent with the General Plan Update Land Use Element may involve the removal or alteration of buildings or structures that have been identified as eligible for listing or may meet the criteria of a historical resource eligible for listing, including the demolition of the CHFB. A substantial adverse change in the significance of an historic resource is defined in Section 15064.5 (b)(1) of the CEQA Guidelines as the "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired." In addition to the demolition of the CHFB, subsequent development due to implementation of the General Plan Update Land Use Element could cause a substantial adverse change in potentially eligible historical resources which have not yet been identified. This is considered a potentially significant impact.

The potential for subsequent development projects to cause a substantial adverse change in the significance of a currently unknown historic resource cannot be definitively assessed at this time. The proposed Project is a planning-level document, and, as such, there are no specific projects identified,

except for the assumption that the CHFB site will be demolished as part of a future redevelopment effort. A separate analysis has been provided below for demolition of the CHFB.

Buildout consistent with the General Plan Update Land Use Element would primarily accommodate new residential and non-residential development generally within the Laguna Niguel Gateway Specific Plan (Gateway Specific Plan), Opportunity Areas (e.g., the Laguna Niguel Marketplace, CHFB site, and Town Center), and Hospitality Overlay sites.

The Rancho Niguel Water Tank Clearwater is located on Rancho Niguel Road, south of Crown Valley Parkway and is not located in an area anticipated for subsequent development or redevelopment, including the Gateway Specific Plan, Opportunity Areas, or the Hospitality Overlay sites. As discussed above, the segment of railroad track of the Burlington Northern Santa Fe Railway, which traverses the Gateway Specific Plan area, would not be impacted by implementation of the General Plan Update Land Use Element. Therefore, the proposed General Plan Update would not cause a substantial adverse change in the significance of these two known historical resources.

Neither Opportunity Area 1 (Laguna Nigel Marketplace), Opportunity Area 3 (Town Center), nor the Hospitality Overlay sites are known to have buildings shown on Figure 4.4-1, *Potential Historic Built Environment Resource Areas Map*, which displays the areas of development that were present on 1972 United States Department of Agriculture (USDA) aerial photographs representing areas in which buildings or structures are 50 years or older and are therefore, considered historic in age. Further, potential historic buildings were analyzed as part of the Laguna Niguel Gateway Specific Plan Program EIR (Gateway Specific Plan EIR), which determined implementation of the Gateway Specific Plan would have no impacts on historical resources.

While no impact on currently unknown historic resources would occur at this time, implementation of the General Plan Update Land Use Element would occur over 20 years. Therefore, there is the potential that subsequent development and redevelopment activities within the Planning Area could occur in areas identified within Figure 4.4-1, with the potential to result in significant impacts to a historic resource.

Mitigation Measure CUL-1 requires preparation of a historical resources assessment as part of the development review process for construction and demolition activities that may affect historical resources (i.e., structures 45 years or older). The historical resources assessment would be conducted to determine the actual significance of the structure and potential impacts of the proposed development in accordance with CEQA Guidelines Section 15064.5. Mitigation Measure CUL-2 requires use of the Secretary of the Interiors Standards for the Treatment of Historic Properties for subsequent projects involving the relocation, rehabilitation, or alteration of a historical resource. Mitigation Measure CUL-3 requires recordation of a historical resource if the proposed project would result in demolition of a historical resource. During consideration of new development and infrastructure projects, the City would evaluate the specific proposal for conformance with the City's General Plan as well as other applicable State and local regulations relative to historic and potentially historic resources, including implementation of Mitigation Measures CUL-1 through CUL-3. Subsequent development and infrastructure projects would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA, pursuant to the City's entitlement review process. Implementation of Mitigation Measures CUL-1 through

CUL-3 would reduce potential impacts to currently unknown historical resources to a less than significant level.

Chet Holifield Federal Building Demolition

As discussed, the CHFB has a California Historical Resource Status Code: 2S2 (Individual property determined eligible for National Register by a consensus through Section 106 process. Listed in the California Register). The U.S. General Services Administration (GSA) plans to transfer the CHFB site out of federal ownership via public sale (referred to as "Undertaking"). The GSA has determined that the Undertaking constitutes an adverse effect on the property. A Memorandum of Agreement among the GSA, SHPO, and ACHP would require the implementation of specific stipulations, comprised of minimization and mitigation measures, to "take into account the effect of the Undertaking on historic properties." These measures include, but are not limited to, requiring the purchaser to either execute a Preservation Easement or establish a $2 million mitigation fund escrow account, administered by a qualified nonprofit, to provide financial support for historic preservation projects, with an additional $1 million performance deposit to ensure compliance. Additionally, the GSA must comprehensively document the historic property using LiDAR, photogrammetry, and Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER) standards, donate archival and design materials to public repositories, develop a publicly accessible virtual tour, and find a location to house the existing model of the building.

The CHFB site is located within Opportunity Area 2. The proposed General Plan Update Land Use Element envisions a transformative redevelopment of the CHFB site. Provided the criteria outlined in the proposed Land Use Element are met, including but not limited to approval of multiple project-specific legislative actions, Opportunity Area Overlay 2 would result in the General Plan buildout limit for the area to reflect 500 residential attached dwelling units, a 120-room boutique hotel, and 910,000 square feet of commercial space if the Opportunity Area were to be implemented. Implementation of Opportunity Area Overlay 2 assumes the CHFB would be removed to provide for transformative redevelopment of the site. This would result in a significant and unavoidable impact. As discussed, the *Memorandum of Agreement among the U.S. General Services Administration, the California State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding the Sale and Transfer out of Federal Ownership of the Chet Holifield Federal Building Laguna Niguel, California*, would require specific stipulations, comprised of minimization and mitigation measures, to address the effect of the Undertaking on historic properties. Mitigation Measure CUL-4 requires any subsequent project involving the CHFB site to comply with the Memorandum of Agreement, including implementation of all stipulations to reduce the impact associated with the potential removal of the existing CHFB. Although implementation of Mitigation Measure CUL-4 would help to reduce the impact to the historical resource, the impact associated with removal of the CHFB would remain significant and unavoidable.

As documented, with the exception of the CHFB, implementation of Mitigation Measures CUL-1 through CUL-3, potential impacts to currently unknown historic resources would be reduced to a less than significant level. However, buildout consistent with the General Plan Update Land Use Element assumes demolition of the CHFB. Implementation of Mitigation Measure CUL-4 would reduce impacts; however,

removal of this historic resource would result in a substantial adverse change in the significance of a historical resource pursuant to § 15064.5, and impacts would be significant and unavoidable.

The General Plan Update Resource Management Element proposes a policy to address historical resources within the Planning Area. Proposed Resource Management Element Policy RM-4.1 directs the City, for qualifying historic structures, to evaluate their cultural relevance, physical condition, economic factors, feasibility, and other key considerations when reviewing proposals for major alterations, demolition, or relocation.

Mitigation Measures:

CUL-1: Prior to the commencement of any qualifying construction activities that may affect built environment historical resources (i.e., buildings, structures, or objects 45 years or older), the project applicant shall retain a qualified architectural historian meeting the Secretary of the Interior Standards to perform a historical resources assessment. The assessment shall include a records search to determine if any resources that may be potentially affected by a project have been previously recorded, evaluated, and/or designated in the National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), or other registers of historic resources.

Based on results of the records search, a reconnaissance-level and/or intensive-level survey shall be conducted in accordance with the California Office of Historic Preservation (OHP) guidelines to identify any previously unrecorded potential historical resources that may meet the criteria for listing as historical resources under CEQA and may be affected by a proposed project.

CUL-2: The Secretary of the Interior's Standards for the Treatments of Historic Properties shall be used for projects involving the relocation, rehabilitation, or alteration of a built environment historical resource. The application of the standards shall be overseen by a qualified architectural historian meeting the Secretary of the Interior Professional Qualification Standards for Architectural History.

Prior to any construction activities that may affect a built environment historical resource, the applicant shall submit a report prepared by a qualified architectural historian to the Laguna Niguel Community Development Department for review and approval. The report shall identify and specify the treatment of character-defining features and construction activities, demonstrating consistency with the Secretary of the Interior's Standards for the Treatments of Historic Properties. The project shall follow the recommendations of the approved report or provide alternatives that are consistent with the Secretary of the Interior's Standards for the Treatments of Historic Properties.

CUL-3: If a project includes the demolition of a built environment historical resource, such impacts cannot be mitigated to a less than significant level. To assist in minimizing the significant and unavoidable impact, the historical resource shall be documented prior to construction activities.

Documentation shall follow the standards of the Historic American Buildings Survey (HABS), Historic American Engineering Record (HAER), or Historic American Landscape Survey (HALS), as applicable, and shall be performed by an architectural historian or historian who meets the

Secretary of the Interior Professional Qualification Standards for Architectural History. 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 historic photographs.

Documentation shall be reproduced on archival paper and placed in appropriate local, State, or federal institutions. The specific scope and details of documentation (e.g., HABS, HAER, or HALS) shall be determined at the project level and provided to the Laguna Niguel Community Development Department for review and approval.

CUL-4: Prior to issuance of building or demolition permits for the Chet Holifield Federal Building, the applicant shall provide written confirmation to the Laguna Niguel Community Development Department that the minimization and mitigation measures included in the *Memorandum of Agreement Among the U.S. General Services Administration, the California Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding the Sale and Transfer Out of Federal ownership of the Chet Holifield Federal Building, Laguna Niguel, California*, dated November 2023, have been completed.

Level of Significance: Demolition of the CHFB would be significant and unavoidable. Potential impacts to other known historic resources would be less than significant. Potential impacts to unknown historic resources would be less than significant with mitigation incorporated.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

RESOURCE MANAGEMENT ELEMENT

Policy RM-4.1: Historic Resources. For qualifying historic structures, evaluate their cultural relevance, physical condition, economic factors, feasibility, and other key considerations when reviewing proposals for major alterations, demolition, or relocation.

CUL-2: Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

Impact Analysis: Redevelopment and development of previously undeveloped areas have the potential to impact known and unknown archaeological resources. Surface-level and subsurface archaeological sites and deposits can be affected by ground-disturbing activities associated with construction activities.

The archaeological sensitivity of the Planning Area was assessed based on the cultural records search results from the SCCIC, the documented history and geology of the Planning Area, water resources and the positive SLF search results. Based on these data sources, the Planning Area is assessed to have sensitivity for buried prehistoric and historic-aged archaeological resources that varies from very low to high.

Effects on archaeological resources deemed to be significant could be considered adverse if they involve physical demolition, destruction, or alteration of the resource or its immediate surroundings, such that the significance of a resource would be materially impaired. As noted, sensitivity for buried archaeological resources varies from very low to high within the City. While the General Plan Update does not directly propose site-specific development with the potential to directly impact archaeological resources, subsequent development could cause a substantial adverse change in the significance of previously undiscovered archaeological resources. This is considered a potentially significant impact.

While most new development in the City would occur in areas that have been previously developed, subsequent development with buildout consistent with the General Plan Update Land Use Element could result in new development and intensification of existing development within areas with the potential to directly impact archaeological resources. As shown in Table 2-17, *General Plan Update Growth Assumptions Compared to Existing Conditions* and Figure 2-7, *General Plan Update Community Profile and Sub-Profile Areas*, buildout consistent with the General Plan Update Land Use Element would primarily accommodate new residential and non-residential development generally within the Gateway Specific Plan (Community Profile Area 4, located in the northeast portion of the City), the Marketplace at Laguna Niguel and the CHFB site (Community Profile Area 1, located in the northwest portion of the City), and the Town Center (Community Profile Area 14, located in the central portion of the City). In addition to the Gateway Specific Plan and the Opportunity Areas discussed above, the proposed Land Use Element identifies two sites for a Hospitality Overlay with the potential to accommodate future high-quality hotel uses. The Opportunity Areas, Gateway Specific Plan and Hospitality Overlay sites are all located in areas of the City with moderate to high sensitivity for buried prehistoric and historic-aged archaeological resources. As part of the development review process, Mitigation Measure CUL-5 would require the preparation of a cultural resources assessment for subsequent projects in areas assessed to have moderate or high sensitivity for archaeological resources, as determined by the City's Cultural Resources Sensitivity Maps (Appendix H of the Cultural and Paleontological Resources Assessment for the Laguna Niguel General Plan Update Project). If resources are known or reasonably anticipated to be present, the assessment would be required to provide a detailed mitigation plan to reduce potential impacts.

Additionally, for areas in the City with low sensitivity for buried prehistoric and historic-aged archaeological resources, there is the potential for accidental discovery of archaeological resources during ground-disturbing activities. Mitigation Measure CUL-6 would require all work within 50 feet of the find to be suspended until the resource is evaluated by a qualified archaeologist. The evaluation would determine if preparation and implementation of a treatment plan is required, consistent with Mitigation Measure CUL-5. Compliance with the applicable federal, State, and local regulations, along with the implementation of Mitigation Measures CUL-5 and CUL-6 would ensure subsequent projects consistent with the General Plan Update Land Use Element would not cause a substantial adverse change in the significance of an archaeological resource and impacts would be less than significant.

The General Plan Update Resource Management Element includes a policy addressing the protection of archaeological resources. Under proposed Resource Management Element Policy RM-4.2, if significant archaeological or paleontological resources are discovered, the City would evaluate their cultural relevance, physical condition, economic factors, feasibility, and other key aspects. Consider curation in a

public location in Laguna Niguel or appropriate institution, as feasible and permitted by environmental regulations.

Mitigation Measures:

CUL-5: Prior to ground disturbance activities, applicants for projects in areas identified as having moderate to high sensitivity for archaeological resources, based on the City's Cultural Resources Sensitivity Maps (Appendix H of the Cultural and Paleontological Resources Assessment for the Laguna Niguel General Plan Update Project), shall have a technical cultural resources assessment prepared by a qualified archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for Archaeology and certified by the County of Orange.

The assessment shall consist of a record search, field survey, background context, and project specific recommendations in accordance with the City of Laguna Niguel CEQA Manual. The assessment shall be submitted to the Laguna Niguel Community Development Department for review and approval. The requirement for a field survey may be waived if, in the judgement of the qualified archaeologist, and approved by the Laguna Niguel Community Development Department, the project site has been previously disturbed and developed to such an extent as documented through aerial photography review and site observations that archaeological resources could not be observed through a field survey.

If cultural resources are known or reasonably anticipated to be present, the assessment shall provide a detailed monitoring and mitigation plan, which must be submitted to the Laguna Niguel Community Development Department for review and approval. The mitigation plan shall include, but not be limited to, the following actions:

1. Prior to issuance of a grading permit, the applicant shall provide written verification that a qualified archaeologist meeting the Secretary of the Professional Qualification Interior's Standards and certified by the County of Orange has been retained to implement the monitoring program. This verification shall be presented in a letter from the project archaeologist to the City of Laguna Niguel Community Development Department.

2. The certified archaeologist shall attend the pre-grading meeting with the contractors to explain and coordinate the requirements of the monitoring program.

3. During the initial grading of previously undisturbed deposits, the archaeological monitor(s) as determined by the qualified archaeologist, shall perform periodic inspections of the excavations. The frequency of inspections will depend upon the rate of excavation, the materials excavated, and the potential for presence of artifacts and features. The qualified archaeologist shall have the authority to modify the frequency and duration of the monitoring program, either more or less, if the potential for cultural resources if based on observations of the grading operation is different than anticipated based on site conditions, soil material encountered, rate of grading, and the potential for presence of artifacts.

4. In the event that previously unidentified cultural resources are discovered, the archaeological monitors shall have the authority to divert or temporarily halt ground disturbance operation in the area of discovery to allow for the evaluation of potentially significant cultural resources. The qualified archaeologist shall contact the Laguna Niguel Community Development Department at the time of discovery. The qualified archaeologist, in consultation with the Laguna Niguel Community Development Department, shall determine the significance of the discovered resources in accordance with the City of Laguna Niguel CEQA Manual and archaeological professional standards. If the resource is determined to be significant, a Research Design and Data Recovery Program shall be prepared by the qualified archaeologist in accordance with the City of Laguna Niguel CEQA Manual and archaeological professional standards and approved by the Laguna Niguel Community Development Department before being carried out using professional archaeological methods. A Research Design and Data Recovery Program typically includes, but is not limited to, the following components:

    - Research Objectives: Clearly defined goals to guide the research and data recovery efforts.
    - Methodologies: Detailed methods and techniques to be employed during the research and data recovery process.
    - Data Collection: Strategies for gathering data, including the types of information to be collected and the methods to collect it.
    - Data Analysis: Processes for analyzing the collected data to derive insights and conclusions.
    - Documentation: Procedures for documenting the research findings, including reports and presentations.
    - Public Engagement: Strategies for involving the public and stakeholders in the research and data recovery process.
    - Mitigation Plans: Recommendations for mitigating any potential impacts on cultural resources identified during the study.

5. Cultural isolates and clearly non-significant deposits as determined by the qualified archaeologist will be minimally documented in the field so the monitored grading can proceed.

6. Before construction activities are allowed to resume in the affected area, all significant cultural resources that cannot be avoided through project redesign (as the default option) shall be recovered and recorded using professional archaeological methods. The qualified archaeologist shall determine the amount of material to be recovered for an adequate artifact sample for analysis based on the protocol established in the Research Design and Data Recovery Program.

7. All significant cultural material collected during the grading monitoring program shall be processed and curated according to the current professional repository standards. The

collections and associated records shall be transferred, including title, to an appropriate curation facility, to be accompanied by payment of the fees by the project proponent necessary for permanent curation.

A final report documenting the fieldwork and analysis results, including interpretation of any artifact and research findings, shall be prepared by the qualified archaeologist. The report shall be submitted to the Laguna Niguel Community Development Department for review and approval prior to the issuance of any building permits. The report shall include all necessary Department of Parks and Recreation (DPR) 523 series Site Forms.

CUL-6: In the event of an unanticipated archaeological discovery at a project site, all work shall be suspended within 50 feet of the find until a qualified archaeologist meeting the Secretary of the Interior's Professional Qualification Standards can evaluate the resource. The evaluation may require preparation and implementation of a treatment plan in accordance with Mitigation Measure CUL-5.

Level of Significance: Less than Significant Impact with Mitigation Incorporated.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

RESOURCE MANAGEMENT ELEMENT

Policy RM-4.2: Archaeological and Paleontological Resources. If significant archaeological or paleontological resources are discovered, evaluate their cultural relevance, physical condition, economic factors, feasibility, and other key aspects. Consider curation in a public location in Laguna Niguel or appropriate institution, as feasible and permitted by environmental regulations.

CUL-3: Disturb any human remains, including those interred outside of formal cemeteries?

Impact Analysis: Subsequent construction projects within the Planning Area could have the potential to disturb or destroy buried Native American human remains, as well as other human remains, including those interred outside of formal cemeteries. Health and Safety Code Section 7050.5, CEQA Guidelines Section 15064.5(e), and PRC 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. In such an event, the County Coroner must be called in to assess the remains (CEQA Guidelines Section 15064.5[e]e). If the County Coroner determines that the remains are those of a Native American, the NAHC must be contacted within 24 hours, and the provisions for treating or disposing of the remains and any associated grave goods, as described in CEQA Guidelines Section 15064.5 must be followed.

As subsequent development and infrastructure projects are considered by the City, each project would be evaluated for conformance with the General Plan, Municipal Code, and other applicable State and local regulations. Subsequent discretionary development and infrastructure projects would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA. Under CEQA, human remains are protected under the definition of archaeological materials as being "any evidence of human activity." PRC Section 5097 has specific stop-work and notification procedures to follow in the event that

Native American human remains are inadvertently discovered during development activities. Tribal consultation for subsequent site-specific projects would be conducted in accordance with applicable State, local, and tribal intergovernmental consultation requirements, ensuring meaningful engagement with Native American tribes and the appropriate consideration of potential tribal cultural resources and human remains.

To address the potential for unanticipated discoveries for site-specific projects, Mitigation Measure CUL-7 requires that if human remains are encountered during ground-disturbing activities, then work must stop within 50 feet of the discovery, and the City and County Coroner must be notified immediately, as stated in California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98. Implementation of Mitigation Measure CUL-7 and the compliance of existing regulations, including Health and Safety Code Section 7050.5, CEQA Guidelines Section 15064.5(e), and PRC Section 5097.98, would ensure that potential impacts associated with the inadvertent discovery of human remains would be less than significant.

Mitigation Measures:

CUL-7: In the event of unanticipated discoveries of human remains at a project site, all ground disturbance activities shall immediately be halted within 50 feet of the discovery. The County Coroner and the City of Laguna Niguel shall be immediately notified, and provisions of Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98 shall be followed.

If the County Coroner determines that the human remains are Native American, the Native American Heritage Commission (NAHC) shall be contacted by phone within 24 hours to identify the Most Likely Descendant (MLD). The MLD shall be afforded the opportunity to make recommendations for the treatment and potential repatriation of the remains noting that under CEQA avoidance is the default option unless project redesign is impossible. The recommendations of the MLD shall be followed to the degree practicable, in accordance with Public Resources Code Section 5097.98.

Level of Significance: Less than Significant Impact with Mitigation Incorporated.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: There are no General Plan Update goals or policies specific to the potential disturbance of human remains, including those interred outside of formal cemeteries.

4.4.6 CUMULATIVE IMPACTS

Section 3.0, *Basis of Cumulative Analysis*, identifies projected regional growth having the potential to interact with the proposed Project to the extent that a significant cumulative effect may occur. The geographic setting for cultural resources considers development with a similar geologic setting and cultural resource deposit sensitivity; however, the local geologic setting and historical significance would vary according to the site location and specific conditions.

Would the project, combined with other related cumulative projects, cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

Impact Analysis: Previously recorded historic built environment resources have been identified within the City. With the exception of the CHFB, known historic resources would not be impacted by the General Plan Update. Additionally, due to the age of development within the City and the timeframe for buildout of the General Plan Update (e.g., 20 years), there is the potential for eligible historical resource sites to be located within the Planning Area. Subsequent development within the Planning Area has the potential to impact potentially unknown eligible historical resources. The potential for subsequent development projects to cause a substantial adverse change in the significance of a currently unknown historic resource would be assessed on a project-by-project basis. Implementation of Mitigation Measures CUL-1, CUL-2, and CUL-3 would reduce potential impacts to historical resources to a less than significant level.

As with the Project, related cumulative projects within the region would undergo environmental review pursuant to CEQA to evaluate whether a project would cause a substantial adverse change in the significance of a historical resource. This would include an assessment of structures that potentially have historic significance (45 years or older). Related cumulative projects with the potential to impact historic resources would be required to comply with the established federal, State, and local regulatory framework concerning the protection of historical resources on a project-by-project basis. Therefore, the General Plan Update's incremental effects associated with the potential to cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5 would not be cumulatively considerable.

Chet Holifield Federal Building Demolition

Although the General Plan Update Land Use Element does not propose site-specific development, the proposed General Plan Update envisions a transformative redevelopment of the CHFB site, eligible for listing on the NRHP and CRHR. As discussed in Impact CUL-1, implementation of Mitigation Measure CUL-4 would reduce impacts associated with the demolition of the CHFB; however, the removal of the CHFB would result in a significant and unavoidable impact on a historical resource pursuant to §15064.5.

Although buildout consistent with the General Plan Update Land Use Element may cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5 specific to the CHFB, the impact would not combine with other related cumulative projects within the region to be cumulatively considerable. The CHFB and its eligibility for listing on the NRHP and CRHR are specific to the building's architectural design and visual setting. The architectural design and visual setting of the historic resource is rare and does not occur within the region. Thus, the General Plan Update's incremental effects involving a substantial adverse change in the significance of a historical resource pursuant to §15064.5, specific to CHFB, would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan policies cited above.

Would the project, combined with other related cumulative projects, cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Impact Analysis: Subsequent development within the Planning Area has the potential to impact previously undiscovered archaeological resources. With implementation of Mitigation Measures CUL-5 and CUL-6, subsequent site-specific projects would not cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5.

Related cumulative projects within the region could involve actions with the potential to damage known or as-yet discovered archaeological resources specific to the development site. However, cumulative projects would undergo environmental review on a project-by-project basis pursuant to CEQA to evaluate potential impacts to archaeological resources. This would include studies of archaeological resources that are present or could be present within a development site. Similar to subsequent development projects within the City, related cumulative projects would be subject to compliance with the established federal, State, and local regulatory framework in which the site is located concerning the protection of archaeological resources on a project-by-project basis. Where significant or potentially significant impacts are identified, implementation of all feasible site-specific mitigation would be required to avoid or reduce impacts. Therefore, the General Plan Update's incremental effects associated with potential to cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5 would not be cumulatively considerable.

Mitigation Measures: Refer to Mitigation Measures CUL-5 and CUL-6.

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan policies cited above.

Would the project, combined with other related cumulative projects, disturb any human remains, including those interred outside of dedicated cemeteries?

Impact Analysis: As discussed in impact CUL-3, although unlikely, there is the potential that previously undiscovered human remains could be encountered during construction activities associated with subsequent development within the Planning Area. Implementation of Mitigation Measure CUL-7 and the compliance of existing regulations, including Health and Safety Code Section 7050.5, CEQA Guidelines Section 15064.5(e), and PRC Section 5097.98, would ensure the Project's potential impacts associated with the inadvertent discovery of human remains would be less than significant.

Related cumulative projects within the region could also encounter previously undiscovered human remains during construction. However, related cumulative projects would undergo environmental review on a project-by-project basis to evaluate the site-specific archaeological sensitivity. Additionally, related cumulative projects would be subject to compliance with the established State regulatory framework concerning the discovery of human remains on a project-by-project basis. Thus, the General Plan Update's incremental effects associated with the potential to disturb any human remains, including those interred outside of dedicated cemeteries, would not be cumulatively considerable.

Mitigation Measures: Refer to Mitigation Measure CUL-7.

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: There are no General Plan Update goals or policies specific to the potential disturbance of human remains, including those interred outside of formal cemeteries.

4.4.7 SIGNIFICANT UNAVOIDABLE IMPACTS

The General Plan Update would result in a significant and unavoidable impact in the following area:

- General Plan implementation would cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5 specific to the CHFB.

All other cultural resources impacts associated with implementation of the General Plan Update would be mitigated to less than significant.

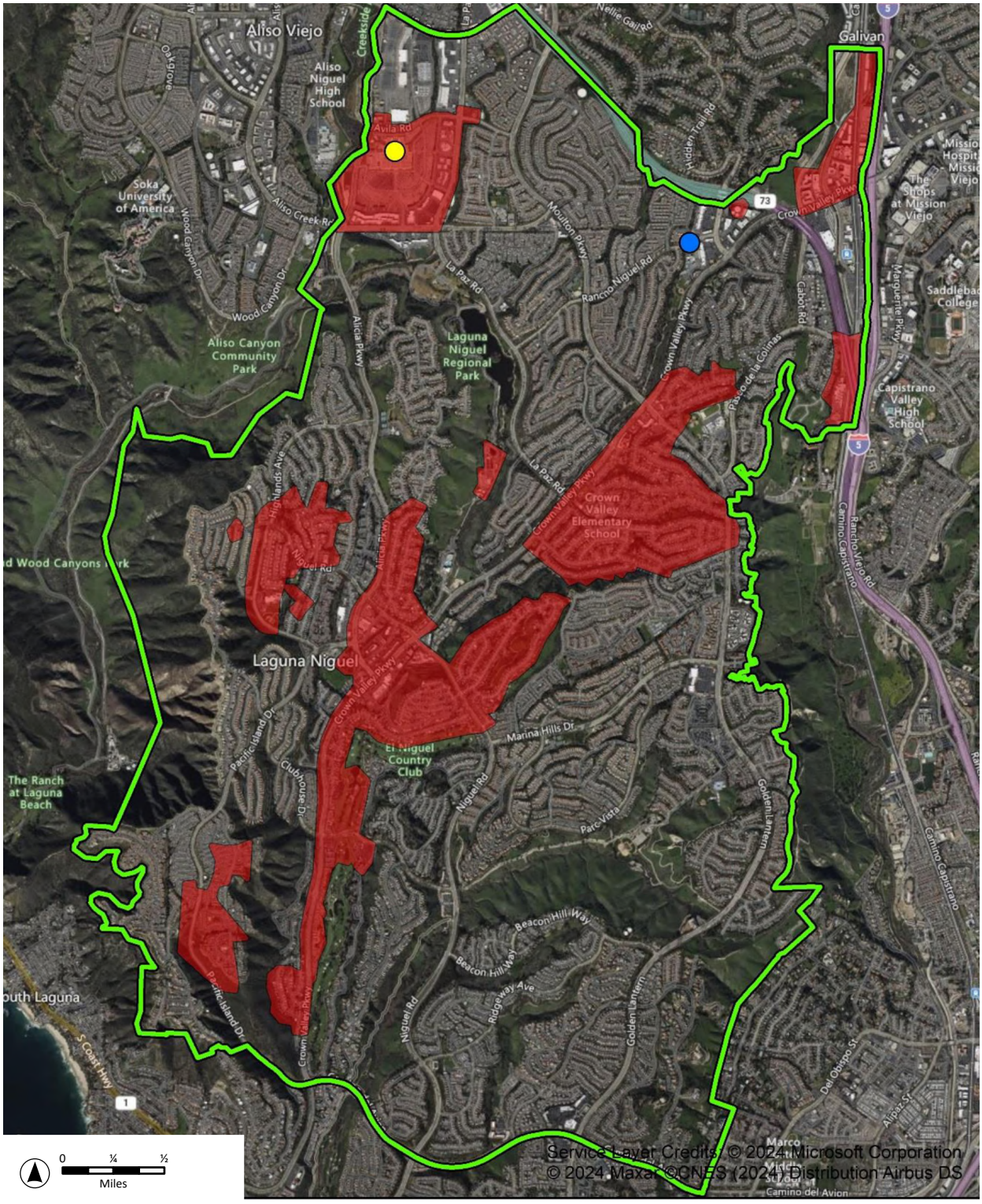
If the City of Laguna Niguel approves the General Plan Update, the City will be required to make findings in accordance with CEQA Guidelines Section 15091 and prepare a Statement of Overriding Considerations for consideration by the City's decision makers in accordance with CEQA Guidelines Section 15093.

4.4.8 REFERENCES

Cogstone Resource Management, Revised August 2025. *Cultural and Paleontological Resources Assessment for the Laguna Niguel General Plan Update Project, City of Laguna Niguel, Orange County, California*.

Memorandum of Agreement Among the U.S. General Services Administration, the California State Historic Preservation officer, and the Advisory Council on Historic Preservation Regarding the Sale and Transfer out of Federal Ownership of the Chet Holifield Federal Building Laguna Niguel, California.

Potomac-Hudson Engineering, Inc., March 2021. *Final Environmental Impact Statement for the Chet Holifield Federal Building Tenant Relocation Laguna Niguel, California*.



Data sources: Cogstone Paleontology/Archaeology/History.

Prepared for the City of Laguna Niguel by De Novo Planning Group
February 14, 2025.

LEGEND

- Laguna Niguel City Boundary
- Sensitive for Historic Built Environment
- Chet Holifield Federal Building
- Rancho Niguel Water Tank Clearwire

Figure 4.4-1

Potential Historic Built Environment Resource Areas Map

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4.5 ENERGY

4.5.1 PURPOSE

This section identifies the existing energy use conditions within the Planning Area and provides an analysis of potential impacts associated with implementation of the General Plan Update.

This section is primarily based upon the air quality emissions analysis and modeling prepared by De Novo Planning Group and included as Appendix B, *Air Quality, Energy and Greenhouse Gas Emissions Modeling Data*.

4.5.2 ENVIRONMENTAL SETTING

ENERGY CONSUMPTION

Energy in California is consumed from a wide variety of sources. Fossil fuels (including gasoline and diesel fuel and natural gas) are the most widely used form of energy in the State.[1] However, renewable sources of energy (such as solar and wind) are growing in proportion to California's overall energy mix. A large driver of renewable sources of energy in California is the State's Renewable Portfolio Standard (RPS), which requires the State to derive at least 33 percent of electricity generated from renewable resources by 2020, 60 percent by 2030, and requires all the state's electricity to come from carbon-free resources by 2045.

Overall, in 2022, California's per capita energy usage was ranked 49th in the nation at 176 million British thermal units (Btu) per capita.[2] Additionally, California's per capita rate of energy usage has been reduced by approximately one third since the 1970s.[3] Many state regulations since the 1970s, including new building energy efficiency standards, vehicle fleet efficiency measures, as well as growing public awareness, have helped to keep per capita energy usage in the state constrained.

The consumption of nonrenewable energy (primarily gasoline and diesel fuel) associated with the operation of passenger, public transit, and commercial vehicles results in greenhouse gas (GHG) emissions that ultimately result in global climate change. Other fuels such as natural gas, ethanol, and electricity (unless derived from solar, wind, nuclear, or other energy sources that do not produce carbon emissions) also result in GHG emissions and contribute to global climate change.

ELECTRICITY CONSUMPTION

California relies on a regional power system composed of a diverse mix of natural gas, renewable, hydroelectric, and nuclear generation resources. Approximately 77 percent of the electrical power needed to meet California's demand is produced in the State, while the remaining 23 percent is imported from

[1] U.S. Energy Information Administration, *California State Profile and Energy Estimates, 2022,* https://www.eia.gov/state/?sid=CA#tabs-1, accessed January 28, 2025.
[2] U.S. Energy Information Administration, *California State Profile and Energy Estimates, 2022,* https://www.eia.gov/state/?sid=CA#tabs-1, accessed January 28, 2025
[3] U.S. Energy Information Administration, *State Energy Data System: 1960-2022,* June 2024.

the Pacific Northwest and the Southwest.[4] In 2023, California's in-State generated electricity was derived from natural gas (43.7 percent), coal (0.1 percent), oil (less than 0.1 percent), and other (waste heat/petroleum coke) (0.1 percent); and nearly half was derived from non-GHG and renewable resources that include geothermal, biomass, hydroelectric resources, nuclear, wind, and solar (56.1 percent). The percentage of renewable resources as a proportion of California's overall energy portfolio is increasing over time, as directed by the RPS.

Electricity service in the City is provided by two utility companies: Southern California Edison (SCE) and San Diego Gas & Electric (SDG&E). SCE provides electricity service to the western portion of the City, while SDG&E provides electricity service to the eastern portion of the City. SCE, a subsidiary of Edison International, serves approximately 185 cities in 15 counties across central and southern California.[5] SDG&E supplies power to a population of 1.4 million business and residential accounts in a 4,100 square-mile service area spanning two counties and 25 communities.[6] According to the California Energy Commission (CEC), approximately 107,876 gigawatt-hours (GWh) of electricity were used in SCE's service area and approximately 21,766 GWh of electricity were used in SDG&E's service area in 2022.[7] This is approximately 45 percent of the State total system electric energy mix of 287,220 GWh in 2022.[8] Orange County's total electricity consumption in 2022 (residential and non-residential) was approximately 20,244 GWh.[9]

NATURAL GAS

Natural gas supplies are derived from underground sources and brought to the surface at gas wells. Once it is extracted, gas is purified and the odorant that allows gas leaks to be detected is added to the normally odorless gas. Natural gas suppliers, such as Southern California Gas Company (SoCalGas), then send the gas into transmission pipelines, which are usually buried underground. Compressors propel the gas through the pipeline system, which delivers it to homes and businesses. SoCalGas provides natural gas for

[4] California Energy Commission, *2023 Total System Electric Generation*, https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2023-total-system-electric-generation, accessed January 28, 2025.
[5] Southern California Edison, *Southern California Edison's Service Area*, https://download.newsroom.edison.com/create_memory_file/?f_id=5cc32d492cfac24d21aecf4c&content_verified=True, April 2019, accessed January 28, 2025
[6] San Diego Gas & Electric, *SDG&E Builder Services*, https://www.sdge.com/sites/default/files/SDG%26E%20Builder%20Guidebook%20v11.4.pdf, accessed January 28, 2025.
[7] California Energy Commission, *Electricity Consumption by Planning Area,* https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/california-energy-consumption-dashboards-0, accessed January 28, 2025.
[8] California Energy Commission, *2022 Total System Electric Generation*, https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2022-total-system-electric-generation, accessed January 28, 2025.
[9] California Energy Commission, *Electricity Consumption by County,* https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/california-energy-consumption-dashboards-0, accessed January 28, 2025.

residential, industrial, and agency consumers within the Planning Area. Orange County's total natural gas consumption in 2022 (residential and non-residential) was approximately 572 million therms.[10]

PETROLEUM

The primary energy source for the United States is petroleum (oil), which is refined to produce fuels like gasoline, diesel, and jet fuel.[11] Petroleum is a finite, nonrenewable energy source. California used approximately 628 million barrels of petroleum in 2022, with the majority (534 million barrels) used for the transportation sector.[12] This total annual consumption equates to a daily use of approximately 1.7 million barrels of petroleum.

4.5.3 REGULATORY SETTING

FEDERAL

Clean Air Act

The Federal Clean Air Act (FCAA) was first signed into law in 1970. The FCAA was substantially amended in 1977, and again in 1990. The FCAA is the foundation for a national air pollution control effort, and it is composed of the following basic elements: National ambient air quality standards (NAAQS) for criteria air pollutants, hazardous air pollutant standards, state attainment plans, motor vehicle emissions standards, stationary source emissions standards and permits, acid rain control measures, stratospheric ozone protection, and enforcement provisions.

The U.S. Environmental Protection Agency (EPA) is responsible for administering the FCAA. The FCAA requires the EPA to set NAAQS for several problem air pollutants based on human health and welfare criteria. Two types of NAAQS were established: primary standards, which protect public health, and secondary standards, which protect the public welfare from non-health-related adverse effects such as visibility reduction.

Energy Policy and Conservation Act

The Energy Policy and Conservation Act of 1975 sought to ensure that all vehicles sold in the U.S. would meet certain fuel economy goals. Through this act, Congress established the first fuel economy standards for on-road motor vehicles in the United States. Pursuant to the Act, the National Highway Traffic and Safety Administration, which is part of the U.S. Department of Transportation (USDOT), is responsible for establishing additional vehicle standards and for revising existing standards.

Since 1990, the fuel economy standard for new passenger cars has been 27.5 miles per gallon (mpg). Since 1996, the fuel economy standard for new light trucks (gross vehicle weight of 8,500 pounds or less) has

[10] California Energy Commission, *Natural Gas Consumption by County,* https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/california-energy-consumption-dashboards-1, accessed July 21, 2025.
[11] U.S. Energy Information Administration, *Monthly Energy Review*, https://www.eia.gov/totalenergy/data/monthly/, accessed January 28, 2025.
[12] U.S. Energy Information Administration, *California State Profile and Energy Estimates: Table F16: Total Petroleum Consumption Estimates, 2022*, https://www.eia.gov/state/data.php?sid=CA#ConsumptionExpenditures, accessed January 28, 2025.

been 20.7 mpg. Heavy-duty vehicles (i.e., vehicles and trucks over 8,500 pounds gross vehicle weight) are not currently subject to fuel economy standards. Compliance with federal fuel economy standards is determined on the basis of each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the U.S. The Corporate Average Fuel Economy (CAFE) program, which is administered by the EPA, was created to determine vehicle manufacturers' compliance with the fuel economy standards. The EPA calculates a CAFE value for each manufacturer based on city and highway fuel economy test results and vehicle sales. Based on the information generated under the CAFE program, the USDOT is authorized to assess penalties for noncompliance.

Energy Policy Act of 1992

The Energy Policy Act of 1992 was passed to reduce U.S. dependence on foreign petroleum and improve air quality. The Energy Policy Act of 1992 includes several parts intended to build an inventory of alternative fuel vehicles (AFVs) in large, centrally fueled fleets in metropolitan areas. The Energy Policy Act of 1992 requires certain federal, state, and local government and private fleets to purchase a percentage of light duty AFVs capable of running on alternative fuels each year. In addition, financial incentives are included in the Energy Policy Act of 1992. Federal tax deductions will be allowed for businesses and individuals to cover the incremental cost of AFVs. States are also required by the Energy Policy Act of 1992 to consider a variety of incentive programs to help promote AFVs.

Energy Policy Act of 2005

The Energy Policy Act of 2005 was signed into law on August 8, 2005. Generally, the Energy Policy Act of 2005 provides for renewed and expanded tax credits for electricity generated by qualified energy sources, such as landfill gas; provides bond financing, tax incentives, grants, and loan guarantees for clean renewable energy and rural community electrification; and establishes a federal purchase requirement for renewable energy.

Intermodal Surface Transportation Efficiency Act (ISTEA)

The Intermodal Surface Transportation Efficiency Act (ISTEA) (49 U.S. Code Section 101 et seq.) promoted the development of intermodal transportation systems to maximize mobility as well as address national and local interests in air quality and energy. ISTEA contained factors that metropolitan planning organizations (MPOs), were to address in developing transportation plans and programs, including some energy-related factors. To meet the ISTEA requirements, MPOs adopted explicit policies defining the social, economic, energy, and environmental values that were to guide transportation decisions in that metropolitan area. The planning process was then to address these policies. Another requirement was to consider the consistency of transportation planning with federal, state, and local energy goals. Through this requirement, energy consumption was expected to become a criterion, along with cost and other values that determine the best transportation solution.

STATE

Warren-Alquist Act

The 1975 Warren-Alquist Act established the California Energy Resources Conservation and Development Commission, now known as CEC. The Warren-Alquist Act established state policy to reduce wasteful,

uneconomical, and unnecessary uses of energy by employing a range of measures. The California Public Utilities Commission (CPUC) regulates privately-owned utilities in the energy, rail, telecommunications, and water fields.

Energy Action Plan

The first Energy Action Plan (EAP) emerged in 2003 from a crisis atmosphere in California's energy markets. The state's three major energy policy agencies (CEC, CPUC, and the Consumer Power and Conservation Financing Authority [established under deregulation and now defunct]) came together to develop one high-level, coherent approach to meeting California's electricity and natural gas needs. It was the first time that energy policy agencies formally collaborated to define a common vision and set of strategies to address California's future energy needs and emphasize the importance of the impacts of energy policy on the California environment.

In October 2005, Energy Action Plan II, CEC, and CPUC updated their energy policy vision by adding some important dimensions to the policy areas included in the original EAP, such as the emerging importance of climate change, transportation-related energy issues, and research and development activities. The CEC adopted an update to EAP II in February 2008 that supplements the earlier EAPs and examines the State's ongoing actions in the context of global climate change.

State of California Energy Action Plan

The CEC is responsible for preparing the State of California EAP, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The current plan is the 1997 California Energy Plan. The California Energy Plan calls for the state to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for zero-emission vehicles and addressing their infrastructure needs; and encouragement of urban design that reduces vehicle miles traveled (VMT) and accommodates pedestrian and bicycle access.

Assembly Bill 1493

In response to Assembly Bill (AB) 1493, CARB approved amendments to the California Code of Regulations (CCR) adding GHG emission standards to California's existing motor vehicle emission standards. Amendments to CCR Title 13 Sections 1900 (CCR 13 1900) and 1961 (CCR 13 1961) and adoption of Section 1961.1 (CCR 13 1961.1) require automobile manufacturers to meet fleet average GHG emission limits for all passenger cars, light-duty trucks within various weight criteria, and medium-duty passenger vehicle weight classes beginning with the 2009 model year. Emission limits are further reduced each model year through 2016. For passenger cars and light-duty trucks 3,750 pounds or less loaded vehicle weight (LVW), the 2016 GHG emission limits are approximately 37 percent lower than during the first year of the regulations in 2009. For medium-duty passenger vehicles and light-duty trucks 3,751 LVW to 8,500 pounds gross vehicle weight (GVW), GHG emissions are reduced approximately 24 percent between 2009 and 2016.

CARB requested a waiver of federal preemption of California's GHG emissions standards. The intent of the waiver is to allow California to enact emissions standards to reduce carbon dioxide and other GHG emissions from automobiles in accordance with the regulation amendments to the CCRs that fulfill the requirements of AB 1493. The EPA granted a waiver to California to implement its GHG emissions standards for cars.

Assembly Bill 1007

AB 1007, (Pavley, Chapter 371, Statutes of 2005) directed the CEC to prepare a plan to increase the use of alternative fuels in California. As a result, the CEC prepared the State Alternative Fuels Plan in consultation with the State, federal, and local agencies. The State Alternative Fuels Plan presents strategies and actions California must take to increase the use of alternative non-petroleum fuels in a manner that minimizes costs to California and maximizes the economic benefits of in-state production. The State Alternative Fuels Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce GHG emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

Executive Order B-48-18: Zero-Emission Vehicles

In January 2018, Executive Order (EO) B-48-18 was signed into law and requires all state entities to work with the private sector to have at least five million zero-emission vehicles (ZEVs) on the road by 2030, as well as install 200 hydrogen fueling stations and 250,000 electric vehicle charging stations by 2025. It specifies that 10,000 of the electric vehicle charging stations should be direct current fast chargers. EO B-48-18 also requires all state entities to continue to partner with local and regional governments to streamline the installation of ZEV infrastructure. The Governor's Office of Business and Economic Development is required to publish a Plug-in Charging Station Design Guidebook and update the 2015 Hydrogen Station Permitting Guidebook to aid in these efforts. All state entities are required to participate in updating the 2016 ZEV Action Plan (Governor's Interagency Working Group on Zero-Emission Vehicles 2016) to help expand private investment in ZEV infrastructure, with a focus on serving low-income and disadvantaged communities. Additionally, all state entities are to support and recommend policies and actions to expand ZEV infrastructure at residential uses through the Low Carbon Fuel Standard Program and recommend how to ensure affordability and accessibility for all drivers.

Executive Order (N-79-20) and Advanced Clean Cars II

CARB has adopted the Advanced Clean Cars II regulations which aim to significantly reduce emissions from light-duty passenger cars, pickup trucks, and SUVs, beginning with the 2026 model year and continuing through 2035. These regulations take a two-pronged approach. First, they revise the Zero-Emission Vehicle Regulation to mandate an increasing share of zero-emission vehicles, leveraging existing advanced technologies such as battery-electric, hydrogen fuel cell electric, and plug-in hybrid electric vehicles to meet air quality and climate goals. This amendment aligns with Governor Newsom's 2020 Executive Order N-79-20, which requires all new passenger vehicles sold in California to be zero-emission by 2035. Second, updates to the Low-Emission Vehicle Regulations impose progressively stricter standards on gasoline-powered cars and heavier passenger trucks to further reduce smog-forming emissions.

California Energy Code

The California Energy Code (CCR Title 24, Part 6), which is incorporated into the Building Energy Efficiency Standards, was first established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods.

The most recent Title 24 standards are the 2022 Title 24 standards. Buildings permitted on or after January 1, 2023, must comply with the 2022 Standards. The California Energy Commission updates the standards every three years. When compared to the 2019 Title 24 standards, the 2022 update focuses on encouraging electric heat pump technology and use; establishing electric-ready requirements when natural gas is installed; expanding solar photovoltaic (PV) system and battery storage standards; and strengthening ventilation standards to improve indoor air quality.

California Green Building Standards Code

The purpose of the California Green Building Standards Code (CALGreen) (CCR Title 24, Part 11) is to improve public health and safety and to promote the general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices in the following categories: 1) planning and design; 2) energy efficiency; 3) water efficiency and conservation; 4) material conservation and resource efficiency; and 5) environmental quality. CALGreen, which became effective on January 1, 2011, instituted mandatory minimum environmental performance standards for all ground-up new construction of commercial, low-rise residential uses, and State-owned buildings, as well as schools and hospitals. The mandatory standards require the following:

- 20 percent mandatory reduction in indoor water use relative to baseline levels;
- 50 percent construction/demolition waste must be diverted from landfills;
- Mandatory inspections of energy systems to ensure optimal working efficiency; and
- Low-pollutant emitting exterior and interior finish materials such as paints, carpets, vinyl flooring, and particle boards.

The voluntary standards require the following:

- Tier I: 15 percent improvement in energy requirements, stricter water conservation requirements for specific fixtures, 65 percent reduction in construction waste, 10 percent recycled content, 20 percent permeable paving, 20 percent cement reduction, and cool/solar reflective roof.
- Tier II: 30 percent improvement in energy requirements, stricter water conservation requirements for specific fixtures, 75 percent reduction in construction waste, 15 percent recycled content, 30 percent permeable paving, 30 percent cement reduction, and cool/solar reflective roof.

The latest version of CALGreen is the 2022 CALGreen Code, which became effective on January 1, 2023. Between 2010 and 2022, continuous updates and additions have been made to CALGreen, including water conservation and recycling, electric vehicle infrastructure and charging, and changes intended to eliminate conflicts with the California Energy Code, which is Part 6 of Title 24.

Title 20

CCR Title 20 requires manufacturers of appliances to meet State and federal standards for energy and water efficiency. The CEC certifies an appliance based on a manufacturer's demonstration that the appliance meets the standards. New appliances regulated under Title 20 include refrigerators, refrigerator-freezers, and freezers; room air conditioners and room air-conditioning heat pumps; central air conditioners; spot air conditioners; vented gas space heaters; gas pool heaters; plumbing fittings and plumbing fixtures; fluorescent lamp ballasts; lamps; emergency lighting; traffic signal modules; dishwaters; clothes washers and dryers; cooking products; electric motors; low-voltage dry-type distribution transformers; power supplies; televisions and consumer audio and video equipment; and battery charger systems. Title 20 presents protocols for testing each type of appliance covered under the regulations, and appliances must meet the standards for energy performance, energy design, water performance, and water design. Title 20 contains three types of standards for appliances: federal and State standards for federally regulated appliances, State standards for federally regulated appliances, and State standards for non-federally regulated appliances.

Renewable Portfolio Standard

In 2002, the Legislature enacted Senate Bill (SB) 1078 (Stats. 2002, ch. 516), which established the Renewables Portfolio Standard program, requiring retail sellers of electricity, including electrical corporations, community choice aggregators, and electric service providers, to purchase a specified minimum percentage of electricity generated by eligible renewable energy resources, such as wind, solar, geothermal, small hydroelectric, biomass, anaerobic digestion, and landfill gas. SB 1078 set a target by which 20 percent of the State's electricity would be generated by renewable sources. (Public Utility Code, Section 399.11, subdivision (a) [subsequently amended].) As described in the Legislative Counsel's Digest, SB 1078 required "[e]ach electrical corporation … to increase its total procurement of eligible renewable energy resources by at least one percent per year so that 20 percent of its retail sales are procured from eligible renewable energy resources. If an electrical corporation fails to procure sufficient eligible renewable energy resources in a given year to meet an annual target, the electrical corporation would be required to procure additional eligible renewable resources in subsequent years to compensate for the shortfall, if funds are made available as described. An electrical corporation with at least 20 percent of retail sales procured from eligible renewable energy resources in any year would not be required to increase its procurement in the following year."

In 2006, the Legislature enacted SB 107 (Stats. 2006, ch. 464), which modified the Renewables Portfolio Standard to require that at least 20 percent of electricity retail sales be served by renewable energy resources by year 2010. (Public Utility Code, Section 399.11, subdivision (a) [subsequently amended].)

SB X1-2 (Stats. 2011, 1st Ex. Sess., ch. 1) set even more aggressive statutory targets for renewable electricity, culminating in the requirement that 33 percent of the state's electricity come from renewables

by 2020. SB X1-2 applies to all electricity retailers in the state, including publicly owned utilities, investor-owned utilities, electricity service providers, and community choice aggregators. All of these entities must meet renewable energy goals of 20 percent of retail sales from renewables by the end of 2013, 25 percent by the end of 2016, and 33 percent by the end of 2020. (See Public Utility Code, Section 399.11 et seq. [subsequently amended].)

SB 350, discussed above, increases the RPS to require 50 percent of electricity generated to be from renewables by 2030. (Public Utility Code, Section 399.11, subd (a); see also Section 399.30, subdivision (c)(2).) Of equal significance, SB 350 also embodies a policy encouraging a substantial increase in the use of electric vehicles. As noted earlier, Section 740.12(b) of the Public Utilities Code now states that the CPUC, in consultation with CARB and the CEC, must "direct electrical corporations to file applications for programs and investments to accelerate widespread transportation electrification to reduce dependence on petroleum, meet air quality standards, … and reduce emissions of greenhouse gases to 40 percent below 1990 levels by 2030 and to 80 percent below 1990 levels by 2050."

EO B-16-12, issued in 2012, embodied a similar vision of a future in which zero-emission vehicles (ZEV) will play a big part in helping the state meet its GHG reduction targets. EO B-16-12 directed state government to accelerate the market for in California through fleet replacement and electric vehicle infrastructure. EO B-16-12set the following targets:

- By 2015, all major cities in California will have adequate infrastructure and be "ZEV ready";
- By 2020, the State will have established adequate infrastructure to support one million ZEVs in California;
- By 2025, there will be 1.5 million ZEVs on the road in California; and
- By 2050, virtually all personal transportation in the state will be based on ZEVs, and GHG emissions from the transportation sector will be reduced by 80 percent below 1990 levels.

In 2018, SB 100 (Stats. 2018, ch. 312) revised the above-described deadlines and targets so that the State will have to achieve a 50 percent renewable resources target by December 31, 2026 (instead of by 2030) and achieve a 60 percent target by December 31, 2030. SB 100 also establishes a state policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all state agencies by December 31, 2045.

In summary, California has set a statutory goal of requiring that, by 2030, 60 percent of the electricity generated in California should be from renewable sources, with increased generation capacity sufficient to allow the mass conversion of the statewide vehicle fleet from petroleum-fueled vehicles to electrical vehicles and/or other ZEVs. By 2045, all electricity must come from renewable resources and other carbon-free resources. Former Governor Brown had an even more ambitious goal for the State of achieving carbon neutrality as soon as possible and by no later than 2045. This goal was reaffirmed in the Final 2022 Scoping Plan, which lays out a path to achieve state targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels no later than 2045. The Legislature is thus looking to California drivers to buy electric cars, powered by green energy, to help the State meet its aggressive statutory goal, created by SB 32, of reducing statewide GHG emissions by 2030 to 40 percent

below 1990 levels. Another key prong to this strategy is to make petroleum-based fuels less carbon-intensive. A number of statutes in recent years have addressed that strategy.

Senate Bill 1078 (2002), Senate Bill 107 (2006), Executive Order S-14-08 (2008), Senate Bill 350 (2015), and Senate Bill 100 (2018), Assembly Bill 1279 (2022), Senate Bill 1020 (2022)

SB 1078 established the RPS program, which required retail sellers of electricity to provide at least 20 percent of their supply from renewable sources by 2017. This goal has subsequently been accelerated several times. SB 1078 changed the target date to 2010 and EO S-14-08 expanded the State's RPS to 33 percent renewable power by 2020. SB 350 expanded the RPS by requiring retail seller and publicly owned utilities to procure 50 percent of their electricity from eligible renewable energy resources by 2030, with interim goals of 40 percent by 2024 and 45 percent by 2027. SB 100 accelerated and expanded the standards set forth in SB 350 by updating the RPS program to 50 percent eligible renewable energy resources by 2025 and 60 percent by 2030. In addition, SB 100 sets a 100 percent clean, zero carbon, and renewable energy policy for California's electricity system by 2045. Additionally, AB 1279, the California Climate Crisis Act, declares the policy of the State both to achieve net zero GHG emissions as soon as possible, but no later than 2045, and achieve and maintain net negative GHG emissions thereafter, and to ensure that by 2045, statewide anthropogenic GHG emissions are reduced to at least 85 percent below the 1990 levels. Lastly, SB 1020 revised State policy to require that eligible renewable energy resources and zero-carbon resources supply 90 percent of all retail sales of electricity to California end-use customers by December 31, 2035, 95 percent of all retail sales of electricity to California end-use customers by December 31, 2040, 100 percent of all retail sales of electricity to California end-use customers by December 31, 2045, and 100 percent of electricity procured to serve all State agencies by December 31, 2035.

LOCAL

City of Laguna Niguel Municipal Code

Municipal Code Title 5, Division 1, Article 10, *California Green Building Standards Code*, adopts the 2022 California Green Building Standards Code, also referred to as CALGreen.

City of Laguna Niguel CEQA Manual

The City of Laguna Niguel CEQA Manual provides the City and project applicants with local guidelines, procedures, requirements, and thresholds of significance for the environmental review process within the City of Laguna Niguel consistent with the California Environmental Quality Act (Public Resources Code [PRC] Section 21000 et seq.), referred to as "CEQA" or "CEQA Statutes," and the State CEQA Guidelines (Title 14, California Code of Regulations (CCR), Division 6, Chapter 3, Section 15000 et seq.). The City's CEQA Manual applies to all public and private projects under the jurisdiction of the City of Laguna Niguel that constitute a "project" and therefore subject to CEQA review.

The City of Laguna Niguel CEQA Manual relies on CEQA Guidelines Appendix F for guidance on the contents of energy studies. The CEQA Manuel notes that in most cases, a project that relies on modern equipment for construction and complies with California Code of Regulations Title 24 Part 6: Energy Efficiency Standards and the CALGreen Code for building construction would have less than significant impacts. Projects that rely on outdated equipment or are a unique use with high energy demands may

cause a significant impact. In such cases, an energy analysis is required to be prepared by a qualified engineer, typically the same engineer who prepares the air quality study.

4.5.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

CEQA Guidelines Appendix G contains the Initial Study Environmental Checklist, which includes questions related to energy. The City relies on the questions included in Appendix G as the thresholds of significance for assessing impacts to energy (City of Laguna Niguel CEQA Manual, Revised February 24, 2023). A significant impact will occur if implementation of the proposed Project will:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation (refer to Impact Statement EN-1); and/or
- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency (refer to Impact Statement EN-2).

METHODOLOGY

In order to determine whether or not the proposed Project would result in a significant impact on energy use, this EIR includes an analysis of proposed Project energy use. A description of the methodology used to estimate energy emissions is provided within the impact analysis.

The CEQA Guidelines require consideration of the potentially significant energy implications of a project. CEQA requires mitigation measures to reduce "wasteful, inefficient and unnecessary" energy usage (Public Resources Code Section 21100, subdivision [b][3]). According to CEQA Guidelines Appendix G, the means to achieve the goal of conserving energy include decreasing overall energy consumption, decreasing reliance on natural gas and oil, and increasing reliance on renewable energy sources. In particular, a project would be considered "wasteful, inefficient, and unnecessary" if it were to violate State and federal energy standards and/or result in significant adverse impacts related to project energy requirements, energy inefficiencies, energy intensiveness of materials, cause significant impacts on local and regional energy supplies or generate requirements for additional capacity, fail to comply with existing energy standards, otherwise result in significant adverse impacts on energy resources, or conflict or create an inconsistency with applicable plan, policy, or regulation.

4.5.5 IMPACTS AND MITIGATION MEASURES

EN-1: Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Impact Analysis: Buildout of the General Plan Update Land Use Element includes residential, commercial, mixed-use, and other land uses (see Section 2.0, *Project Description* for further detail). The amount of energy used in the Planning Area at buildout of the General Plan Update Land Use Element would directly correlate to the type and size of development, the energy consumption associated with unit appliances, outdoor lighting, and energy use associated with other buildings and activities. Other major sources of

Planning Area energy consumption include fuel used by vehicle trips generated during construction and operational activities, and fuel used by off-road and on-road construction vehicles during construction. The following analysis identifies existing energy consumption and provides an estimate of the energy consumption in the Planning Area resulting from buildout of the General Plan Update Land Use Element at planning horizon year 2045 based on calculated levels of energy use from commonly used modelling software (i.e., CalEEMod v.2022.1 and the CARB's EMFAC2021).

ELECTRICITY AND NATURAL GAS

Operation

Under existing conditions within the Planning Area, total annual electricity (kWh) and natural gas (kBTU) usage associated with operational activities for the existing scenario is shown in Table 4.5-1, *Existing (2025) Operational Electricity and Natural Gas Consumption* (as provided by CalEEMod). The analysis performed uses year 2025.

Table 4.5-1
Existing (2025) Operational Electricity and Natural Gas Consumption

Electricity (kWh/year)	(kBTU/year)
212,937,759	721,592,125
Source: CalEEMod v.2022.12.	

At 2045 buildout, the City of Laguna Niguel's electricity and natural gas consumption would be primarily to power buildings (all types of buildings, including residential, commercial, office, industrial, public, etc.). Total annual electricity (kWh) and natural gas (kBTU) usage associated with operational activities at Project buildout are shown in Table 4.5-2, *Project (2045) Operational Electricity and Natural Gas Consumption* (as provided by CalEEMod). The analysis performed uses a 2045 buildout for a 20-year planning horizon.

Table 4.5-2
Project (2045) Operational Electricity and Natural Gas Consumption

Electricity (kWh/year)	Natural Gas (kBTU/year)
268,747,082	868,773,672
Source: CalEEMod v.2022.12.	

These values represent approximately 1.3 percent of all electricity and 1.5 percent of all natural gas consumed by Orange County in the year 2022 (latest year of data available), based on the available data provided by the California Energy Commission.[13,14]

According to CalEEMod's *Appendix A: Calculation Details for CalEEMod*, CalEEMod uses the California Commercial End Use Survey (CEUS) database to develop energy intensity value for non-residential buildings. The energy use from residential land uses is calculated based on the Residential Appliance Saturation Survey (RASS). Similar to CEUS, this is a comprehensive energy use assessment that includes the end use for various climate zones in California.

As shown, over the course of twenty years (from year 2025 to 2045), and with buildout of the proposed General Plan Update Land Use Element, electricity and natural gas emissions would increase over the existing conditions by approximately 26.2 percent and 20.4 percent, respectively (refer to Table 4.5-1 and Table 4.5-2). This increase in electricity and natural gas consumption would not be considered inefficient, wasteful, or unnecessary since these increases are associated with similar increases in population and employment. Moreover, the State's Renewable Portfolio Standard (RPS), which requires the State to derive at least 33 percent of electricity generated from renewable resources by 2020, 60 percent by 2030, and requires all the State's electricity to come from carbon-free resources by 2045, would ensure that electricity consumption in Laguna Niguel through 2045 would not be inefficient, wasteful, or unnecessary. Furthermore, development within Laguna Niguel through 2045 would be required to comply with applicable energy efficiency regulations, including Title 24 Building Energy Efficiency Standards and CALGreen Building Standards Code. Refer to the discussion under Impact EN-2 for further detail.

Construction

Natural gas is not generally required to power construction equipment and therefore, minimal natural gas usage is anticipated due to subsequent construction activities associated with buildout of the General Plan Update Land Use Element.

Electricity use during subsequent construction activities would be temporary and would fluctuate according to the phase of construction. The majority of construction equipment used during the demolition and grading phases would be gas or diesel powered, and electricity usage is anticipated to be minimal during these stages. Electricity-powered equipment may be required for later construction phases, such as interior construction and architectural coatings; however, 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 result in minimal electricity usage during construction activities.

[13] California Energy Commission, *Electricity Consumption by County,* https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/california-energy-consumption-dashboards-0, accessed January 28, 2025.
[14] California Energy Commission, Natural Gas Consumption by County, https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/california-energy-consumption-dashboards-1, accessed July 21, 2025.

FUEL CONSUMPTION - ON-ROAD VEHICLES

Operation

Based on the *Transportation Analysis* prepared for the Project (Appendix F), total VMT associated with the Planning Area under existing conditions could generate up to 889,139,186 VMT per day. In order to calculate operational on-road vehicle energy usage and emissions, trip lengths generated by CalEEMod were used and proportioned to the estimated daily VMT. Based on year 2025 gasoline and diesel mpg factors for individual vehicle classes as provided by EMFAC, a weighted mpg factor was derived for operational on-road vehicles of approximately 26 mpg for gasoline vehicles and diesel vehicles. With this information, as a conservative estimate, it was calculated that on-road vehicle energy usage in the Planning Area under existing conditions in year 2025 would be approximately 80,508 gallons of gasoline per day and 12,102 gallons of diesel fuel per day, on average, or 29,385,290 annual gallons of gasoline and 4,417,227 annual gallons of diesel fuel annually.

Implementation of the General Plan Update Land Use Element would generate vehicle trips during its operational phase. Based on the *Transportation Analysis* prepared for the Project (Appendix F), total VMT associated with the Planning Area as a result of implementation of the General Plan Update Land Use Element (in addition to existing development) could generate up to 1,030,045,628 VMT per day; however, the Project itself does not propose any specific development. In order to calculate operational on-road vehicle energy usage and emissions, trip lengths generated by CalEEMod were used and proportioned to the estimated daily VMT. Based on year 2045 gasoline and diesel mpg factors for individual vehicle classes as provided by EMFAC, a weighted mpg factor was derived for operational on-road vehicles of approximately 34 mpg for gasoline vehicles and diesel vehicles. This is an improvement of approximately 27 percent from the existing conditions. With this information, as a conservative estimate, it was calculated that on-road vehicle energy usage in the Planning Area at buildout year 2045 would be approximately 72,483 gallons of gasoline per day and 11,720 gallons of diesel fuel per day, on average, or 26,456,423 annual gallons of gasoline and 4,277,818 annual gallons of diesel fuel annually. In addition, the increasing adoption of electric and hybrid vehicles, which are more energy efficient than gasoline and diesel fueled vehicles, is occurring throughout the State, consistent with the requirements of CARB's Advanced Clean Cars II regulation, and would be expected to comprise a growing proportion of operational on-road vehicle use during the development of subsequent projects consistent with the General Plan Update Land Use Element. These electric vehicles would increasingly be fueled by renewable electricity generation as required under the RPS program.

FUEL CONSUMPTION - ON- AND OFF-ROAD VEHICLES

Construction

Buildout of the General Plan Update Land Use Element would also generate on-road vehicle trips during the 20-year period for construction activities (from construction workers, vendors, and haulers) as well as off-road vehicle use at construction sites. The amount of fuel consumption associated with construction activities cannot be accurately estimated due to the lack of information on the totality of construction equipment necessary for development on a citywide basis. However, construction related fuel efficiency

is anticipated to be typical of construction vehicles available at the time of development (or better).[15] Although the fuel usage of construction activities cannot be accurately quantified at this time due to lack of detail regarding the specific nature and timing of individual development projects associated with buildout of the General Plan Update Land Use Element, individual development projects would be subject to all applicable CARB regulations, including the In-Use Off-Road Diesel-Fueled Fleets Regulation (Off-Road Regulation), the Advanced Clean Fleets Regulation, and the Advanced Clean Trucks Regulation, which ensure increasing fuel efficiency over time and as a result, older, less fuel-efficient construction vehicles would be phased out. In addition, energy efficient electric on-road and off-road vehicles are beginning to be available and would comprise a growing proportion of construction equipment during the development of subsequent projects consistent with the General Plan Update Land Use Element. Lastly, it should be noted that Mitigation Measure AQ-1 requires construction-related mitigation for qualifying individual development projects that exceed the City's adopted thresholds of significance. Depending on the particular project, this may include use of Tier 4 offroad engine exhaust standards or the most stringent exhaust standards for equipment available at the time of project approval, and/or other construction-related measures that would reduce construction-related fuel consumption (refer to Mitigation Measure AQ-1 in Section 4.2, *Air Quality*).

Chet Holifield Federal Building Demolition

The Project assumes that the Chet Holifield Federal Building (CHFB) will be demolished as part of a future redevelopment effort. The following analyzes energy usage associated with future demolition of the CHFB site. This assessment is specific to the demolition of the site and does not include subsequent construction activities that may occur with buildout of the General Plan Update Land Use Element, which is included within the overall analysis of the General Plan Update Land Use Element, discussed above.

Demolition of the CHFB site would involve crushing, grading, and hauling activities, utilizing off-road construction equipment powered exclusively by diesel and gasoline fuel.[16] Additionally, construction-related traffic would include vehicles used by workers and vendors traveling to and from the site, as well as on-road haul trucks transporting materials from site clearing, demolition, and soil import/export for grading.

Off-road equipment usage associated with demolition of the CHFB site was calculated using data on equipment mix, daily hours of operation, horsepower, load factors, and phase duration; refer to CalEEMod construction output in Appendix B. Fuel consumption for construction worker commutes, vendor deliveries, and haul trucks was derived from trip rates and travel distances listed in the CalEEMod construction output files. Total VMT for each construction-related trip type were calculated and divided by Orange County-specific miles per gallon factors from the CARB EMFAC model, which provides annual VMT and fuel usage by vehicle type. Consistent with CalEEMod assumptions, construction worker trips

[15] The average fuel efficiency of individual development projects that would occur with buildout of the General Plan Update Land Use Element would be similar to the average fuel efficiency for development projects across the region as a whole.
[16] The majority of construction equipment that is used for demolition activities are gas or diesel powered. Therefore, activities associated with demolition of the CHFB site are not anticipated to use natural gas or electricity.

are composed of 50 percent light-duty gasoline autos and 50 percent light-duty gasoline trucks, while vendor and haul trucks are classified as heavy-duty diesel vehicles. Other modeling assumptions that were made for the CalEEMod modeling associated with the demolition of the CHFB site, based on available data (including information provided by a demolition contractor) are:

- Demolition activities were assumed to begin in early 2026 and extend to early 2027.[17]
- Demolition would occur for a 1,000,000 square foot building, as well as 2,526,481 square feet of asphalt.
- Demolition activity equipment types and numbers were provided by a demolition contractor.
- A total of approximately 79,686 tons of demolition debris would be generated during demolition-related activities.
- Worker, hauling, and on-site trips and trip lengths were provided by the demolition contractor:
    - 35 daily one-way worker trips at 18.5 miles in length
    - 7 daily one-way hauling trips at 102.4 miles in length
    - 7 daily on-site truck trips at 0.25 miles in length

As indicated in Table 4.5-3, *Energy Use During CHFB Site Demolition*, construction-related activities associated with demolition of the CHFB site are estimated to consume a total of approximately 27,337 gallons of diesel fuel and 18,848 gallons of gasoline.

Table 4.5-3
Energy Use During CHFB Site Demolition

Source	Gasoline	Diesel
Off-road Construction Equipment	14,106	27,302
Worker commute	4,742	28
Vendors	0	0
On-road haul	0	7
Totals	**18,848**	**27,337**
Source: CalEEMod v.2022.12.		

Fuel energy consumed during the demolition activities would be temporary in nature and there are no unusual characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in other parts of the region or State. Demolition of the CHFB site would comply with applicable regulations relating to demolition activities, including the In-Use Off-Road Diesel-Fueled Fleets Regulation (Off-Road Regulation), the Advanced Clean Fleets Regulation, and the Advanced Clean Trucks regulation. Compliance with these regulations would ensure that the Project would not waste energy or use it in an inefficient manner. In addition, the energy usage for demolition of the CHFB site would be similar to the energy usage for other types of demolition projects of a similar size within the region. Lastly, compared with energy usage for the region as a whole, fuel

[17] This is a conservative assumption, since demolition activities that occur in later years (after 2026), would have lower emissions when compared to the modeled emissions, since construction-related vehicles (both on- and off-road) would improve average vehicle efficiency over time.

energy consumed during demolition activities would be negligible; specifically, according to the California Energy Commission, approximately 13.4 billion gallons of gasoline fuel and 3.5 billion gallons of diesel fuel were consumed per year.[18,19] Therefore, activities associated with demolition of CHFB site represents approximately 0.0001 percent of all gasoline and diesel fuel used per year within the State of California. Overall, this ensures that the proposed construction activities for demolition of the CHFB site would not result in inefficient, wasteful, or unnecessary fuel consumption.

CONCLUSION

The General Plan Update Land Use Element would not result in any significant adverse impacts related to Project energy requirements, energy use inefficiencies, and/or the energy intensiveness of materials by amount and fuel type with buildout of the General Plan Update Land Use Element, including during construction, operation, maintenance, and/or removal. Subsequent development within the City would be required to comply with all existing energy standards, and there would be no resulting significant adverse impacts on energy resources. For the reasons stated above, buildout of the General Plan Update Land Use Element and demolition of the CHFB site would not cause inefficient, wasteful, or unnecessary use of energy resources nor conflict with or obstruct a State or local plan for renewable energy or energy efficiency. More specifically, the Project would not violate State and federal energy standards and/or result in significant adverse impacts related to project energy requirements, energy inefficiencies, energy intensiveness of materials, cause significant impacts on local and regional energy supplies or generate requirements for additional capacity, fail to comply with existing energy standards, otherwise result in significant adverse impacts on energy resources, or conflict or create an inconsistency with applicable plan, policy, or regulation. Therefore, impacts would be less than significant, and no mitigation measures would be required.

Furthermore, the General Plan Update includes a range of proposed policies towards increasing energy efficiency, energy conservation, and reducing vehicle travel, which would potentially reduce energy usage, further minimizing impacts related to energy. Land Use Element Policy LU-1.10 would implement policies that encourage the efficient use of land and infrastructure to reduce environmental impacts and support long-term community sustainability. Mobility Element Policy M-1.2 supports an integrated transportation network as a system that accommodates and promotes various modes of travel, such as walking, bicycling, public transit, enhancing multimodal connectivity throughout the City and contributing to environmental sustainability. Resource Management Element Policy 6.1 includes efforts to reduce energy use in City operations and improve energy efficiency and storage. Policy RM-6.2 encourages energy conservation and the adoption of renewable energy sources, lower greenhouse gas emissions, and foster a more sustainable community. This includes implementing innovative energy-saving strategies and utilizing renewable energy sources throughout the community, in close partnership with other agencies and local energy providers.

[18] California Energy Commission, *California Gasoline Data, Facts, and Statistics,* https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-gasoline-data-facts-and-statistics, accessed , August 15, 2025.
[19] California Energy Commission, *Diesel Fuel Data, Facts, and Statistics, https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/diesel-fuel-data-facts-and-statistics*, accessed August 15, 2025.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

LAND USE ELEMENT

Goal LU-1: **Land Use Planning.** Establish a balanced land use pattern that integrates residential, commercial, and employment uses with open space and public services to support a vibrant, sustainable community that offers a high quality of life.

Policy LU-1.1: **Promote Mixed-Use Development.** Encourage mixed-use zoning in strategic locations to combine residential, commercial, and employment uses. This approach aims to create vibrant, walkable neighborhoods that enhance community engagement and drive economic activity.

Policy LU-1.10: **Sustainable Development Practices.** Implement policies that encourage the efficient use of land and infrastructure to reduce environmental impacts and support long-term community sustainability.

Policy LU-1.11: **Mobility and Connectivity.** Prioritize transportation planning and infrastructure that connects residential, commercial, and employment areas efficiently, with a focus on improving transportation options, including pedestrian paths and bicycle lanes to promote sustainable and non-motorized transportation options when evaluating land use options and development projects.

Policy LU-1.12: **Residential and Non-Residential Capacities.** Ensure the levels of residential and non-residential building development remain within the established baseline General Plan buildout limits (Maximum Development Intensities – MDIs) for the Sub-profile Areas.

Policy LU-2.8: **Pedestrian-Friendly Environments.** Prioritize pedestrian-oriented design and connectivity by incorporating thoughtfully planned tree-lined sidewalks, pathways, and active street fronts throughout new developments. This includes a focus on human-scale building frontages that create visually appealing and pedestrian-friendly environments, as well as pedestrian safe connections to surrounding streets.

MOBILITY ELEMENT

Goal M-1: **Transportation Network.** A well-planned and comprehensive multimodal transportation system that connects neighborhoods, jobs, shopping, recreation, and transit hubs.

Policy M-1.1: **Balanced Circulation Network**. Support the design, management, maintenance, and enhancement of a multimodal roadway network that accommodates the City's current and future development as outlined in the Land Use Element. This includes maintaining and adapting the Laguna Niguel's Circulation Plan Figure M-1 and related

infrastructure to ensure safe, efficient, and well-connected links between neighborhoods, workplaces, shopping, recreation, and transit hubs.

Policy M-1.2: **Multimodal Transportation**. Support an integrated transportation network as a system that accommodates and promotes various modes of travel, such as walking, bicycling, public transit, enhancing multimodal connectivity throughout the City and contributing to environmental sustainability.

Policy M-1.3: **Mobility Hubs.** Support the development and enhancement of mobility hubs Figure M-8 to serve as centralized, convenient points linking a variety of transportation options.

Policy M-1.5: **Land Use Planning**. Align transportation planning with land use decisions to support a multimodal system that minimizes traffic congestion and reduces environmental impacts from future developments.

Policy M-1.7: **Vehicle Miles Traveled.** For qualifying development projects, ensure the preparation of a Vehicle Miles Traveled analysis in accordance with the City's Transportation Assessment Guidelines and compliance with applicable state law(s) aimed at reducing vehicle travel distances from and within the City.

Policy M-1.8: **Travel Demand Management.** Encourage the development and implementation of travel demand management programs to reduce peak-hour traffic congestion and help reduce vehicles miles traveled within the community.

Goal M-2: **Active Transportation.** A balanced transportation network that supports walking, bicycling, and other non-motorized modes of travel, fostering active lifestyles, environmental sustainability, and enhancing the overall quality of life for the Laguna Niguel community.

Policy M-2.1: **Active Transportation.** Maintain and enhance the City's pedestrian, bicycle, and multi-use trail networks to support safe, convenient, well-connected, and efficient non-motorized travel for both recreational and commuting purposes. New development projects should make positive contributions towards these active transportation efforts with connected street systems and dedicated pedestrian friendly paths.

Policy M-2.2: **Connectivity and Accessibility.** Prioritize infrastructure improvements that enhance connectivity between neighborhoods, workplaces, schools, recreation, shopping areas, and transit hubs, ensuring safe and accessible routes for all users.

Policy M-2.3: **Active Lifestyles and Environmental Sustainability**. Support active transportation to reduce automobile reliance, promote environmental sustainability, and encourage active lifestyles throughout the community.

Policy M-2.8 **Last-Mile Connectivity.** Coordinate active transportation routes, such as bike paths and pedestrian walkways, with transit stops to improve last-mile connections, promoting greater transit ridership, active lifestyles, and environmental sustainability.

RESOURCE MANAGEMENT ELEMENT

Policy RM-5.2: **Sustainable Infrastructure.** Consider implementing sustainable technologies and practices in the development and maintenance of public infrastructure projects.

Goal RM-6: **Energy Resources.** Implement sustainable energy practices that strengthen community resilience, economic stability, and long-term energy adaptability.

Policy RM-6.1: **Energy Compliance and Sustainability.** Ensure state energy compliance by adhering to all power generation requirements and encouraging renewable energy expansion. This also includes efforts to reduce energy use in City operations and pursuing partnerships to improve energy efficiency, storage, and microgrid solutions.

Policy RM-6.2: **Energy Conservation and Renewable Energy.** Encourage energy conservation and the adoption of renewable energy practices within the City and by residents and businesses to reduce reliance on traditional energy sources, lower greenhouse gas emissions, and foster a more sustainable community. This includes implementing innovative energy-saving strategies and utilizing renewable energy sources throughout the community, in close partnership with other agencies and local energy providers.

Policy RM-6.3: **Green Building Standards.** Ensure all new development projects comply with the current version of the California Green Building Standards Code.

Policy RM-6.4: **Electric Vehicles.** Encourage electric vehicle use by expanding citywide electric vehicle charging infrastructure. This includes the provision of electric vehicle charging stations at City facilities and encouraging their installation at workplaces, multifamily residential communities, and commercial centers to improve accessibility and convenience for electric vehicle owners.

EN-2: Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Impact Analysis: Buildout of the General Plan Update Land Use Element would use energy resources for the operation of buildings (electricity and natural gas), for on-road vehicle trips (e.g., gasoline and diesel fuel), and from off-road construction activities (e.g., diesel fuel) associated with 2045 buildout of the General Plan Update Land Use Element. Each of these activities would require the use of energy resources.

Buildout of the General Plan Update Land Use Element would not conflict with or obstruct regional plans for renewable energy or energy efficiency. Section 4.7, *Greenhouse Gas Emissions*, provides a consistency analysis of the proposed General Plan Update with SCAG's 2024-2050 RTP/SCS (Table 4.7-3). The 2024-2050 RTP/SCS is supported by a combination of transportation and land use strategies that help the region achieve State GHG emissions reduction goals and FCAA requirements, preserve open space areas, improve public health and roadway safety, support vital goods movement industry, and utilize resources more efficiently.

Other Statewide measures, including those intended to improve the energy efficiency of the statewide passenger and heavy-duty truck vehicle fleet (e.g., the Pavley Bill and the Low Carbon Fuel Standard), would improve vehicle fuel economies, thereby conserving gasoline and diesel fuel. These energy savings would continue to accrue over time, and the General Plan Update would not obstruct or conflict with their implementation.

SCE is responsible for the mix of energy resources used to provide electricity for its customers, and it is in the process of implementing the RPS to increase the proportion of renewable energy (e.g., solar and wind) within its energy portfolio. SCE is expected to achieve at least 60 percent renewables by 2030, and 100 percent zero-carbon electricity by 2045 (in compliance with SB 100). The General Plan Update would not conflict with or obstruct SCE's plans for renewable energy.

The City does not have a local plan for renewable energy or energy efficiency. Laguna Niguel Municipal Code Title 5, Division 1, Article 10, *California Green Building Standards Code*, adopts the 2022 California Green Building Standards Code, also referred to as CALGreen. CALGreen encourages sustainable construction practices in several categories, including energy efficiency. Subsequent development projects would be required to comply with the City's Municipal Code, including CALGreen standards for energy efficiency. More specifically, new development would be required to install on-site solar photovoltaic (PV) systems, consistent with the latest version of Title 24 Building Energy Efficiency Standards. This would increase the amount of solar energy generation and greatly reduce the amount of electricity demand for subsequent development projects associated with buildout of the General Plan Update Land Use Element. Additional project-specific sustainability features implemented by subsequent development projects would further energy consumption of individual projects.

As demonstrated above, the General Plan Update would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency, and impacts would be less than significant.

Furthermore, the General Plan Update includes a range of policies to promote energy efficiency and support state and regional plans for renewable energy or energy efficiency. The policies in the General Plan Update are intended to complement and further the intent of Statewide and local energy conservation measures, thereby providing guidance for additional actions intended to minimize potential impacts associated with energy use. For example, Land Use Element Goal LU-1 and related policies support a balanced and integrated land use pattern that would facilitate multimodal transportation options and potentially reduce vehicle trips. The Mobility Element likewise contains goals and policies that promote multimodal travel. For example, Policy M-1.2 supports an integrated transportation network that accommodates and promotes various modes of travel. Policy M-1.7 ensures preparation of a Vehicle Miles Traveled analysis for qualifying development projects in accordance with the City's Transportation Assessment Guidelines and compliance with applicable State laws aimed at reducing vehicle travel distances from and within the City. The Resource Management Element contains goals and policies related to the sustainable use of energy resources, including Goal RM-6 and related policies.

Chet Holifield Federal Building Demolition

Demolition of the CHFB site would not obstruct a state or local plan for renewable energy or energy efficiency. Demolition of the CHFB site would be required to comply with local regulations regulating

energy usage, including the City's Municipal Code and CALGreen, during construction activities. Moreover, as described under Impact EN-1, energy usage during CHFB site demolition activities would be similar to the energy usage of other demolition projects of a similar size within the region. Thus, impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan Update goals and policies cited above in EN-1.

4.5.6 CUMULATIVE IMPACTS

Section 3.0, *Basis of Cumulative Analysis*, identifies projected regional growth having the potential to interact with the proposed Project to the extent that a significant cumulative effect may occur. The geographic setting for energy would be the Orange County region.

Would the project, combined with other related cumulative projects, result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Impact Analysis: As previously discussed, subsequent construction and operational activities associated with buildout of the General Plan Update would not result in significant impacts due to wasteful, inefficient, or unnecessary consumption of energy resources. As described under Impact EN-1, the State's Renewable Portfolio Standard (RPS), which requires the State to derive at least 33 percent of electricity generated from renewable resources by 2020, 60 percent by 2030, and requires all the State's electricity to come from carbon-free resources by 2045, would ensure that electricity consumption in Laguna Niguel through 2045 would not be inefficient, wasteful, or unnecessary. As subsequent development projects are proposed, they would be reviewed to determine compliance with relevant State, regional, and local programs and requirements for renewable energy and energy efficiency. The proposed Project, inclusive of the CHFB site demolition, as well as subsequent development projects associated with the General Plan Update, would comply with applicable regulations relating to construction and demolition activities, including the In-Use Off-Road Diesel-Fueled Fleets Regulation (Off-Road Regulation), the Advanced Clean Fleets Regulation, and the Advanced Clean Trucks regulation, further providing for better energy efficiency. Thus, the Project would not be considered inefficient, wasteful, or unnecessary regarding energy.

Similar to the proposed Project, related cumulative projects within the region would be reviewed at the project level to determine energy consumption and would be subject to applicable State programs and requirements, Title 24 standards, which include the CALGreen Code, and applicable local requirements of the jurisdiction in which the development is located relative to renewable energy and energy efficiency. Individual projects would be reviewed for their potential to result in wasteful, inefficient, or unnecessary consumption of energy resources. The General Plan Update's incremental effects associated with a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan goals and policies cited above.

Would the project, combined with other related cumulative projects, conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Impact Analysis: As discussed in Impact EN-2, the General Plan Update, including demolition of the CHFB site, would not conflict with or obstruct a state, regional, or local plan for renewable energy or energy efficiency. The Project would be consistent with the 2024-2050 RTP/SCS which encourages the use of technology and sustainability policies to reduce overall energy consumption and subsequent projects would be required to comply with Title 24 standards, which include the CAL Green Code, at the local level. Similarly, related cumulative projects would be required to comply with energy conservation plans and efficiency standards and would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. As such, the General Plan Update's incremental effect associated with the potential to conflict with or obstruction of a plan for renewable energy or energy efficiency would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan goals and policies cited above.

4.5.7 SIGNIFICANT UNAVOIDABLE IMPACTS

Energy impacts associated with the implementation of the General Plan Update would be less than significant. No significant unavoidable impacts associated with energy would occur as a result of the General Plan Update.

4.5.8 REFERENCES

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U.S. Energy Information Administration, *Monthly Energy Review*, https://www.eia.gov/totalenergy/data/monthly/, accessed January 28, 2025.

U.S. Energy Information Administration, *State Energy Data System: 1960-2022,* June 2024.

4.6 GEOLOGY AND SOILS

4.6.1 PURPOSE

This section identifies the existing geology, soils, and seismicity conditions within the Planning Area and provides an analysis of potential impacts associated with implementation of the General Plan Update Land Use Element.

This section is based in part on the *Cultural and Paleontological Resources Assessment for the Laguna Niguel General Plan Update Project* (Cultural Resources Study), prepared by Cogstone Resource Management, and revised August 2025; refer to Appendix D, *Cultural and Paleontological Resources Study*.

4.6.2 ENVIRONMENTAL SETTING

GEOLOGIC CONDITIONS

The Planning Area is located within the Peninsular Ranges Geomorphic Province, which extends from Mount San Jacinto in the north to Baja California in the south and includes the Inland Empire, Los Angeles, Orange, and San Diego Counties. The Peninsular Ranges Geomorphic Province is located in the southwestern corner of California and is bounded by the Transverse Ranges Geomorphic Province to the north and the Colorado Desert Geomorphic Province to the east. This geomorphic province is characterized by elongated northwest-trending mountain ridges separated by sediment-floored valleys. Many faults to the west of the Salton Trough section of the San Andreas Fault Zone parallel this northwest-southeast trending fault zone and have taken up some of the strain of the San Andreas.

Peninsular Ranges

The Peninsular Ranges Geomorphic Province consists of a series of mountain ranges separated by long valleys, formed from faults branching from the San Andreas Fault.[1] The topographic trend is similar to the Coast Ranges, but the geology is more like the Sierra Nevada, with granitic rocks intruding the older metamorphic rocks. The Los Angeles Basin and the Channel Islands of Santa Catalina, Santa Barbara, San Clemente, and San Nicolas are included in this province. At the northern end of the province, Mount San Jacinto forms the dramatic backdrop to the Coachella Valley more than 10,000 feet below. The Peninsular Ranges extend south across the international border into Baja California, forming the spine of Baja California.

Regional Geology

The geology of southern California formed as a result of complex plate tectonics and fault movement. The most notable fault in southern California, the San Andreas Fault, is a right lateral strike-slip (or transform) fault that marks the boundary between the Pacific tectonic plate and the North American tectonic plate.[2]

[1] California Department of Conservation, California Geological Survey, *Note 36: California Geomorphic Provinces,* December 2002.
[2] Wallace, R., *The San Andreas Fault System, California. U.S. Geological Survey Professional Paper 1515*, 1990.

Both plates are moving northward, but the Pacific plate is moving at a faster rate than the North American plate and the relative difference in the two rates results in movement along the San Andreas Fault. Northwest of the Los Angeles basin, where the southern San Joaquin Valley meets the San Emigdio and Tehachapi Mountains, the orientation of the San Andreas Fault changes from generally northwest to west-northwest. This portion of the fault system is known as the "Big Bend." Another large fault in southern California, the left-lateral Garlock Fault, intersects the San Andreas Fault system at this location. This bend in the San Andreas Fault system results in transgressional forces between the two tectonic plates, a geologic result of which was the uplift of the Transverse Ranges, including the San Gabriel Mountains.

Geologically the City is within the eastern portion of the San Joaquin Hills, a part of the Peninsular Ranges Geomorphic Province. These hills are the product of the environmental conditions that have shifted and shaped the terrain during geologic time. The tectonic forces acting on the Peninsular Ranges over the past 1–2 million years have broadly compressed and warped geologically young marine sediments from the sea to elevations over 1,000 feet in these hills. These bedrock sediments have been continuously worn by erosion into the subtle, rolling hillsides characteristic of southern Orange County.

From approximately 10,000 through 30,000 years ago, a distinctly wetter climate generated a dynamic erosional environment regionally and locally. This period coincides with an overall globally cooler climate and is responsible for most of the topography seen in the City of Laguna Niguel today. This environment resulted in flowing rivers and deeply cut canyons flanked by uplifted and saturated hillsides. Numerous landslides occurred throughout Laguna Niguel and surrounding areas during this time.

FAULTS

Faults are classified as Historic, Holocene, Late Quaternary, Quaternary, and Pre-Quaternary according to the age of most recent movement.[3] These classifications are described as follows:

- **Historic:** faults on which surface displacement has occurred within the past 200 years;
- **Holocene:** shows evidence of fault displacement within the past 11,000 years, but without historic record;
- **Late Quaternary:** shows evidence of fault displacement within the past 700,000 years, but may be younger due to a lack of overlying deposits that enable more accurate age estimates;
- **Quaternary:** shows evidence of displacement sometime during the past 1.6 million years; and
- **Pre-Quaternary:** without recognized displacement during the past 1.6 million years.

[3] California Department of Conservation, California Geological Survey (Jennings, C. & Bryant, W.), *An Explanatory Text to Accompany the Fault Activity Map of California*, 2010. Available at: https://www.conservation.ca.gov/cgs/documents/publications/geologic-data-maps/GDM_006-FAM-Pamphlet-2010.pdf. Accessed January 2025.

Faults are further distinguished as active, potentially active, or inactive.[4]

- **Active:** An active fault is a Historic or Holocene fault that has had surface displacement within the last 11,000 years;
- **Potentially Active:** A potentially active fault is a pre-Holocene Quaternary fault that has evidence of surface displacement between about 1.6 million and 11,000 years ago; and
- **Inactive:** An inactive fault is a pre-Quaternary fault that does not have evidence of surface displacement within the past 1.6 million years. The probability of fault rupture is considered low; however, this classification does not mean that inactive faults cannot, or will not, rupture.

Figure 4.6-1, *Regional Faults*, illustrates the location of nearby fault zones within the Planning Area. Among these, the Newport-Inglewood-Rose Canyon Fault is located approximately 2.1 miles west of the Planning Area, the San Joaquin Thrust Fault lies approximately 1.9 miles to the north, the Pelican Thrust Fault is about 4.4 miles to the west, and the Oceanside Fault is situated roughly 4.7 miles to the southwest of the Planning Area.

SEISMIC HAZARDS

Seismic hazards include both rupture (surface and subsurface) along active faults and ground shaking, which can occur over wider areas. Ground shaking, produced by various tectonic phenomena, is the principal source of seismic hazards in areas devoid of active faults. All areas of California are subject to some level of seismic ground shaking. Strong ground shaking from an earthquake can result in damage associated with landslides, ground lurching, structural damage, and liquefaction.

Several scales may be used to measure the strength or intensity of an earthquake.[5] Magnitude scales, like the moment magnitude (Mw), measure the size of the earthquake at its source. An earthquake event has a single magnitude; however, the degree of ground shaking that the earthquake causes varies from place to place based on distance, type of surface material, and other factors. Magnitude is expressed as a number. For example, a magnitude 5.3 is a moderate earthquake, and a 6.3 is a strong earthquake. Because of the logarithmic basis of the magnitude scale, each whole number increase in magnitude represents a tenfold increase in measured amplitude as measured on a seismogram.

In contrast to magnitude, other scales describe earthquake intensity, which can vary depending on distance from earthquake epicenter and local characteristics. The Modified Mercalli Intensity Scale expresses earthquake intensity experienced at a particular location on a scale of increasing levels of intensity that range from imperceptible shaking to catastrophic destruction. It does not have a mathematical basis; instead, it is an arbitrary ranking based on observed effects. Table 4.6-1, *Modified*

[4] California Department of Conservation, California Geological Survey (Jennings, C. & Bryant, W.), *An Explanatory Text to Accompany the Fault Activity Map of California*, 2010. Available at: https://www.conservation.ca.gov/cgs/documents/publications/geologic-data-maps/GDM_006-FAM-Pamphlet-2010.pdf. Accessed January 2025.

[5] United States Geological Survey, *Earthquake Magnitude, Energy Release, and Shaking Intensity*, https://www.usgs.gov/programs/earthquake-hazards/earthquake-magnitude-energy-release-and-shaking-intensity#:~:text=Moment%20Magnitude%20(MW)%20is,magnitude%20range%20where%20they%20overlap., accessed January 2025.

Mercalli Intensities and Effects, represents the potential effects of an earthquake based on the Modified Mercalli Intensities.

Table 4.6-1
Modified Mercalli Intensities and Effects

Intensity	Shaking	Description/Damage
I	Not felt	Not felt except by very few under especially favorable conditions.
II	Weak	Felt only by a few persons at rest, especially on upper floors of buildings.
III	Weak	Felt quite noticeably by persons indoors, especially on upper floors of buildings. Many people do not recognize it as an earthquake. Vibrations similar to the passing of a truck.
IV	Light	Felt indoors by many, outdoors by few during the day. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like a heavy truck striking a building. Standing vehicles are rocked noticeably.
V	Moderate	Felt by nearly everyone; many awakened: Some dishes and windows are broken. Unstable objects are overturned. Pendulum clocks may stop.
VI	Strong	Felt by all, and many are frightened. Some heavy furniture is moved; a few instances of fallen plaster occur. Damage is slight.
VII	Very strong	Damage is negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built or badly designed structures; some chimneys are broken.
VIII	Severe	Damage slight in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned.
IX	Violent	Damage is considerable in specially designed structures; well-designed frame structures are thrown out of plumb. Damage is great in substantial buildings, with partial collapse. Buildings are shifted off foundations.
X	Extreme	Some well-built wooden structures are destroyed; most masonry and frame structures are destroyed with foundations. Rails are bent.

Source: United States Geological Survey, *The Modified Mercalli Intensity Scale.* Available at: https://www.usgs.gov/programs/earthquake-hazards/modified-mercalli-intensity-scale. Accessed January 26, 2024.

A relatively new earthquake forecast model, referred to as the Uniform California Earthquake Rupture Forecast, Version 3, or UCERF3, provides estimates of the likelihood and severity of potentially damaging earthquake ruptures in California. The UCERF3 can be combined with other ground motion prediction models to produce estimates of the severity of ground shaking that can be expected during a given period (seismic hazard), and of the threat to the built environment (seismic risk). This information is used for disaster planning and mitigation efforts, to inform engineering design and building codes, and to evaluate earthquake insurance premiums.

Results for the Los Angeles region faults, which includes the Laguna Niguel region, based on the UCERF3 are shown in Table 4.6-2, *Likelihood of Having One or More Earthquakes by Size in the Next 30 Years (Starting from 2014)*.

Table 4.6-2
Likelihood of Having One or More Earthquakes by Size in the Next 30 Years (Starting from 2014)

Magnitude (greater than or equal to)	Average repeat time (years)	30-year likelihood of one or more events	Readiness
5	1.4	100%	1.0
6	10	96%	1.0
6.7	40	60%	1.1
7	61	46%	1.2
7.5	109	31%	1.3
8	532	7%	1.3

Source: United States Geological Survey, *UCERF3: A New Earthquake Forecast for California's Complex Fault System*, March 2015, https://pubs.usgs.gov/fs/2015/3009/pdf/fs2015-3009.pdf.
Note: Readiness indicates the factor by which probabilities are currently elevated, or lower, because of the length of time since the previous large earthquake. A factor of 1.0 indicates current earthquake likelihood relative to long-term likelihood is equal; a factor above 1.0 indicates elevated probabilities; and a factor below 1.0 indicates lower probabilities.

Based on the available science, the USGS has predicted the probabilities of earthquakes within California, including the southern California/Los Angeles Region. The USGS Earthquake Probabilities predicts the probability that an earthquake will occur in the Los Angeles region within the next 30 years:[6]

- 60 percent that an earthquake measuring magnitude 6.7 will occur;
- 46 percent that an earthquake measuring magnitude 7 will occur; and
- 31 percent that an earthquake measuring magnitude 7.5 will occur.

SEISMIC HAZARD ZONES

Alquist-Priolo Fault Zone

An active earthquake fault, per California's Alquist-Priolo Act, is one that has ruptured within the Holocene Epoch (approximately 11,000 years). Based on this criterion, the California Geological Survey (CGS) identifies Earthquake Fault Zones. These Earthquake Fault Zones are identified in Special Publication 42 (SP42), which is updated as new fault data become available. SP42 lists all counties and cities within

[6] United States Geological Survey, *What is the probability that an earthquake will occur in the Los Angeles Area? In the San Francisco Bay area?*. Available at: https://www.usgs.gov/faqs/what-probability-earthquake-will-occur-los-angeles-area-san-francisco-bay-area#:~:text=Within%20the%20next%2030%20years,an%20earthquake%20measuring%20magnitude%207.5. Accessed January 2025.

California that are affected by designated Earthquake Fault Zones. The Earthquake Fault Zones are delineated on maps within SP42 (Earthquake Fault Zone Maps).

Southern California is a region of high seismic activity. Similar to most cities in the region, Laguna Niguel is subject to risks associated with potentially destructive earthquakes. While there are no known active or potentially active faults in the City, there are several active faults located within Orange County. The Newport-Inglewood Fault angles from offshore near Dana Point and passes through the northwestern portion of the County and is believed capable of producing a maximum credible earthquake of 7.5 magnitude. The Whittier Fault roughly parallels the Newport-Inglewood Fault across the northeasterly edge of the County and the maximum credible earthquake estimated is 7.0 magnitude. Earthquakes on faults located outside Orange County can also cause damage within Laguna Niguel. Depending on their magnitude, earthquakes can cause minor to moderate damage to an area within a fifty-mile radius of their epicenter. Active faults outside the County that have the potential to impact the City include, but are not limited to, the San Andreas; San Jacinto, Malibu-Coast, Palos Verdes, San Gabriel, and Sierra Madre-Santa Susana-Cucamonga faults.

Seismic Hazard Zones

The California Seismic Hazards Mapping Act of 1990 addresses hazards along active faults. The Planning Area is within the San Juan Capistrano Quadrangle, as delineated by CGS.[7] Seismic hazard zones are currently mapped within the San Juan Capistrano quadrangles, and include areas mapped for liquefaction and landslide hazards, as described further below.

LIQUEFACTION

Liquefaction is a phenomenon in which the strength and stiffness of soil is reduced by earthquake shaking or other events. Liquefaction is primarily associated with loose, saturated materials in which the space between individual soil particles is filled with water. Cohesion between the loose materials that comprise the soil may be jeopardized during seismic events, and the ground will take on liquid properties. Thus, liquefaction requires specific soil characteristics, high ground water, and seismic shaking.

Liquefaction zones are areas where historical occurrence of liquefaction, or local geological, geotechnical, and ground water conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693(c) would be required. As shown in Figure 4.6-2, *Seismic Hazard Zones*, there are three areas within Laguna Niguel designated as having the potential for liquefaction: one in the northwestern portion near La Paz Road and Aliso Creek Road, a second in the northeastern position along Camino Capistrano, and a third in the southcentral position along Crown Valley Parkway.

[7] Department of Conservation, *California Geological Survey, Earthquake Zones of Required Investigation Maps and Reports*, 2025. Available at: https://maps.conservation.ca.gov/cgs/informationwarehouse/regulatorymaps/#data_s=id%3AdataSource_3-19030d1c028-layer-3%3A19. Accessed February 2025.

OTHER GEOLOGIC HAZARDS

Soils

According to the Natural Resource Conservation Service (NRCS), there are 21 different soil types located in the Planning Area. Table 4.6-3, *Planning Area Soils*, and Figure 4.6-3, *Soils Map*, present the soil types and associated acreages located in the Planning Area.

Table 4.6-3
Planning Area Soils

Soil Types	Total Acres
Alo series	**4,419.11**
Alo clay, 15 to 30 percent slopes, dry	1,141.02
Alo clay, 30 to 50 percent slopes, warm MAAT, MLRA 20	3,197.93
Alo clay, 9 to 15 percent slopes	80.16
Balcom series	**144.13**
Balcom clay loam, 15 to 30 percent slopes	8.61
Balcom clay loam, 30 to 50 percent slopes	26.65
Balcom-Rock outcrop complex, 15 to 50 percent slopes	108.87
Beaches	**2.49**
Beaches	2.49
Bolsa series	**7.68**
Bolsa silty clay loam, drained	7.68
Bosanko series	**714.83**
Bosanko clay, 15 to 30 percent slopes	411.54
Bosanko clay, 30 to 50 percent slopes	242.26
Bosanko clay, 9 to 15 percent slopes	61.03
Botella series	**675.88**
Botella clay loam, 2 to 9 percent slopes, warm MAAT, MLRA 19	196.22
Botella clay loam, 9 to 15 percent slopes	442.32
Botella loam, 2 to 9 percent slopes, warm MAAT, lower MAP, MLRA 19	37.35
Calleguas series	**740.70**
Calleguas clay loam, 50 to 75 percent slopes, eroded	740.70
Capistrano series	**14.21**
Capistrano sandy loam, 2 to 9 percent slopes	14.21
Chesterton series	**23.53**
Chesterton loamy sand, 2 to 15 percent slopes	23.53
Chino series	**0.03**
Chino silty clay loam, drained	0.03
Cieneba series	**89.64**
Cieneba-Rock outcrop complex, 30 to 75 percent slopes	82.53
Rock outcrop-Cieneba complex, 30 to 75 percent slopes	7.11
Corralitos series	**94.63**
Corralitos loamy sand, moderately fine substratum	94.63
Cropley series	**114.92**
Cropley clay, 2 to 9 percent slopes, warm MAAT, MLRA 19	114.92

Table 4.6-3 (continued)
Planning Area Soils

Soil Types	Total Acres
Modjeska series	**74.80**
Modjeska gravelly loam, 15 to 30 percent slopes	69.51
Modjeska gravelly loam, 9 to 15 percent slopes	5.29
Myford series	**49.55**
Myford sandy loam, 2 to 9 percent slopes	8.71
Myford sandy loam, 9 to 15 percent slopes	30.43
Myford sandy loam, 9 to 30 percent slopes, eroded	3.07
Myford sandy loam, thick surface, 2 to 9 percent slopes	7.34
Riverwash	**69.23**
Riverwash	69.23
Soboba series	**2.61**
Soboba cobbly loamy sand, 0 to 15 percent slopes	2.61
Soper series	**1,114.68**
Soper gravelly loam, 15 to 30 percent slopes, MLRA 20	176.00
Soper gravelly loam, 30 to 50 percent slopes, MLRA 20	871.95
Soper-Rock outcrop complex, 30 to 75 percent slopes	66.73
Sorrento series	**565.94**
Sorrento clay loam, 0 to 2 percent slopes, warm MAAT, MLRA 19	22.02
Sorrento clay loam, 2 to 9 percent slopes, warm MAAT, MLRA 19	46.36
Sorrento loam, 0 to 2 percent slopes, warm MAAT, MLRA 19	8.11
Sorrento loam, 2 to 9 percent slopes, warm MAAT, MLRA 19	489.45
Water	**32.11**
Water	32.11
Yorba series	**513.05**
Yorba cobbly sandy loam, 30 to 50 percent slopes	196.15
Yorba cobbly sandy loam, 9 to 30 percent slopes, eroded	135.31
Yorba gravelly sandy loam, 15 to 30 percent slopes	17.15
Yorba gravelly sandy loam, 9 to 15 percent slopes	164.43
Grand Total	**9,463.77**
Source: Natural Resource Conservation Service, 2022	

Erosion

The NRCS delineates soil units and compiles soils data as part of the National Cooperative Soil Survey. The following description of erosion factors is provided by the NRCS Physical Properties Descriptions:

> *Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water. Erosion factor Kw indicates the erodibility of the whole soil, whereas Kf indicates the erodibility of the fine soils. The estimates are modified by the presence of rock fragments.*

Soil erosion data for the City of Laguna Niguel was obtained from the NRCS. As identified by the NRCS web soil survey, the erosion factor K within the City varies from 0.2 to 0.55, which is considered a medium to high potential for erosion. Generally, erosion potential within Laguna Niguel aligns with water features/drainages.

Expansive Soils

The NRCS delineates soil units and compiles soils data as part of the National Cooperative Soil Survey. The following description of linear extensibility (also known as shrink-swell potential or expansive potential) is provided by the NRCS Physical Properties Descriptions:

> *"Linear extensibility" refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. It is an expression of the volume change between the water content of the clod at 1/3- or 1/10-bar tension (33kPa or 10kPa tension) and oven dryness. The volume change is reported in the table as percent change for the whole soil. The amount and type of clay minerals in the soil influence volume change.*
>
> *The shrink-swell potential is low if the soil has a linear extensibility of less than 3%; moderate if 3 to 6%; high if 6 to 9%; and very high if more than 9%. If the linear extensibility is more than 3, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots. Special design commonly is needed.*

Figure 4.6-4, *Shrink-Well Potential of Soils*, illustrates the shrink-swell potential of soils in the City. The linear extensibility of the soils within the City of Laguna Niguel ranges from "Low" to "Very High."

Landslides

CGS classifies landslides based on the type of material that failed and the type of movement that the failed material exhibited. Material types are broadly categorized as either rock or soil, or a combination of the two for complex movements. Landslide movements are categorized as falls, topples, spreads, slides, or flows.

Figure 4.6-5, *Landslide Susceptibility*, illustrates the landslide potential (for non-seismically included potential) within the City, which ranges from 0 (low susceptibility) to 10 (high susceptibility). Much of the City, mostly along hillsides, is within the 7 to 10 range. Areas underlain by shale and siltstone are more prone to landslide when compared to other bedrock geology, and the Capistrano, Monterey, and Topanga Formations, prevalent through hillside areas in the City, are most prone to slow-developing, slump-type failure. Slope stability hazards in the City relate to undeveloped hillside areas, as grading activities and soil remediation techniques required by the City's Grading and Excavation Code are used to address these hazards prior to development.

Subsidence

Land subsidence is a gradual settling or sudden sinking of the Earth's surface due to removal or displacement of subsurface earth materials. Common causes of land subsidence include aquifer-system compaction associated with groundwater withdrawals; drainage of organic soils; underground mining; and natural compaction or collapse. Subsidence takes place gradually, usually over a period of several

years. Soils with high shrink-swell (linear extensibility) potential can be particularly susceptible to subsidence during a loss of soil moisture. There is no record of historic or current United States Geological Survey (USGS)-recorded subsidence within the Planning Area.

Collapsible Soils

Hydroconsolidation occurs when soil layers collapse, or settle, as water is added under loads. Natural deposits susceptible to hydroconsolidation are typically aeolian, alluvial, or colluvial materials that have a high apparent strength when dry. The dry strength of the materials may be attributed to the clay and silt constituents in the soil and the presence of cementing agents (i.e., salts). Capillary tension may tend to act to bond soil grains. Once these soils are subjected to excessive moisture and foundation loads, the constituency including soluble salts or bonding agents is weakened or dissolved, capillary tensions are reduced, and collapse occurs resulting in settlement. Existing alluvium within the City may be susceptible to collapse and excessive settlements, which could create the risk of hydroconsolidation if these soils were exposed to excessive moisture.

PALEONTOLOGICAL RESOURCES

Stratigraphy

Geologic mapping by Morton and Miller (2006) indicates that the Planning Area includes 26 separate rock units ranging from Late Eocene sediments to modern deposits. Geological units are discussed in order from oldest to youngest in Table 2 of the *Cultural and Paleontological Resources Study* (Appendix D). Figure 4.6-6, *Geologic Map*, shows the geologic units underlying the Planning Area.

Paleontological Setting

Southern Orange County has a complicated paleoenvironmental history which began at the age of dinosaurs about 66 million years ago (66 Ma). The past 66 Ma has seen the region transition from coastal lowlands during the Paleocene to Oligocene, to shallow marine during the early Miocene, to deep marine during the early to early-late Miocene, back to shallow marine in the latest Miocene through the Pliocene, and finally to increasingly arid terrestrial deposits from the Pleistocene to the Holocene.

Paleontological Records Search

A search for paleontological records was completed by the Natural History Museum of Los Angeles County. Published literature, unpublished paleontological reports, and online databases were also searched for fossil records. Unpublished reports included an earlier literature review from the near vicinity of the City. Databases included the Natural History Museum of Los Angeles County Invertebrate Paleontology, the Paleobiology Database, and the University of California Museum of Paleontology. The record search revealed multiple fossil localities from within the Planning Area, as well as the near vicinity from sediments similar to those found within the Planning Area. Summaries of the paleontological resources within and near Laguna Niguel are provided below.

Late Eocene to Latest Early Miocene: Sespe Formation

At least 25 fossils of terrestrial animals have been recovered from 17 localities in the Sespe Formation in Orange County. Two localities were recovered from the Lower Bowerman Landfill, nine localities were

recovered from the Upper Bowerman Landfill, four localities were recovered from the Foothill Transportation Corridor-Oso segment, and a locality was recovered from the San Joaquin Hills. The OCPC listed one locality from the El Toro 7.5' USGS topographic quadrangle. These localities have produced fossils of canine, weasel, peccary, oreodont, camel, musk deer, opossum, shrew, pika, squirrel, rodent, and iguana.

Early Miocene: Vaqueros-Sespe Formation

At least 2400 fossils of terrestrial animals and plants have been recovered from 122 localities in the Vaqueros-Sespe Formation in Orange County. These localities have produced fossils of canine, bear, weasel, rhinoceros, horse, peccary, pig-like artiodactyl, oreodont, camel, deer-like artiodactyl, musk deer, hedgehog, shrew, pika, rabbit, squirrel, rodent, opossum, and reptile.

Middle Miocene: Topanga Group

At least 375 fossils of marine and terrestrial animals have been recovered from 37 localities in the Topanga Group in Orange County. These localities have produced fossils of pinnipeds, baleen and toothed whales, dugongs, sea cows, desmostylians, proboscideans, rodents, birds, sea turtles, bony fish, sharks, rays, and invertebrates.

Late Miocene: Monterey Formation

At least 150 fossils of marine animals have been recovered from 31 localities within and near the Planning Area. These localities have produced fossils of pinnipeds, baleen and toothed whales, dugongs, desmostylians, birds, crocodiles, sea turtles, bony fish, sharks and rays, and invertebrates. Numerous species of land plants and algae have also been recovered from these localities.

Late Miocene to Early Pliocene: Capistrano Formation

At least 375 fossils of marine and terrestrial animals have been recovered from 33 localities from the Oso Sand of the Capistrano Formation. These localities have produced fossils of pinnipeds, rodents, camels, baleen and toothed whales, horses, rhinoceros, mastodon, dugong, sea cows, desmostylians, birds, sea turtles, tortoise, bony fish, sharks and rays, and invertebrates. Numerous species of land plants and algae have also been recovered from these localities.

At least 100 fossils of marine and terrestrial animals have been recovered from 30 localities from undifferentiated deposits of Capistrano Formation. These localities have produced fossils of pinnipeds, camels, baleen and toothed whales, horses, birds, sea turtles, tortoise, crocodile, bony fish, sharks and rays, and invertebrates.

Pliocene To Pleistocene: Niguel Formation- Quaternary Terrace

A fossil of a sea lion and a camel have been recovered from two localities in Niguel Formation – Quaternary terrace deposits.

Pleistocene Deposits

At least 225 fossils of terrestrial animals have been recovered from 29 localities from Pleistocene deposits outside of Laguna Niguel. These localities have produced fossils of ground sloth, short faced bear,

American lion, mammoth, mastodon, horses, ancient bison, shrews, reptiles, and amphibians. The most significant of these localities is Costeau Pit located in the City, just south of Laguna Niguel which has additionally produced coyote, dire wolf, saber-toothed cat, camel, llama, diminutive pronghorn, long-horned bison, rabbits, rodents, and birds.

The following units include Pleistocene sediments:

- Quaternary very old axial channel deposits (Qvoa, Qvoa2, Qvoa3); early to middle Pleistocene
- Quaternary very old alluvial fan deposit (Qvof); early to middle Pleistocene
- Quaternary young axial channel deposit (Qya); late Pleistocene to Holocene
- Quaternary young alluvial fan deposit (Qyf); late Pleistocene to Holocene
- Quaternary young landslide deposit (Qyls); late Pleistocene to Holocene

Holocene Deposits

No fossils are known from any of the Holocene deposits as they are all too young to contain fossils. The following units are Holocene in age:

- Very young colluvial deposits (Qc); late Holocene
- Very young slope wash deposits (Qsw); late Holocene
- Very young landslide deposits (Qls); late Holocene
- Artificial fill; modern

4.6.3 REGULATORY SETTING

FEDERAL

Earthquake Hazards Reduction Act

The Earthquake Hazards Reduction Act of 1977 established the National Earthquake Hazards Reduction Program (NEHRP). Under the NEHRP, four federal agencies have responsibility for long-term earthquake risk reduction: the USGS, the National Science Foundation, the Federal Emergency Management Agency (FEMA), and the National Institute of Standards and Technology. NEHRP's mission includes improved understanding, characterization, and prediction of hazards and vulnerability; improvements of building codes and land use practices; risk reduction through post-earthquake investigation and education; development and improvement of design and construction techniques; improvement of mitigation capacity; and accelerated application of research results.

STATE

Earthquake Fault Zoning Act (Alquist-Priolo Act)

The State of California Alquist-Priolo Earthquake Fault Zoning Act of 1972 was established to mitigate the hazard of surface faulting to structures for human occupancy. Pursuant to the act, the state geologist has established regulatory zones (known as earthquake fault zones) around surface traces of active faults.

Application for a development permit for any project within a delineated earthquake fault zone is required to be accompanied by a geologic report, prepared by a geologist registered in California, that is directed to the problem of potential surface fault displacement through a project site.

Seismic Hazards Mapping Act

The Seismic Hazard Mapping Act (SHMA) was adopted by the state in 1990 to protect the public from the effects of non-surface fault rupture earthquake hazards, including strong ground shaking, liquefaction, seismically induced landslides, ground amplification, or other ground failure caused by earthquakes. The goal of the act is to minimize loss of life and property by identifying and mitigating seismic hazards. The CGS is the primary agency responsible for the implementation of the SHMA. The CGS prepares maps identifying seismic hazard zones and provides them to local governments, which include areas susceptible to amplified shaking, liquefaction, earthquake-induced landslides, and other ground failures. SHMA requires responsible agencies to only approve projects within these zones following a site-specific investigation to determine if the hazard is present, and if so, the inclusion of appropriate mitigation(s). In addition, the SHMA requires real estate sellers and agents at the time of sale to disclose whether a property is within one of the designated seismic hazard zones.

California Building Standards Code (Title 24)

Title 24 of the California Code of Regulations (CCR) provides state regulations that govern the design and construction of buildings, associated facilities, and equipment. These regulations are also known as building standards (reference California Health and Safety Code Section 18909). Cities and counties are required by state law to enforce CCR Title 24 and may adopt ordinances making more restrictive requirements than provided by CCR Title 24 due to local climatic, geological, or topographical conditions.

Caltrans Seismic Design Criteria

The California Department of Transportation (Caltrans) has Seismic Design Criteria (SDC), an encyclopedia of new and currently practiced seismic design and analysis methodologies for the design of new bridges in California. SDC adopts a performance-based approach specifying minimum levels of structural system performance, component performance, analysis, and design practices for ordinary standard bridges. SDC Memo 20-1, Seismic Design Methodology, outlines the bridge category and classification, seismic performance criteria, seismic design philosophy and approach, seismic demands and capacities on structural components, and seismic design practices that collectively make up Caltrans' seismic design.

National Pollutant Discharge Elimination System

The National Pollutant Discharge Elimination System (NPDES) permit program (under Section 402 of the Clean Water Act) controls water pollution by regulating point sources that discharge pollutants into waters of the United States. The term "pollutant" can include, but is not limited to, industrial and municipal waste, as well as eroded soils, sediment, and particulate material. The State Water Resources Control board (SWRCB) and its nine Regional Water Quality Control Boards (RWQCBs) issue these permits in lieu of direct issuance by the Environmental Protection Agency (EPA), subject to review and approval by the EPA Regional Administrator (EPA Region 9). In general, the discharge of pollutants is to be eliminated or reduced, as much as practicable.

Individual projects that disturb more than one acre are required to obtain NPDES coverage under the California General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit). The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) describing best management practices (BMPs) the discharger would use to prevent and retain storm water runoff. The SWPPP 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 sediment monitoring plan if the site discharges directly to a waterbody listed on the state's CWA 303(d) list for sediment.

LOCAL

Orange County and Orange County Fire Authority Local Hazard Mitigation Plan

The Orange County and Orange County Fire Authority Local Hazard Mitigation Plan (LHMP) focuses on mitigating natural hazards, including earthquakes and landslides, impacting unincorporated areas of the County as well as County and Orange County Fire Authority owned facilities.[8] The LHMP is a multi-jurisdictional plan developed jointly between the County of Orange and the Orange County Fire Authority (OCFA). The mission of the LHMP is to promote sound public policy designed to protect residents, critical facilities, infrastructure, key resources, private property, and the environment from natural hazards in unincorporated areas, fire hazards in the Fire Authority service area, and County and Fire Authority owned facilities.

City of Laguna Niguel Local Hazard Mitigation Plan

The Laguna Niguel Local Hazard Mitigation Plan (LHMP) was last updated in 2023 in accordance with the Disaster Mitigation Act (DMA) of 2000.[9] The LHMP provides the city with a blueprint for hazard mitigation action planning to reduce hazard risks and disaster impacts, including earthquakes and landslides. The LHMP conducts a risk assessment that identifies the location of hazards; the value of existing land and property in hazard locations; and an analysis of risk to life, property, and the environment that may result from natural hazard events. The LHMP also includes mitigation strategies aimed at reducing risk from natural hazards by identifying resources, information, and strategies for risk reduction, while helping to guide and coordinate mitigation activities throughout the city.

City of Laguna Niguel Municipal Code

Article 8 of the City of Laguna Niguel Municipal Code comprises the City's Grading and Excavation Code.[10] The code sets forth rules and regulations to control excavation, grading and earthwork construction,

[8] County of Orange and Orange County Fire Authority, Local Hazard Mitigation Plan, December 2021. Available at: https://www.ocsheriff.gov/sites/ocsd/files/2022-03/2021%20County%20of%20Orange%20and%20Orange%20County%20Fire%20Authority%20Local%20Hazard%20Mitigation%20Plan.pdf. Accessed January 2025.
[9] City of Laguna Niguel, Local Hazard Mitigation Plan, 2023. Available at: https://www.cityoflagunaniguel.org/DocumentCenter/View/27301/City-of-Laguna-Niguel-LHMP-2023. Accessed February 2025.
[10] City of Laguna Niguel, Municipal Code, Article 8, Grading and Excavation Code. Available at: https://library.municode.com/ca/laguna_niguel/codes/code_of_ordinances?nodeId=TIT8BURE_DIV1BUCOGE_ART8GREXCO. Accessed February 2025.

including fills and embankments, site drainage and relevant water quality requirements, and establishes administrative requirements for issuance of permits and approvals of plans and inspection of grading construction in accordance with the requirements for grading and excavation as contained in the most recently adopted California Building Code.

City of Laguna Niguel CEQA Manual

The City of Laguna Niguel CEQA Manual provides the City and project applicants with local guidelines, procedures, requirements, and thresholds of significance for the environmental review process within the City of Laguna Niguel consistent with the California Environmental Quality Act (Public Resources Code [PRC] Section 21000 et seq.), referred to as "CEQA" or "CEQA Statutes," and the State CEQA Guidelines (Title 14, California Code of Regulations (CCR), Division 6, Chapter 3, Section 15000 et seq.). The City's CEQA Manual applies to all public and private projects under the jurisdiction of the City of Laguna Niguel that constitute a "project" and therefore subject to CEQA review.

4.6.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

CEQA Guidelines Appendix G contains the Initial Study Environmental Checklist, which includes questions related to geology and soils. The City relies on the questions included in Appendix G as the thresholds of significance for assessing impacts related to geology and soils (City of Laguna Niguel CEQA Manual, Revised February 24, 2023). A significant impact will occur if implementation of the proposed Project will:

- 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 (refer to Impact Statement GS-1);
    - Strong seismic ground shaking (refer to Impact Statement GS-1);
    - Seismic-related ground failure, including liquefaction (refer to Impact Statement GS-1); and
    - Landslides (refer to Impact Statement GS-1).
- Result in substantial soil erosion or the loss of topsoil (refer to Impact Statement GS-2);
- 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 (refer to Impact Statement GS-3);
- Be located on expansive soil, as defined in Tables 18-1-D of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property (refer to Impact Statement GS-4);
- Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water (refer to Section 7.0, *Effects Found Not To Be Significant*); and/or

- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature (refer to Impact Statement GS-5).

4.6.5 IMPACTS AND MITIGATION MEASURES

GS-1: Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, or landslides?

Impact Analysis: The Planning Area, like the rest of southern California, is situated within a seismically active region as the result of being located near the active margin between the North American and Pacific tectonic plates. Subsequent development with buildout of the General Plan Update Land Use Element could result in new development and intensification of existing development within the Planning Area that would expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking.

As discussed, there are no designated Alquist-Priolo fault zones within the Planning Area. Therefore, the Project would not 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.

While there are no known active or potentially active faults in the City, there are several active faults located within Orange County, as shown in Figure 4.6-1, including Newport-Inglewood-Rose Canyon fault, San Joaquin Hills Thrust fault, Pelican Thrust fault, and the Oceanside fault. Therefore, the Planning Area could experience considerable ground shaking generated by regional faults. Additionally, as shown in Figure 4.6-2, there are three areas within Laguna Niguel designated as having the potential for liquefaction; one in the northwestern portion near La Paz Road and Aliso Creek Road, a second in the northeastern portion along Camino Capistrano, and a third in the southcentral portion along Crown Valley Parkway. As discussed above and shown in Figure 4.6-2, multiple areas of the City are in CGS-designated earthquake-induced landslide zones.

Subsequent development with buildout of the General Plan Update Land Use Element could result in new development and intensification of existing development within the Planning Area. In particular, the majority of the potential growth opportunities are located within specific areas of the City, including the Laguna Niguel Gateway Specific Plan (Gateway Specific Plan), the Opportunity Areas (e.g., the Marketplace at Laguna Niguel, Chet Holifield Federal Building [CHFB] site, and Town Center), and the Hospitality Overlay sites.

As shown in Figure 4.6-2, various geological conditions occur within these identified growth areas and throughout the Planning Area. Within the Gateway Specific Plan, there are areas designated as liquefaction and earthquake-induced landslide zones. Potential adverse effects associated with strong seismic ground shaking and seismic-related ground failure, including liquefaction and landslides associated with implementation of the Gateway Specific Plan have been analyzed within the Laguna Niguel Gateway Specific Plan Program EIR (Gateway Specific Plan EIR) and determined to be less than significant. The General Plan Update would not provide for new or different land uses or development

potential beyond what is currently allowed by the Gateway Specific Plan and analyzed in the Gateway Specific Plan EIR.

Portions of Community Profile Area 1, including the Marketplace at Laguna Niguel and CHFB Opportunity Areas, the northernmost portion of Community Profile Area 7, and the western portion of Community Profile Area 9 (adjacent to Crown Valley Parkway) include lands designated as liquefaction zones. The Marketplace at Laguna Niguel and Town Center Opportunity Areas, the Hospitality Overlay sites, as well as hillside areas throughout the Planning Area include lands designated as landslide zones; refer to Figure 4.6-2. As such, new development within the Planning Area could be exposed to strong seismic ground shaking and seismic-related ground failure, including liquefaction and landslides.

Subsequent development projects would be required to comply with the California Building Standards Code (CBSC), which requires development projects to perform geotechnical investigations in accordance with State law, engineer improvements to address potential seismic and ground failure issues and use earthquake-resistant construction techniques to address potential earthquake loads when constructing buildings and improvements. In furtherance of these requirements, grading activities and soil remediation techniques required by the City's Grading and Excavation Code (Laguna Niguel Municipal Code, Title 8, Division 1, Article 8) are used to address slope stability hazards prior to development. As future development is proposed, a soil engineering and engineering geology report would be required pursuant to the Laguna Niguel Municipal Code, unless waived by the Building Official (Laguna Niguel Municipal Code, Section 8-1-819). The report is required to include information appropriate for the site, including any information required by the Building Official. Subsequent projects would be required to incorporate the recommendations included in the reports (approved by the Building Official) into the grading plans or specifications. To further ensure compliance, Mitigation Measure GS-1 would require qualifying development projects to prepare a Preliminary Geotechnical Study for review and approval by the City. The Preliminary Geotechnical Study would be required to provide an analysis of geologic hazards and recommendations to be included during grading for topics such as, but not limited to, faults and seismic safety, landslides and site stability, liquefaction, differential settlement, lateral spreading, subsidence, expansive soils, corrosivity, and/or overall geotechnical stability of the site. A Final Geotechnical Report would be required to incorporate the recommendations of the Preliminary Geotechnical Report to ensure construction-level geotechnical recommendations and design parameters are integrated into the final grading design.

As subsequent development and infrastructure projects are considered by the City of Laguna Niguel, each project would be evaluated for conformance with the CBSC, Municipal Code, and other regulations. Subsequent development with buildout of the General Plan Update Land Use Element would be reviewed to identify and assess seismic safety issues and would be required to design and construct improvements in compliance with the applicable building codes and standards in place at the time to reduce the potential adverse effects associated with strong seismic ground shaking, liquefaction, and landslides. Compliance with the CBSC, Laguna Niguel Municipal Code, and implementation of Mitigation Measure GS-1 would reduce potential impacts associated with strong seismic ground shaking and seismic-related ground failure, including liquefaction and landslides to a less than significant level.

In addition to the requirements associated with the CBSC and the Municipal Code, the General Plan Update Public Safety Element includes policies to address potential hazards associated with seismic activity. Public Safety Element Policy PS-1.1 encourages that Laguna Niguel's geologic and seismic hazards maps are maintained in the City's geographic information system in concert with updates from the California Geologic Survey and local surveys. Policy PS-1.2 requires geological and geotechnical assessments and compliance with applicable codes and standards. Policy PS-1.3 ensures compliance with the requirements of the California Seismic Hazards Mapping and Alquist-Priolo Earthquake Fault Zoning Acts and applicable grading, excavation, and building codes to minimize the risks of erosion, slope failure, landslides, and other seismic and geologic hazards.

Mitigation Measures:

GS-1: Applicants of qualifying development projects shall have a Preliminary Geotechnical Study prepared by a qualified geotechnical engineer and/or engineering geologist. The study shall be prepared in accordance with the methodologies, standards, and significance thresholds in the City of Laguna Niguel Grading Code and the City's CEQA Manual and submitted for review and approval by the Laguna Niguel Community Development Department. This shall include an analysis of geologic hazards and recommendations to be included during grading for topics such as, but not limited to, faults and seismic safety, landslides and site stability, liquefaction, differential settlement, lateral spreading, subsidence, expansive soils, corrosivity, and/or overall geotechnical stability of the site. The Preliminary Geotechnical Study shall assess and determine the feasibility of developing the project site and provide recommendations for site preparation, such as remedial grading, subsurface drainage, subsurface structures such as caissons, etc.

Prior to issuance of a grading permit, the applicant shall have a Final Geotechnical Report prepared by a qualified geotechnical engineer and/or engineering geologist that incorporates all of the recommendations from the Preliminary Geotechnical Report to ensure construction-level geotechnical recommendations and design parameters are integrated into the final grading design.

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

PUBLIC SAFETY ELEMENT

Goal PS-1: **Seismic and Geologic Hazards.** Minimize the risk of injury and damage to property and the environment caused by seismic and geologic hazards.

Policy PS-1.1: **Geologic and Seismic Hazard Mapping.** Maintain Laguna Niguel's geologic and seismic hazards maps in the City's geographic information system in concert with updates from the California Geologic Survey and local surveys and update as appropriate.

Policy PS-1.2: **Geologic and Seismic Assessments.** For development projects in areas of potential seismic or geologic hazards, require geological and geotechnical assessments and compliance with applicable codes and standards.

Policy PS-1.3: **Geologic and Seismic Regulatory Compliance.** Ensure compliance with the requirements of the California Seismic Hazards Mapping and Alquist-Priolo Earthquake Fault Zoning Acts and applicable grading, excavation, and building codes to minimize the risks of erosion, slope failure, landslides, and other seismic and geologic hazards.

GS-2: Would the project result in substantial soil erosion or the loss of topsoil?

Impact Analysis: As noted previously, data obtained from the NRCS identifies an erosion factor (K) within the Planning Area that varies from 0.2 to 0.55, which is considered a medium to high potential for erosion. Subsequent development with buildout of the General Plan Update Land Use Element would potentially involve land clearing, mass grading, and other ground-disturbing activities that could temporarily increase soil erosion rates during and shortly after project construction. Depending upon the location of a specific project site, construction activities, and soil conditions, construction-related erosion could result in the loss of a substantial amount of nonrenewable topsoil and could adversely affect water quality in nearby surface waters. Similarly, precipitation and irrigation of landscaping may result in runoff during project operations, which could result in the loss of nonrenewable topsoil and potentially affect water quality.

However, the portions of the Planning Area designated for development are primarily urbanized with limited pervious areas. In particular, the majority of the potential growth opportunities are located within the Gateway Specific Plan, the Opportunity Areas, and the Hospitality Overlay sites. Subsequent development throughout the City, including within the Gateway Specific Plan, Opportunity Areas, and the Hospitality Overlay site located at the corner of Golden Lantern and Camino Del Avion, would primarily occur through infill development and redevelopment of sites that are currently developed and do not contain significant amounts of pervious area. Additionally, potential soil erosion or loss of topsoil associated with implementation of the Gateway Specific Plan have been analyzed within the Gateway Specific Plan EIR and determined to be less than significant. The General Plan Update would not provide for new or different land uses or development potential beyond what is currently allowed by the Gateway Specific Plan and analyzed in the Gateway Specific Plan EIR. Overall, due to the limited pervious areas within the Planning Area that could be developed, it is not anticipated that subsequent development would significantly increase impervious areas resulting in increased runoff when compared to existing conditions.

However, the Hospitality Overlay site located at the northwest corner of Pacific Island Drive and Crown Valley Parkway is currently undisturbed and undeveloped; therefore, any development within the site would involve the removal of natural vegetated land and a resulting increase in impervious areas when compared to the existing site conditions.

As subsequent development and infrastructure projects are considered by the City, each project would be evaluated for conformance with the CBSC, Municipal Code, NPDES permit, and other relevant regulations. In compliance with NPDES Permit regulations, the State of California requires that any construction activity disturbing one acre or more of soil comply with the Construction General Permit. The Construction General Permit requires development and implementation of a SWPPP, which must include erosion-control and sediment-control BMPs that would meet or exceed measures required by the Construction General Permit to control stormwater quality degradation due to potential construction-related pollutants. The SWPPP would include project-specific BMPs designed to control drainage and

erosion. Subsequent development would also be subject to construction and post-construction requirements under the Municipal Code. Specifically, Laguna Niguel Municipal Code Title VI, Division 3, Article 5, *Prohibition of Non-Stormwater Discharges Into Storm Sewers*, contains conditions and procedures to ensure compliance with the NPDES permit. Therefore, through compliance with existing regulations, including the Laguna Niguel Municipal Code, potential impacts associated with erosion and loss of topsoil would be less than significant.

Chet Holifield Federal Building Demolition

Activities associated with demolition of the CHFB site would disturb greater than one acre of soil and would be subject to compliance with the Construction General Permit. The Permit requires development and implementation of a SWPPP, which must include erosion-control and sediment-control BMPs that would meet or exceed measures required by the Construction General Permit to control stormwater quality degradation due to potential construction-related pollutants. The SWPPP would include project-specific BMPs, reducing potential impacts associated with soil erosion or the loss of topsoil during CHFB site demolition activities to a less than significant level.

Furthermore, the General Plan Update includes a range of policies aimed at minimizing discharge of materials (including eroded soils) into the storm drain system. Public Safety Policy PS-3.3 directs the City to regularly assess and maintain the local storm drainage infrastructure to identify needed improvements and ensure the system is functioning properly. Public Safety Policy PS-3.5 ensures that development projects comply with state, regional, and local flood control and stormwater runoff requirements and standards.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

PUBLIC SAFETY ELEMENT

Policy PS-3.3: **Storm Drainage Infrastructure.** Regularly assess and maintain the local storm drainage infrastructure to identify needed improvements and ensure the system is functioning properly.

Policy PS-3.5: **Flood Control and Stormwater Management.** Ensure development projects comply with state, regional, and local flood control and stormwater runoff requirements and standards.

GS-3: Would the project 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?

Impact Analysis: Refer to Impact Statement GS-1 for potential impacts related to liquefaction and landslides. The following discussion identifies the potential for lateral spreading, subsidence, or collapse within the Planning Area:

LATERAL SPREADING

Lateral spreading refers to landslides that are a result of lateral displacement of gently sloping ground. Ground shaking, especially when inducing liquefaction, may cause lateral spreading toward unsupported slopes. Areas identified to have high liquefaction susceptibility or areas with a sloping terrain may be vulnerable to lateral spreading. As stated previously, there are three areas within the Planning Area designated as having the potential for liquefaction; one in the northwestern portion near La Paz Road and Aliso Creek Road, a second in the northeastern position along Camino Capistrano, and a third in the southcentral position along Crown Valley Parkway. Therefore, these areas may be vulnerable to lateral spreading.

SUBSIDENCE

Soils with high shrink-swell potential can be particularly susceptible to subsidence during a loss of soil moisture. The Planning Area contains soils that range from having low to very high shrink-swell potential. Although there is no record of historic or current USGS-recorded subsidence within the Planning Area, the presence of soils with high shrink-swell potential indicates a potential for subsidence.

COLLAPSE

Collapsible soils undergo a rearrangement of their grains and a loss of cementation, resulting in substantial and rapid settlement under relatively low loads. Collapsible soils occur predominantly at the base of mountain ranges, where Holocene-age alluvial fan and wash sediments have been deposited during rapid run-off events. Differential settlement of structures can occur when collapsible soils are saturated, such as from heavily irrigated landscape areas near a building foundation. Examples of common problems associated with collapsible soils include tilting floors, cracking or separation in structures, sagging floors, and nonfunctional windows and doors. Existing alluvium within the Planning Area may be susceptible to collapse and excessive settlements, which could create the risk of hydroconsolidation if these soils were exposed to excessive moisture.

CONCLUSION

As discussed above, areas of the City identified as having high liquefaction susceptibility or areas with a sloping terrain may be vulnerable to lateral spreading. Portions of Community Profile Area 1, including the Marketplace at Laguna Niguel and CHFB Opportunity Areas, the northernmost portion of Community Profile Area 7, and the western portion of Community Profile Area 9 (adjacent to Crown Valley Parkway) include lands designated as liquefaction zones. The Marketplace at Laguna Niguel and Town Center Opportunity Areas, the Hospitality Overlay sites, as well as hillside areas throughout the Planning Area include lands designated as landslide zones. Soils with high shrink-well potential within the Planning Area may be susceptible to subsidence, and alluvium sediments within the Planning Area may be susceptible to collapse. Subsequent development with buildout of the General Plan Update Land Use Element could result in development on a site with conditions susceptible to lateral spreading, subsidence, and collapse.

As subsequent development and infrastructure projects are considered by the City, each project would be evaluated for conformance with the CBSC, Municipal Code, including the Grading and Excavation Code (Title 8, Division 1, Article 8), and the City's CEQA Manual. Subsequent development and improvement

projects would be required to prepare site-specific geotechnical studies to identify geologic and soil conditions specific to the site and provide design recommendations consistent with the requirements of State and City codes in compliance with Mitigation Measure GS-1.

Implementation of CBSC and the Municipal Code requirements related to seismic and geologic conditions and compliance with Mitigation Measure GS-1 would ensure that subsequent development projects are evaluated for potential geologic and seismic risks and that potential risks are adequately addressed. Therefore, the proposed General Plan Update would have a less than significant impact relative to the potential for lateral spreading, subsidence, or collapse.

Furthermore, the General Plan Update includes a range of policies to address geologic conditions within the Planning Area. The Public Safety Element Policy PS-1.1 encourages that Laguna Niguel's geologic and seismic hazards maps are maintained in the City's geographic information system in concert with updates from the California Geologic Survey and local surveys. Policy PS-1.2 requires geological and geotechnical assessments and compliance with applicable codes and standards. Policy PS-1.3 ensures compliance with the requirements of the California Seismic Hazards Mapping and Alquist-Priolo Earthquake Fault Zoning Acts and applicable grading, excavation, and building codes to minimize the risks of erosion, slope failure, landslides, and other seismic and geologic hazards.

Mitigation Measures: Refer to Mitigation Measure GS-1.

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

PUBLIC SAFETY ELEMENT

Goal PS-1: **Seismic and Geologic Hazards.** Minimize the risk of injury and damage to property and the environment caused by seismic and geologic hazards.

Policy PS-1.1: **Geologic and Seismic Hazard Mapping.** Maintain Laguna Niguel's geologic and seismic hazards maps in the City's geographic information system in concert with updates from the California Geologic Survey and local surveys and update as appropriate.

Policy PS-1.2: **Geologic and Seismic Assessments.** For development projects in areas of potential seismic or geologic hazards, require geological and geotechnical assessments and compliance with applicable codes and standards.

Policy PS-1.3: **Geologic and Seismic Regulatory Compliance.** Ensure compliance with the requirements of the California Seismic Hazards Mapping and Alquist-Priolo Earthquake Fault Zoning Acts and applicable grading, excavation, and building codes to minimize the risks of erosion, slope failure, landslides, and other seismic and geologic hazards.

GS-4: Would the project be located on expansive soil, as defined in Tables 18-1-D of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Impact Analysis: Expansive soil properties can cause substantial damage to building foundations, piles, pavements, underground utilities, and/or other improvements. Structural damage, such as warping and cracking of improvements, and rupture of underground utility lines, may occur if the expansive potential of soils is not considered during the design and construction of all improvements. The linear extensibility (also known as shrink-swell potential or expansive potential) of the soils within the City of Laguna Niguel ranges from "Low" to "Very High." As shown in Figure 4.6-4, the central and eastern portions of the City experience the highest shrink-swell potential. Subsequent development with buildout of the General Plan Update Land Use Element could result in development on a site with expansive soil.

Subsequent development with buildout of the General Plan Update Land Use Element could result in new development and intensification of existing development within the Planning Area. In particular, the majority of the potential growth opportunities are located within specific areas of the City, including the Gateway Specific Plan, the Opportunity Areas, and the Hospitality Overlay sites.

Within the Gateway Specific Plan, there are areas designated as having very high shrink-swell potential of soils. The potential for a project to be located on expansive soil creating substantial direct or indirect risks to life or property associated with implementation of the Gateway Specific Plan have been analyzed within the Gateway Specific Plan EIR and determined to be less than significant. The General Plan Update would not provide for new or different land uses or development potential beyond what is currently allowed by the Gateway Specific Plan and analyzed in the Gateway Specific Plan EIR.

The Marketplace at Laguna Niguel and CHFB site Opportunity Areas are identified as having soils with low, moderate, and high shrink-swell potential. The Town Center Opportunity Area is identified as having soils with moderate, high, and very high shrink-swell potential. The Hospitality Overlay site at Pacific Island Drive and Crown Valley Parkway is identified as having soils with low shrink-swell potential and the Hospitality Overlay site at Golden Lantern and Camino Del Avion is identified as soils with moderate and very high shrink-swell potential. Other areas within the Planning Area with the potential for subsequent development could experience soils with high and very high shrink-swell potential; refer to Figure 4.6-4. As such, new development within the Planning Area could be located on expansive soil with the potential to create substantial direct or indirect risks to life or property.

As previously discussed, subsequent development and infrastructure projects considered by the City would be evaluated for site-specific geologic and soil conditions. Each project would be required to comply with the CBSC, Municipal Code, including the Grading and Excavation Code (Title 8, Division 1, Article 8), and other regulations. A site-specific geotechnical investigation, in compliance with Mitigation Measure GS-1, would identify the potential for damage related to expansive soils and non-uniformly compacted fill and engineered fill. If a risk is identified, design criteria and specification options may include removal of the problematic soils, and replacement, as needed, with properly conditioned and compacted fill material that is designed to withstand the forces exerted during the expected shrink-swell cycles and settlements.

Design criteria and specifications set forth in the design-level geotechnical investigation would ensure impacts from problematic soils are minimized.

Implementation of CBSC and the Municipal Code requirements related to on-site soil conditions and compliance with Mitigation Measure GS-1 would ensure that subsequent development projects are evaluated for potential risks associated with development on expansive soils and that potential risks are adequately addressed. Therefore, the proposed General Plan Update would have a less than significant impact associated with expansive soils.

In addition, the proposed General Plan Update includes a range of policies that are designed to protect the City from geologic hazards, including expansive soils. The Public Safety Element Policy PS-1.1 encourages that Laguna Niguel's geologic and seismic hazards maps are maintained in the City's geographic information system in concert with updates from the California Geologic Survey and local surveys. Policy PS-1.2 requires geological and geotechnical assessments and compliance with applicable codes and standards. Policy PS-1.3 ensures compliance with the requirements of the California Seismic Hazards Mapping and Alquist-Priolo Earthquake Fault Zoning Acts and applicable grading, excavation, and building codes to minimize the risks of erosion, slope failure, landslides, and other seismic and geologic hazards.

Mitigation Measures: Refer to Mitigation Measure GS-1.

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

PUBLIC SAFETY ELEMENT

Goal PS-1: **Seismic and Geologic Hazards.** Minimize the risk of injury and damage to property and the environment caused by seismic and geologic hazards.

Policy PS-1.1: **Geologic and Seismic Hazard Mapping.** Maintain Laguna Niguel's geologic and seismic hazards maps in the City's geographic information system in concert with updates from the California Geologic Survey and local surveys and update as appropriate.

Policy PS-1.2: **Geologic and Seismic Assessments.** For development projects in areas of potential seismic or geologic hazards, require geological and geotechnical assessments and compliance with applicable codes and standards.

Policy PS-1.3: **Geologic and Seismic Regulatory Compliance.** Ensure compliance with the requirements of the California Seismic Hazards Mapping and Alquist-Priolo Earthquake Fault Zoning Acts and applicable grading, excavation, and building codes to minimize the risks of erosion, slope failure, landslides, and other seismic and geologic hazards.

GS-5: Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Impact Analysis: The record search conducted as part of the Cultural and Paleontological Resources Assessment revealed multiple fossil localities from within and around the Planning Area. The Planning

Area is situated upon a variety of geological units ranging in age from the late Eocene Epoch to the present; many of these formations have potential to yield significant fossil remains. The late Eocene to early Miocene Vaqueros, Vaqueros-Sespe, and Sespe formations, as well as the late Miocene to early Pliocene Capistrano Formation, are assigned high paleontological sensitivity. Therefore, it is possible that undiscovered paleontological resources could be encountered during ground-disturbing activities associated with future development under the General Plan Update. This is considered a potentially significant impact.

Only qualified, trained paleontologists with specific expertise in the type of fossils being evaluated can determine the scientific significance of paleontological resources. Fossils are considered to be significant if one or more of the following criteria apply:

1. The fossils provide information on the evolutionary relationships and developmental trends among organisms, living or extinct.
2. The fossils provide data useful in determining the age(s) of the rock unit or sedimentary stratum, including data important in determining the depositional history of the region and the timing of geologic events therein.
3. The fossils provide data regarding the development of biological communities or interaction between paleobotanical and paleozoological biotas.
4. The fossils demonstrate unusual or spectacular circumstances in the history of life.
5. The fossils are in short supply and/or in danger of being depleted or destroyed by the elements, vandalism, or commercial exploitation, and are not found in other geographic locations.
6. All identifiable vertebrate fossils are considered significant due to the rarity of their preservation.

Significant paleontological resources are determined to be fossils or assemblages of fossils that are unique, unusual, rare, uncommon, or diagnostically important. Significant fossils can include remains of large to very small aquatic and terrestrial vertebrates or remains of plants and invertebrate animals previously not represented in certain portions of the stratigraphy. Assemblages of fossils that might aid stratigraphic correlation, particularly those offering data for the interpretation of tectonic events, geomorphologic evolution, and paleoclimatology are also critically important.

There are no specific projects or specific construction plans identified, except for the assumption that the CHFB site will be demolished as part of a future redevelopment effort.

Although site-specific development projects are not proposed as part of the General Plan Update, except for the assumption that the CHFB site will be demolished as part of a future redevelopment effort, due to the high paleontological sensitivity that occurs within the Planning Area, ground-disturbing activities associated with subsequent development with buildout of the General Plan Update Land Use Element could encounter undiscovered paleontological resources. As demonstrated above, this could be a potentially significant impact requiring mitigation. Mitigation Measure GS-2 requires preparation of a combined paleontological assessment and mitigation plan by a certified principal paleontologist for qualifying projects with a Bureau of Land Management (BLM) Potential Fossil Yield Classification (PFYC)

ranking of moderate (PFYC 3) or above. If resources are known or reasonably anticipated, a detailed mitigation plan would be prepared and submitted to the City for review and approval. The paleontological assessment and mitigation plan would include information on the services to be provided by the paleontological mitigation company, such as providing worker awareness training, construction monitoring, fossil recovery, data collection, preparation to a point of permanent preservation, professional identification, and other special studies that may be appropriate to provide dates on the fossils recovered. All mass grading in areas or sediments having moderate to very high paleontological sensitivity would be monitored for paleontological resources.

If paleontological resources are encountered on a site in which prior paleontologist involvement was not required due to the low sensitivity for paleontological resources, Mitigation Measure GS-3 would require all earth-disturbing activities to cease within a 50-foot radius of the area of discovery and a certified principal paleontologist be contacted to evaluate the find. Should it be deemed necessary to proceed with paleontological mitigation by the paleontologist, the protocol established in Mitigation Measure GS-2 would be implemented.

Implementation of Mitigation Measures GS-2 and GS-3 would reduce potential impacts to paleontological resources to a less than significant level. Thus, the proposed General Plan Update would not directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature, and impacts would be less than significant.

Chet Holifield Federal Building Demolition

Demolition of the CHFB site would involve removal of the existing building and pavement. The demolition activities would not include ground-disturbing activities within undisturbed sediments to the extent that paleontological resources could potentially be discovered. However, should unanticipated fossil resources be encountered during demolition activities, the applicant would be required to comply with Mitigation Measure GS-3. Implementation of Mitigation Measure GS-3 would reduce potential impacts to paleontological resources to a less than significant level. Thus, demolition of the CHFB site would not directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature, and impacts would be less than significant.

The proposed General Plan Update Resource Management Element includes policies to protect significant paleontological resources within the Planning Area. Under Policy RM-4.2 discovered significant archaeological or paleontological resources would be evaluated for their cultural relevance, physical condition, economic factors, feasibility, and other key aspects.

Mitigation Measures:

GS-2: Prior to ground disturbance activities, applicants for qualifying development projects located within undisturbed sediments with a Bureau of Land Management (BLM) Potential Fossil Yield Classification (PFYC) ranking of moderate (PFYC 3) or above shall provide a combined paleontological assessment and mitigation plan to the Laguna Niguel Community Development

Department for review and approval. The paleontological assessment and mitigation plan shall be prepared by a certified principal paleontologist meeting Orange County standards.[11]

The mitigation plan shall consist of a record search, field survey, background context, identification of monitoring levels for individual geological units, and project-specific mitigation, as applicable. Additionally, the plan shall include information on the services to be provided by the paleontological mitigation company, such as providing worker awareness training, construction monitoring, fossil recovery, data collection, preparation to a point of permanent preservation (which typically includes removal of the majority of matrix, hardening, washing and sorting of some or all of the matrix for microfossil specimens, and other treatments for specimens determined to be scientifically significant by the qualified principal paleontologist), professional identification, and other special studies that may be appropriate to provide dates on the fossils recovered (e.g. optically stimulated luminescence [OSL], radiocarbon dating, pollen, foraminiferal studies, etc.). Upon completion of mitigation activities, a final mitigation compliance report shall be prepared and submitted to the Laguna Niguel Community Development Department.

All mass grading in areas or sediments having moderate to very high paleontological sensitivity shall be monitored for paleontological resources. Exceptions may be made by a certified principal paleontologist for drilling, auguring, cast-in-drilled-hole (CIDH) piles, and similar activities where stratigraphic details would be lost and fossils would most likely be highly damaged.

The Dr. John D. Cooper Laboratory shall be given first right of refusal to curate any scientifically significant fossils found. The final mitigation compliance report shall include documentation that this requirement has been met.

GS-3: In the event that unanticipated fossil resources are discovered in areas that did not require prior paleontologist monitoring, the project applicant or designee (e.g., contractor) shall immediately cease all earth-disturbing activities within a 50-foot radius of the area of discovery. A certified principal paleontologist meeting Orange County standards shall be retained by the applicant to evaluate the find, and the Laguna Niguel Community Development Department shall be notified.

Should it be deemed necessary to proceed with paleontological mitigation by the paleontologist, the protocol established in Mitigation Measure GS-2 shall be implemented.

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

RESOURCE MANAGEMENT ELEMENT

Policy RM-4.2: Archaeological and Paleontological Resources. If significant archaeological or paleontological resources are discovered, evaluate their cultural relevance, physical condition, economic factors, feasibility, and other key aspects. Consider curation in a

[11] County of Orange, *Qualification for Certification of Archaeological and Paleontological*, https://ocds.ocpublicworks.com/sites/ocpwocds/files/2021-06/Qualifications-Certification-Archaeological-Paleontological.pdf, accessed June 12, 2025.

public location in Laguna Niguel or appropriate institution, as feasible and permitted by environmental regulations.

4.6.6 CUMULATIVE IMPACTS

Section 3.0, *Cumulative Analysis*, identifies projected regional growth having the potential to interact with the proposed Project to the extent that a significant cumulative effect may occur. The regional geologic setting and regional seismicity would be similar for the Project and cumulative projects; however, the local geologic setting, surficial geology, and subsurface soil conditions would vary according to the site location and specific conditions.

Would the project, combined with other related cumulative projects, directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, or landslides?

Impact Analysis: There are no designated Alquist-Priolo Earthquake Fault Zones within the Planning Area. Therefore, the proposed Project would not contribute to cumulative impacts related to potential adverse effects involving rupture of a known earthquake fault, and impacts in this regard are not cumulatively considerable.

Subsequent development with buildout of the General Plan Update Land Use Element could result in new development and intensification of existing development within the Planning Area. New development could be exposed to strong seismic ground shaking and seismic-related ground failure, including liquefaction and landslides. As subsequent development and infrastructure projects are considered by the City of Laguna Niguel, each project would be evaluated for conformance with the CBSC, General Plan, Municipal Code, and other regulations, as well as Mitigation Measure GS-1 which requires qualifying development projects to prepare a Preliminary Geotechnical Study and Final Geotechnical Report to address potential seismic and ground failure issues and use earthquake-resistant construction techniques to address potential earthquake loads when constructing buildings and improvements. Compliance with the CBSC, Laguna Niguel Municipal Code, and Mitigation Measure GS-1 would reduce potential impacts associated with strong seismic ground shaking and seismic-related ground failure, including liquefaction and landslides to a less than significant level.

As with the Project, related cumulative projects would be required to comply with the CSBC and municipal code requirements applicable to the specific jurisdiction in which the project is located relative to site-specific geology and soil conditions. Individual projects would be reviewed for the potential to expose people and structures to potential substantial adverse effects involving rupture of a known earthquake fault and strong seismic ground shaking or seismic-related ground failure, including liquefaction. Individual development projects would be required to implement recommendations to address site-specific geology and soil conditions on a project-by-project basis. Therefore, the General Plan Update's incremental effects involving exposure of people and structures to potential substantial adverse effects involving rupture of a known earthquake fault, and strong seismic ground shaking or seismic-related ground failure, including liquefaction, would not be cumulatively considerable.

Mitigation Measures: Refer to Mitigation Measure GS-1.

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan policies cited above.

Would the project, combined with other related cumulative projects result in substantial soil erosion or the loss of topsoil?

Impact Analysis: The portions of the Planning Area designated for development are primarily urbanized with limited pervious areas. Subsequent development would primarily occur through infill development and redevelopment of sites that are currently developed and do not contain significant amounts of pervious area. However, the Hospitality Overlay site located at the corner of Pacific Island Drive and Crown Valley Parkway is currently undisturbed and undeveloped; therefore, any development within the site would involve the removal of natural vegetated land and a resulting increase in impervious areas when compared to existing site conditions. Overall, due to the limited pervious areas that could be developed, it is not anticipated that subsequent development would significantly increase impervious areas resulting in increased runoff when compared to existing conditions. Upon compliance with existing regulations, including the Laguna Niguel Municipal Code, potential impacts associated with erosion and loss of topsoil would be less than significant.

Similar to the proposed Project, related cumulative projects within the region would be required to comply with stormwater runoff and pollution control requirements required by the regional water quality control board and implemented by the specific jurisdiction in which the development occurs. Construction activities within the region would be required to comply with any local requirements that implement erosion and siltation control measures of the Construction General Permit, reducing potential impacts associated with soil erosion or the loss of topsoil during construction activities. Additionally, cumulative development would be required to comply with postconstruction runoff pollution reduction BMPs implemented through the Standard Urban Stormwater Mitigation Plan. Thus, the General Plan Update's incremental effects involving substantial soil erosion or the loss of topsoil would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan Update policies cited above.

Would the project, combined with other related cumulative projects 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 or be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Impact Analysis: As stated previously, there are three areas within the Planning Area designated as having the potential for liquefaction and multiple areas of the City are in CGS-designated earthquake-induced landslide zones. Risk of subsidence and collapse due to soil conditions may also occur within the Planning Area. The linear extensibility (also known as shrink-swell potential or expansive potential) of the soils within the City of Laguna Niguel ranges from "Low" to "Very High." As subsequent development and infrastructure projects are considered by the City of Laguna Niguel, each project would be evaluated for conformance with the CBSC, Municipal Code, and other regulations, as well as Mitigation Measure GS-1 which requires qualifying development projects to prepare a Preliminary Geotechnical Study and Final Geotechnical Report to address potential seismic and ground failure issues. Compliance with the CBSC, Laguna Niguel Municipal Code, and Mitigation Measure GS-1 would reduce potential impacts associated with a geologic unit or soil that is unstable or expansive soil to a less than significant level.

The geotechnical and soil characteristics of related cumulative projects within the region may experience similar geology and soil constraints as within the Planning Area. Similar to the Project, related cumulative development would be evaluated on a project-by-project basis, and would be required to reduce potential impacts associated with unstable geologic units or soils as relevant for each project. As with the Project, related cumulative projects would be required to comply with the CSBC and municipal code requirements applicable to the specific jurisdiction in which the project is located relative to site-specific geology and soil conditions. Individual projects would be reviewed for the potential to be locate on a geologic unit or soil that is unstable. Individual development projects would be required to implement recommendations to address site-specific geology and soil conditions on a project-by-project basis. Therefore, the General Plan Update's incremental effects involving unstable geologic units or soils, potentially resulting in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse**,** or being located on expansive soils would not be cumulatively considerable.

Mitigation Measures: Refer to Mitigation Measure GS-1.

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan policies cited above.

Would the project, combined with other related cumulative projects directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Impact Analysis: The Planning Area has the potential to contain paleontological resources. As discussed above, implementation of Mitigation Measures GS-2 and GS-3 would reduce potential impacts to paleontological resources associated with the proposed Project to a less than significant level.

There is also the potential for cumulative related project sites within the region to have soils that contain the potential for paleontological resources. Construction activities associated with cumulative related projects may have the potential to directly or indirectly destroy paleontological resources specific to those development sites. However, as with the Project, potential development would undergo environmental and design review on a project-by-project basis pursuant to CEQA to evaluate potential impacts to paleontological resources. All development would be subject to compliance with the established federal, State, and local regulatory framework concerning protection of paleontological resources on a project-by-project basis. Where significant or potentially significant impacts are identified, implementation of all feasible site-specific mitigation would be required to avoid or reduce impacts. Thus, the General Plan Update's incremental effects involving the potential to directly or indirectly destroy a unique paleontological resource or unique geologic feature would not be cumulatively considerable.

Mitigation Measures: Refer to Mitigation Measure GS-2 and GS-3.

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan Update policy cited above.

4.6.7 SIGNIFICANT UNAVOIDABLE IMPACTS

Geology and soils impacts associated with the implementation of the General Plan Update would be less than significant. No significant unavoidable geology and soils impacts would occur as a result of the General Plan Update.

4.6.8 REFERENCES

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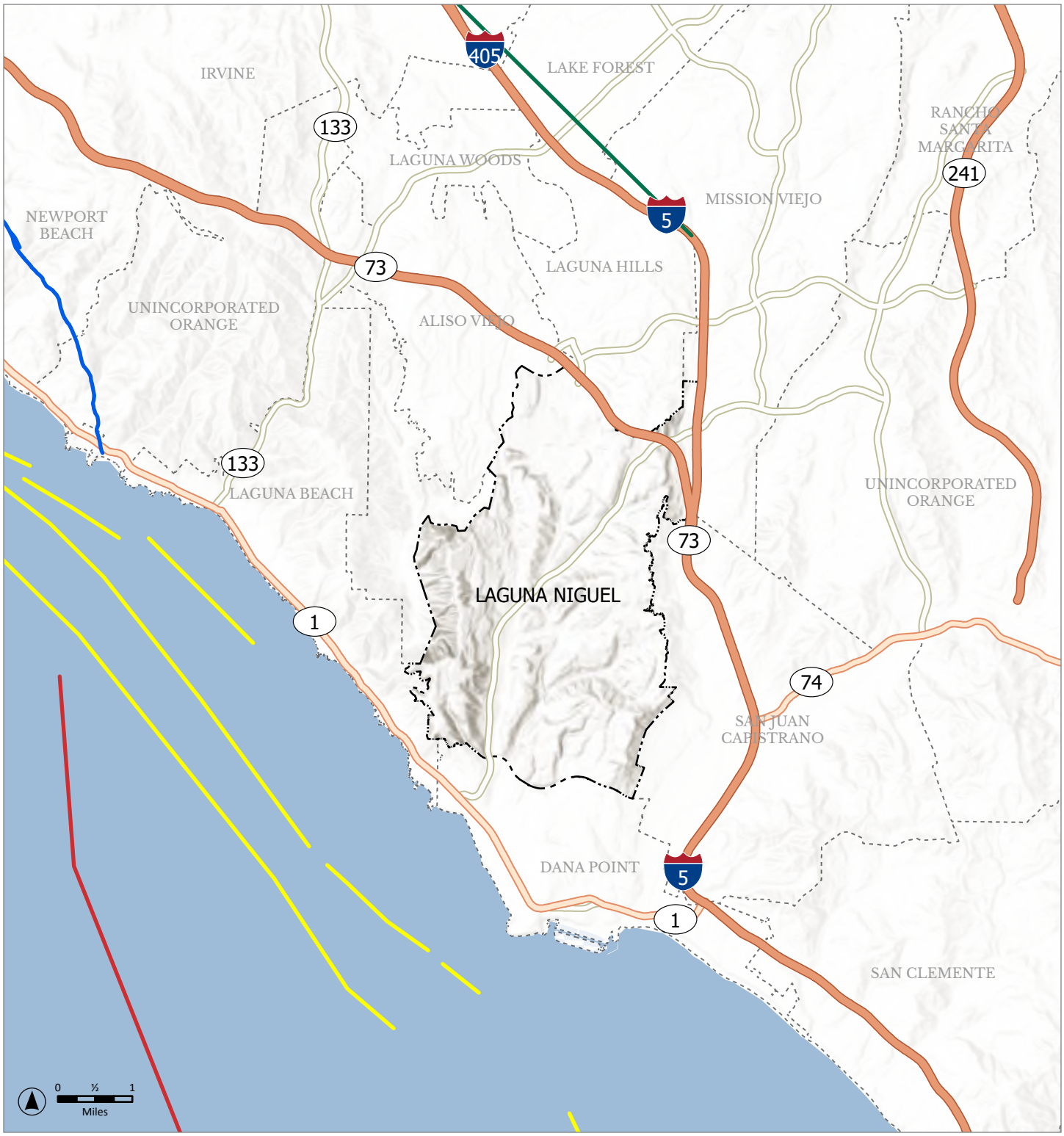

Data sources: USGS; City of Laguna Niguel; Orange County GIS.

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February 12, 2025

LEGEND

- Laguna Niguel City Boundary
- Other Jurisdictions
- Newport-Inglewood-Rose Canyon fault zone
- Oceanside fault
- Pelican Hill fault
- San Joaquin Hills thrust

Figure 4.6-1.
Regional Faults

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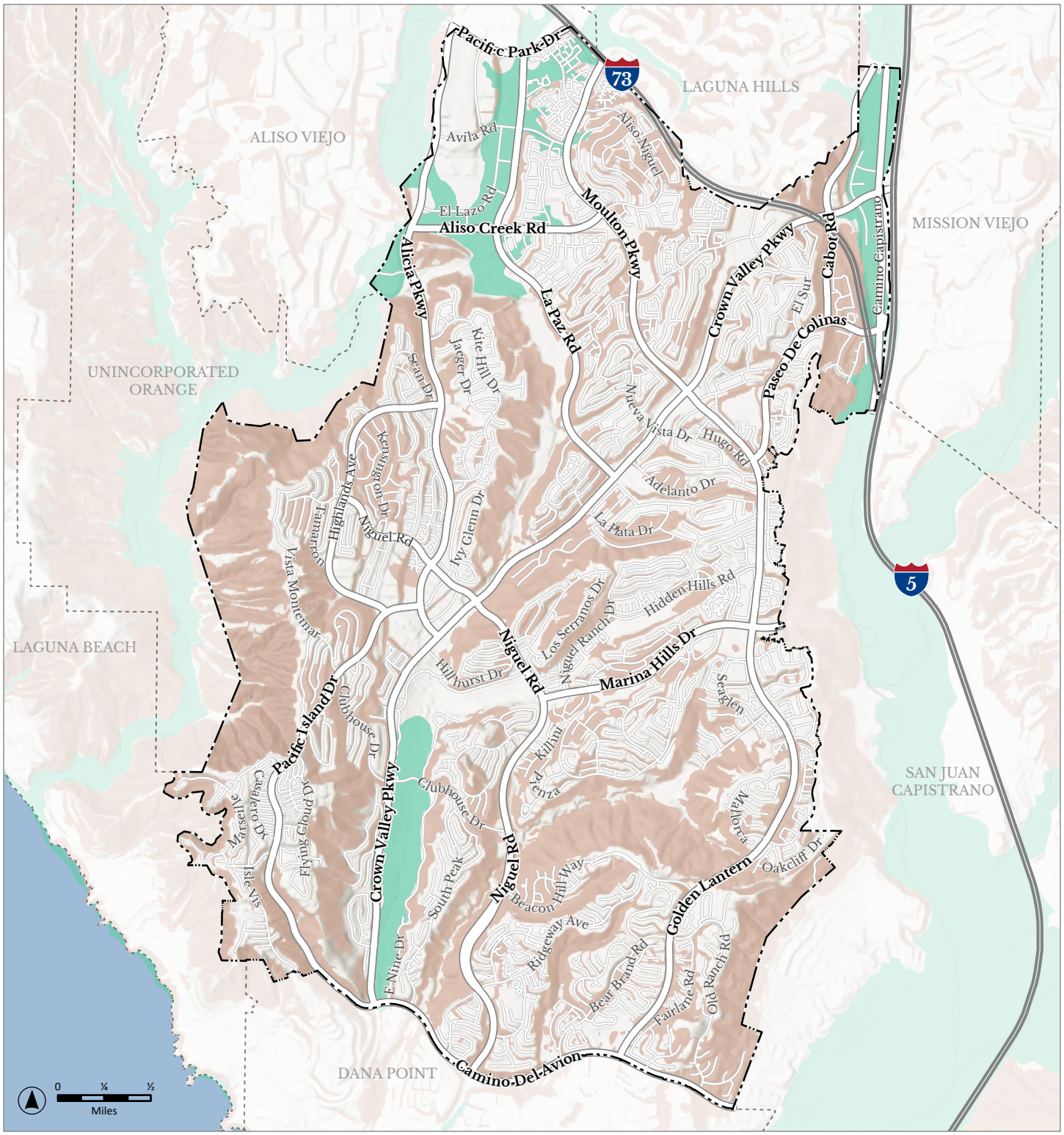

Data sources: CGS Information Warehouse, Seismic Hazards Zonation Program (Dana Point/San Juan Capistrano/Laguna Beach quads); City of Laguna Niguel; Orange County GIS.

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February 12, 2025

LEGEND

- Laguna Niguel City Boundary
- Other Jurisdictions

Seismic Hazard Zones

- Liquefaction Zone
- Landslide Zone

Figure 4.6-2.

Seismic Hazard Zones

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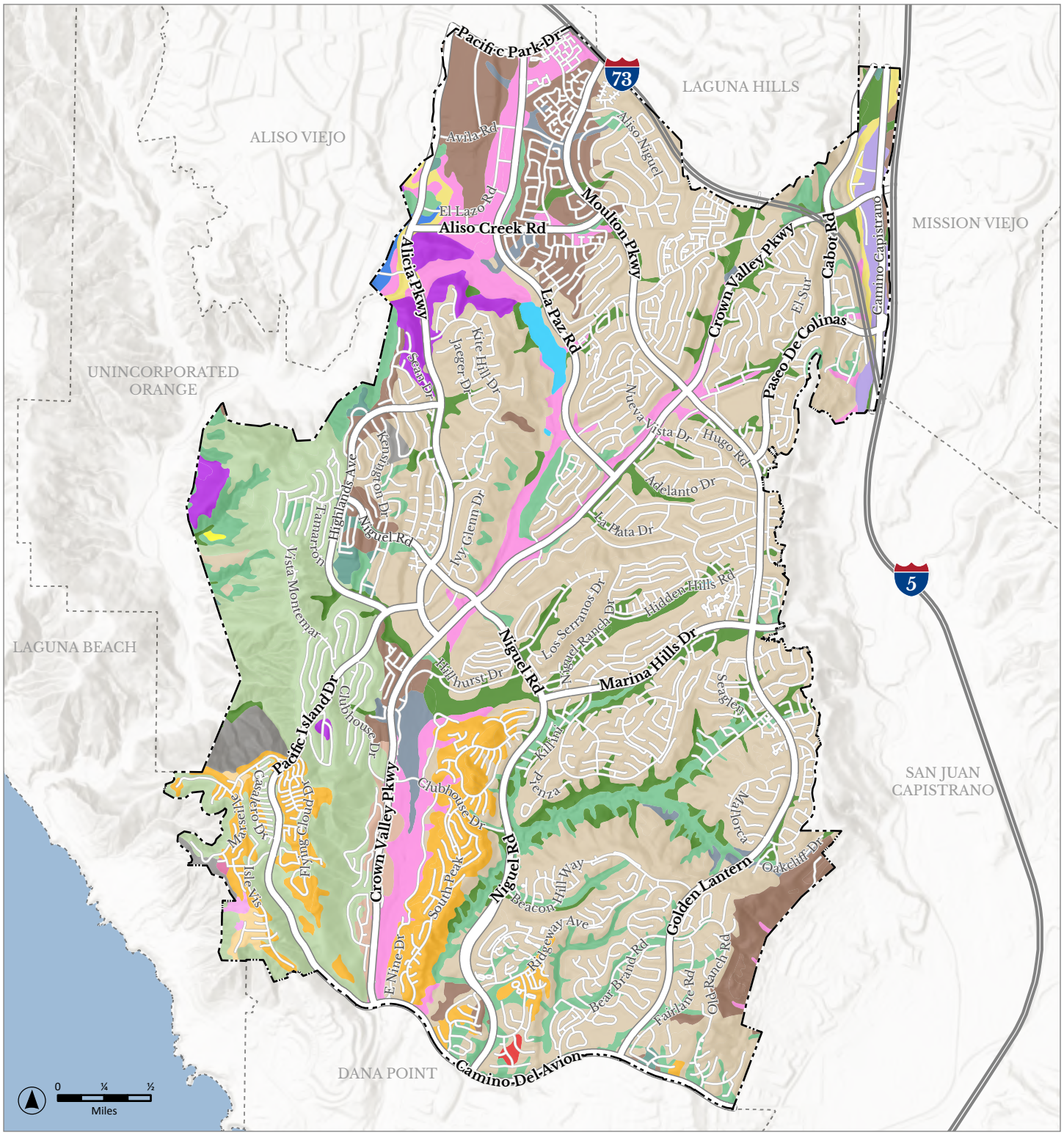

Data sources: NRCS Web Soil Survey, CA678 v16, 9/6/2022; City of Laguna Niguel; Orange County GIS.

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February 12, 2025

LEGEND

- Laguna Niguel City Boundary
- Other Jurisdictions
- Alo clay
- Balcom clay loam
- Beaches
- Bolsa silty clay loam
- Bosanko clay
- Botella loam/clay loam
- Calleguas clay loam
- Capistrano sandy loam
- Chesterton loamy sand
- Chino silty clay loam
- Cieneba-Rock outcrop complex
- Corralitos loamy sand
- Cropley clay
- Modjeska gravelly loam
- Myford sandy loam
- Riverwash
- Rock outcrop-Cieneba complex
- Soboba cobbly loamy sand
- Soper gravelly loam/ rock outcrop complex
- Sorrento loam
- Yorba gravelly sand
- Water

Figure 4.6-3.
Soils Map

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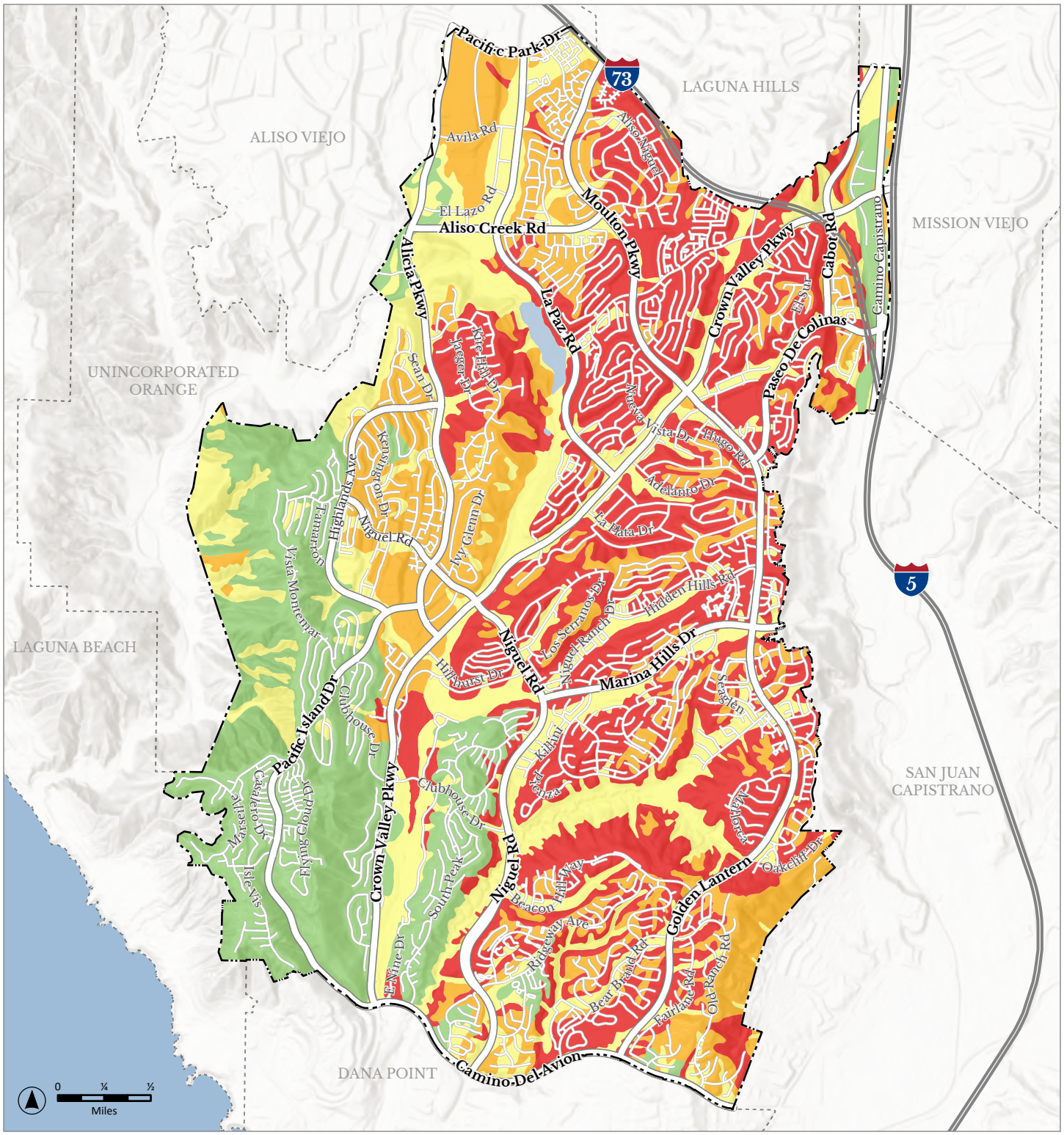

Data sources: NRCS Web Soil Survey, CA678 v16, 9/6/2022; City of Laguna Niguel; Orange County GIS.

Prepared for the City of Laguna Niguel by De Novo Planning Group
February 12, 2025

LEGEND

- Laguna Niguel City Boundary
- Other Jurisdictions

Shrink-Swell Potential of Soil*

- Low
- Moderate
- High
- Very High

** Shrink-Swell Potential is based on a linear extensibility rating. Linear extensibility refers to the change in volume of an unconfined clod of soil as moisture content is decreased from a moist to a dry state. The volume change is reported as percent change for the whole soil.*

A map unit is typically composed of one or more soil/rock components. Each of these components may have its own linear extensibility rating. For mapping purposes, these individual ratings are aggregated into a single value that represents the map unit as a whole. For each map unit, linear extensibility is actually recorded as three separate values: a low value, a high value, and a "representative" value. The "representative" value indicates the expected value for the soil component. This map is based on the "representative" value of each aggregated map unit, using the Weighted Average Aggregation method where percent composition is the weighting factor.

Map units with a representative values of 0-3% linear extensibility are considered Low for shrink-swell potential. Ratings of 3-6% are considered moderate. Ratings of 6-9% are considered high, and ratings above 9% are very high. Some map units are not rated.

Figure 4.6-4.

Shrink-Swell Potential of Soils

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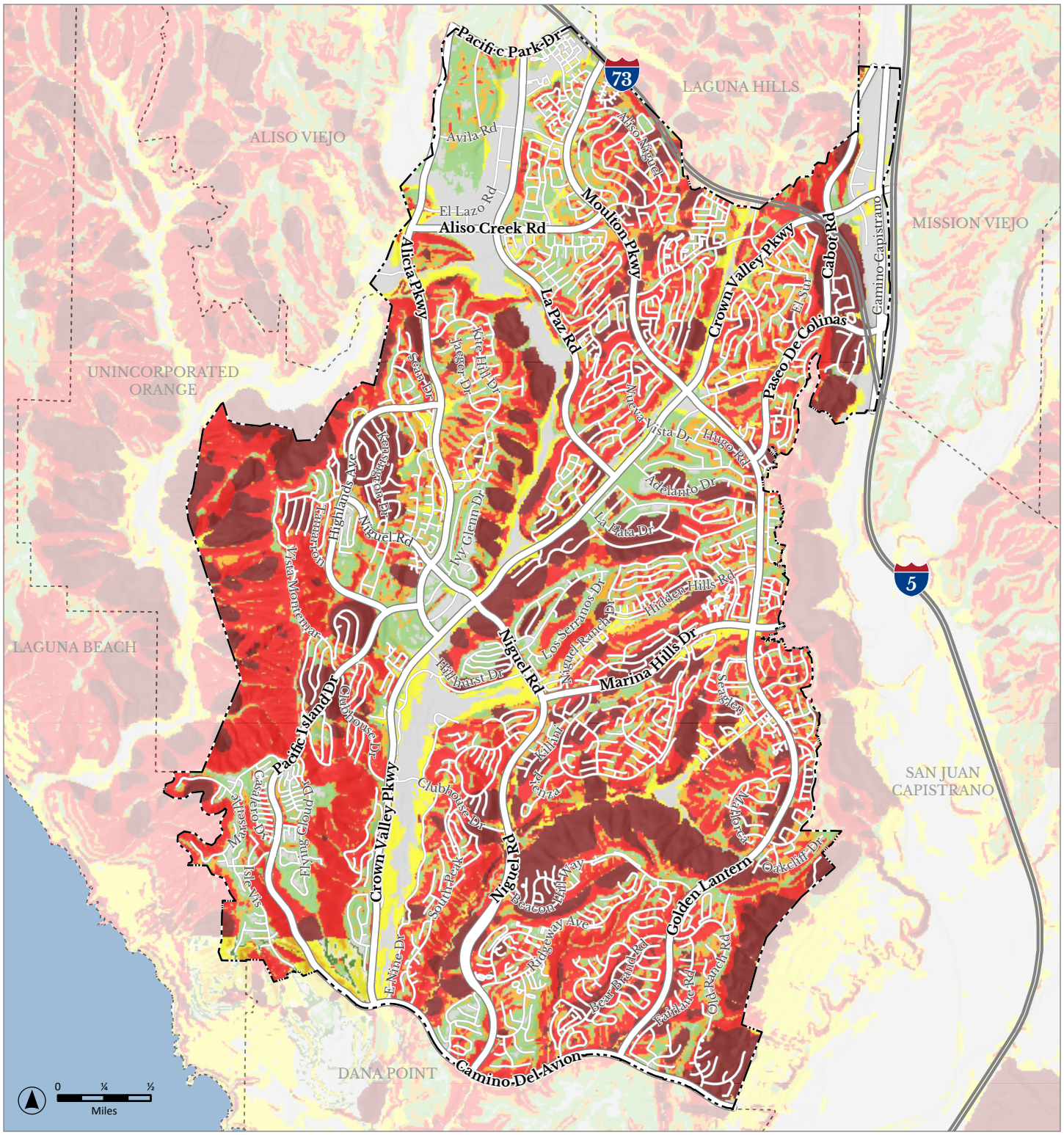

Data sources: California Geological Survey Map Sheet 58, Susceptibility to Deep-Seated Landslides in California, 2011; City of Laguna Niguel; Orange County GIS.

Prepared for the City of Laguna Niguel by De Novo Planning Group
February 12, 2025

LEGEND

- Laguna Niguel City Boundary
- Other Jurisdictions

Landslide Susceptibility Class

increasing susceptibility

0 3 5 6 7 8 9 10

Figure 4.6-5.

Landslide Susceptibility

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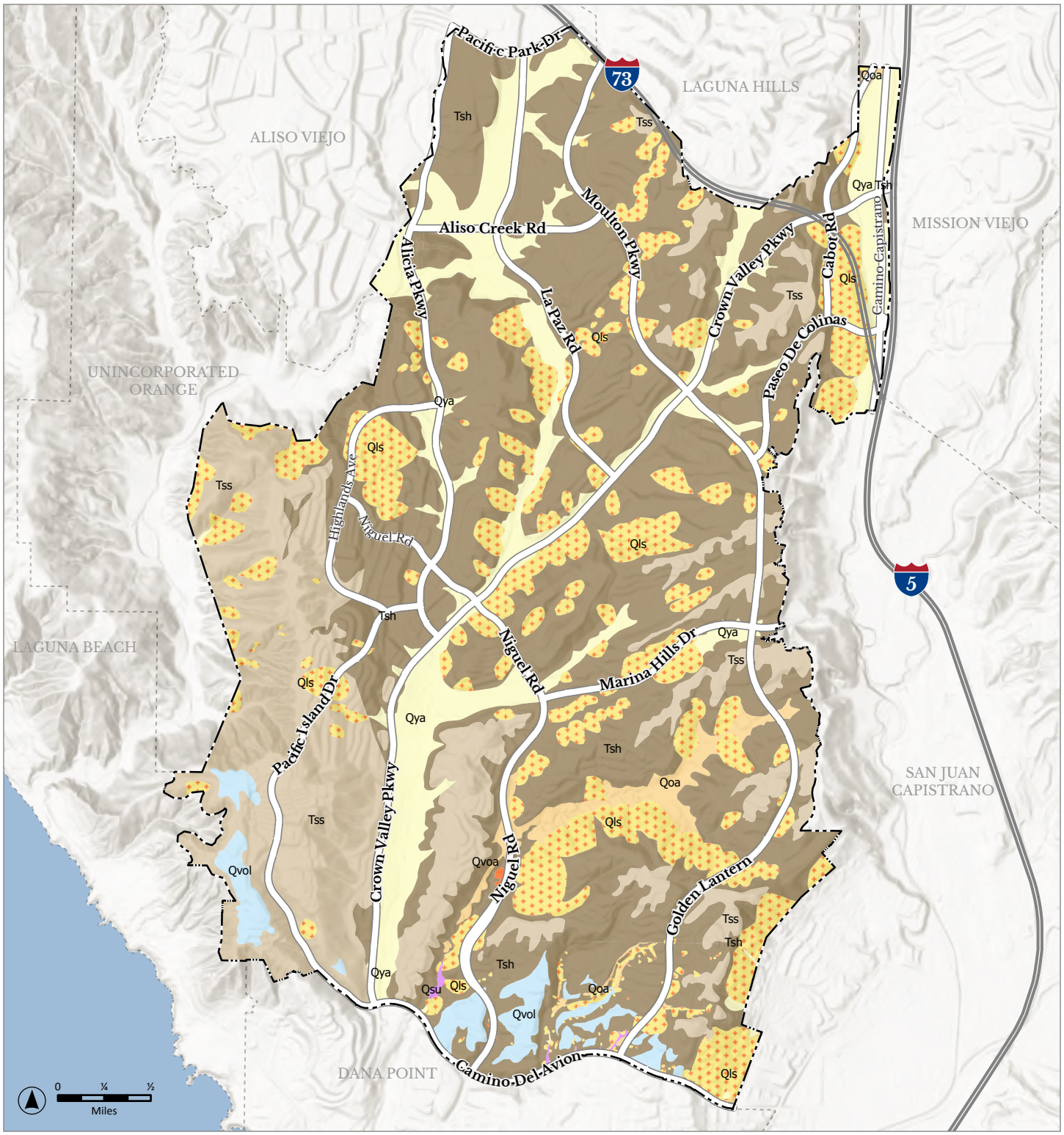

Data sources: California Geological Survey Special Report 217: Geologic Compilation of Quaternary Surficial Deposits in Southern California (2012 Revision); City of Laguna Niguel; Orange County GIS.

Prepared for the City of Laguna Niguel by De Novo Planning Group
February 12, 2025

LEGEND

- Laguna Niguel City Boundary
- Other Jurisdictions

Surficial Deposits (Quaternary)

- Qls – Landslide Deposits
- Qsu –Undifferentiated Deposits
- Qya –Young Alluvial Valley Deposits
- Qoa – Old Alluvial Valley Deposits
- Qvoa –Very Old Alluvial Valley Deposits
- Qvol –Very Old Lacustrine, Playa, and Estuarine Deposits

Bedrock (Tertiary)

- Tsh – Fine-grained formations
- Tss –Coarse-grained formations

Figure 4.6-6.
Geologic Map

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4.7 GREENHOUSE GAS EMISSIONS

4.7.1 PURPOSE

This section identifies the existing climate conditions, the current state of climate change science, and greenhouse gas (GHG) emissions sources within California and the Planning Area and provides an analysis of potential impacts associated with implementation of the General Plan Update. This section is primarily based upon GHG emissions analysis and modeling prepared by De Novo Planning Group and included as Appendix B, *Air Quality, Energy and Greenhouse Gas Emissions Modeling Data*.

4.7.2 ENVIRONMENTAL SETTING

GREENHOUSE GASES AND CLIMATE CHANGES LINKAGES

Various gases in the Earth's atmosphere, classified as atmospheric GHGs, play a critical role in determining the Earth's surface temperature. Solar radiation enters Earth's atmosphere from space, and a portion of the radiation is absorbed by the Earth's surface. The Earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation.

Naturally occurring GHGs include water vapor (H_2O), carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and ozone (O_3). Several classes of halogenated substances that contain fluorine, chlorine, or bromine are also GHGs, but they are, for the most part, solely a product of industrial activities. Although the direct GHGs CO_2, CH_4, and N_2O occur naturally in the atmosphere, human activities have changed their atmospheric concentrations. From the pre-industrial era (i.e., ending about 1750) to 2019, concentrations of these three GHGs have increased globally by 47, 156, and 23 percent, respectively.[1]

GHGs, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect. Among the prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), ozone (O_3), water vapor, nitrous oxide (N_2O), and chlorofluorocarbons (CFCs).

Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. In California, the transportation sector is the largest emitter of GHGs, followed by the industrial and electricity generation sectors.[2]

[1] Intergovernmental Panel on Climate Change, *Climate Change 2023 Synthesis Report*, https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_LongerReport.pdf, accessed January 28, 2025.
[2] California Energy Commission, 2021 *California Clean Energy Almanac*, https://www.energy.ca.gov/sites/default/files/2022-02/2021_EnergyAlmanac_ADA.pdf, accessed January 28, 2025.

As the name implies, global climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern, respectively. California produced 369 million gross metric tons of carbon dioxide equivalents ($MMTCO_2e$) in 2022.

Carbon dioxide equivalents are a measurement used to account for the fact that different GHGs have different potential to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. This potential, known as the global warming potential of a GHG, is also dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. Expressing GHG emissions in carbon dioxide equivalents takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted.

Consumption of fossil fuels in the transportation sector was the single largest source of California's GHG emissions in 2022, accounting for 39 percent of total GHG emissions in the State. This category was followed by the industrial sector (23 percent), the electricity generation sector (including both in-state and out of-state sources) (16 percent), the agriculture and forestry sector (eight percent), the residential energy consumption sector (eight percent), and the commercial energy consumption sector (six percent).[3]

EFFECTS OF GLOBAL CLIMATE CHANGE

According to NASA Science and the Intergovernmental Panel on Climate Change (IPCC), global climate change is not a future problem, but a current reality with far-reaching consequences.[4] The results of the IPCC Sixth Assessment report identify that the effects of increasing global temperature are far-reaching and extremely difficult to quantify. The scientific community continues to study the effects of global climate change. In general, increases in the ambient global temperature as a result of increased GHGs are anticipated to result in rising sea levels, which could threaten coastal areas through accelerated coastal erosion, threats to levees and inland water systems and disruption to coastal wetlands and habitat.

According to the IPCC, if the temperature of the ocean warms, it is anticipated that the winter snow season would be shortened. Snowpack in the Sierra Nevada provides both water supply (runoff) and storage (within the snowpack before melting), which is a major source of supply for the State. The snowpack portion of the supply could potentially decline by 50 percent to 75 percent by the end of the 21st century.[5] This phenomenon could lead to significant challenges securing an adequate water supply for a growing state population. Further, the increased ocean temperature could result in increased moisture flux into the State; however, since this would likely increasingly come in the form of rain rather than snow in the

[3] California Air Resources Board, *Current California GHG Emission Inventory Data*, https://ww2.arb.ca.gov/ghg-inventory-data, accessed January 28, 2025.
[4] National Aeronautics and Space Administration (NASA), *The Effects of Climate Change*, https://science.nasa.gov/climate-change/effects/#:~:text=Global%20climate%20change%20is%20not,longer%2C%20more%20intense%20heat%20waves, accessed January 28, 2025.
[5] Natural Resources Defense Council, *California Snowpack and the Drought*, 2014, https://www.nrdc.org/sites/default/files/ca-snowpack-and-drought-FS.pdf, accessed January 28, 2025.

high elevations, increased precipitation could lead to increased potential and severity of flood events, placing more pressure on California's levee/flood control system.

Furthermore, sea level has risen approximately seven inches during the last century, and it is predicted to rise an additional 22 to 35 inches by 2100, depending on the future GHG emission levels. If this occurs, resultant effects could include increased coastal flooding, saltwater intrusion, and disruption of wetlands. As the existing climate throughout California changes over time, mass migration of species, or failure of species to migrate in time to adapt to the perturbations in climate, could also result. According to the Indicators of Climate Change in California report, the impacts of global warming in California are anticipated to include, but are not limited to, those discussed below.[6]

Public Health

Higher temperatures are expected to increase the frequency, duration, and intensity of conditions conducive to air pollution formation. For example, days with weather conducive to O_3 formation are projected to increase from 25 percent to 35 percent under the lower warming range and to 75 percent to 85 percent under the medium warming range. In addition, if global background O_3 levels increase as predicted in some scenarios, it may become impossible to meet local air quality standards. Air quality could be further compromised by increases in wildfires, which emit fine particulate matter that can travel long distances depending on wind conditions. The Climate Scenarios report identified by the IPCC indicates that large wildfires could become up to 55 percent more frequent if GHG emissions are not significantly reduced.[7]

In addition, under the higher warming scenario, there could be up to 100 more days per year with temperatures above 90 degrees Fahrenheit (°F) in Los Angeles and 95°F in Sacramento by 2100. This is a large increase over historical patterns and approximately twice the increase projected if temperatures remain within or below the lower warming range. Rising temperatures will increase the risk of death from dehydration, heat stroke/exhaustion, heart attack, stroke, and respiratory distress caused by extreme heat.

Water Resources

A vast network of man-made reservoirs and aqueducts capture and transport water throughout the State from northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada snow pack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snow pack, increasing the risk of summer water shortages.

The State's water supplies are also at risk from rising sea levels. An influx of saltwater would degrade California's estuaries, wetlands, and groundwater aquifers. Saltwater intrusion caused by rising sea levels

[6] California Office of Environmental Health Hazard Assessment, *2022 Report: Indicators of Climate Change in California,* https://oehha.ca.gov/climate-change/epic-2022, accessed January 28, 2025.
[7] Intergovernmental Pannel on Climate Change , *Climate Change 2021: The Physical Science Basis, the Working Group I contribution to the Sixth Assessment Report*, 2023, https://www.ipcc.ch/report/sixth-assessment-report-working-group-i/, accessed January 28, 2025.

is a major threat to the quality and reliability of water within the southern edge of the Sacramento/San Joaquin River Delta, a major State fresh water supply. Global warming is also projected to seriously affect agricultural areas, with California farmers projected to lose as much as 25 percent of the water supply they need; decrease the potential for hydropower production within the State (although the effects on hydropower are uncertain); and seriously harm winter tourism. Under the lower warming range, the snow dependent winter recreational season at lower elevations could be reduced by as much as one month. If temperatures reach the higher warming range and precipitation declines, there might be many years with insufficient snow for skiing, snowboarding, and other snow dependent recreational activities.

If GHG emissions continue unabated, more precipitation will fall as rain instead of snow, and the snow that does fall will melt earlier, reducing the Sierra Nevada spring snow pack by as much as 70 to 90 percent. Under the lower warming scenario, snow pack losses are expected to be only half as large as those expected if temperatures were to rise to the higher warming range. How much snow pack will be lost depends in part on future precipitation patterns, the projections for which remain uncertain. However, even under the wetter climate projections, the loss of snow pack would pose challenges to water managers, hamper hydropower generation, and nearly eliminate all skiing and other snow-related recreational activities.

Agriculture

Increased GHG emissions are expected to cause widespread changes to the agriculture industry, reducing the quantity and quality of agricultural products statewide. Although higher carbon dioxide levels can stimulate plant production and increase plant water-use efficiency, California's farmers will face greater water demand for crops and a less reliable water supply as temperatures rise.

Plant growth tends to be slow at low temperatures, increasing with rising temperatures up to a threshold. However, faster growth can result in less-than-optimal development for many crops, so rising temperatures are likely to worsen the quantity and quality of yield for a number of California's agricultural products. Products likely to be most affected include wine grapes, fruits and nuts, and milk.

Crop growth and development will be affected, as will the intensity and frequency of pest and disease outbreaks. Rising temperatures will likely aggravate ozone pollution, which makes plants more susceptible to disease and pests and interferes with plant growth.

In addition, continued global warming will likely shift the ranges of existing invasive plants and weeds and alter competition patterns with native plants. Range expansion is expected in many species while range contractions are less likely in rapidly evolving species with significant populations already established. Should range contractions occur, it is likely that new or different weed species will fill the emerging gaps. Continued global warming is also likely to alter the abundance and types of many pests, lengthen pests' breeding season, and increase pathogen growth rates.

Forests and Landscapes

Global warming is expected to alter the distribution and character of natural vegetation thereby resulting in a possible increased risk of large wildfires. If temperatures rise into the medium warming range, the

risk of large wildfires in California could increase by as much as 55 percent, which is almost twice the increase expected if temperatures stay in the lower warming range. However, since wildfire risk is determined by a combination of factors, including precipitation, winds, temperature, and landscape and vegetation conditions, future risks will not be uniform throughout the State. For example, if precipitation increases as temperatures rise, wildfires in southern California are expected to increase by approximately 30 percent toward the end of the century. In contrast, precipitation decreases could increase wildfires in northern California by up to 90 percent.

Moreover, continued global warming will alter natural ecosystems and biological diversity within the State. For example, alpine and sub-alpine ecosystems are expected to decline by as much as 60 to 80 percent by the end of the century as a result of increasing temperatures. The productivity of the State's forests is also expected to decrease as a result of global warming.

Rising Sea Levels

Rising sea levels, more intense coastal storms, and warmer water temperatures will increasingly threaten the State's coastal regions. Under the higher warming scenario, sea level is anticipated to rise 22 to 35 inches by 2100. Elevations of this magnitude would inundate coastal areas with saltwater, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats.

4.7.3 REGULATORY SETTING

FEDERAL

Clean Air Act

The Federal Clean Air Act (FCAA) was first signed into law in 1970. In 1977, and again in 1990, the law was substantially amended. The FCAA is the foundation for a national air pollution control effort, and it is composed of the following basic elements: National Ambient Air Quality Standards (NAAQS) for criteria air pollutants, hazardous air pollutant standards, State attainment plans, NAAQS motor vehicle emissions standards, stationary source emissions standards and permits, acid rain control measures, stratospheric ozone protection, and enforcement provisions.

The U.S. Environmental Protection Agency (EPA) is responsible for administering the FCAA. The FCAA requires the EPA to set NAAQS for several problem air pollutants based on human health and welfare criteria. Two types of NAAQS were established: primary standards, which protect public health, and secondary standards, which protect the public welfare from non-health-related adverse effects such as visibility reduction.

In 2007, in the court case of *Massachusetts et al. vs. the USEPA et al*. (549 U.S. 497), the U.S. Supreme Court found that GHGs are air pollutants covered by the FCAA (42 USC Sections 7401-7671q). The Supreme Court held that the Administrator of the EPA must determine whether or not emissions of GHGs from new motor vehicles cause or contribute to air pollution, which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In making these decisions, the EPA Administrator is required to follow the language of Section 202(a) of the FCAA.

On December 7, 2009, the Administrator signed two distinct findings regarding GHGs under Section 202(a) of the FCAA:

Endangerment Finding: The Administrator finds that the current and projected concentrations of the six key well-mixed GHGs (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride) in the atmosphere threaten the public health and welfare of current and future generations.

Cause or Contribute Finding: The Administrator finds that the combined emissions of these well-mixed GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution, which threatens public health and welfare.

These findings do not themselves impose any requirements on industry or other entities. However, this action was a prerequisite for implementing GHG emission standards for vehicles. In collaboration with the National Highway Traffic Safety Administration (NHTSA) and CARB, the USEPA developed emission standards for light-duty vehicles (2012-2025 model years), and heavy-duty vehicles (2014-2027 model years).

Energy Policy and Conservation Act

The Energy Policy and Conservation Act of 1975 sought to ensure that all vehicles sold in the U.S. would meet certain fuel economy goals. Through the Energy Policy and Conservation Act, Congress established the first fuel economy standards for on-road motor vehicles in the United States. Pursuant to the Energy Policy and Conservation Act, the National Highway Traffic and Safety Administration, which is part of the U.S. Department of Transportation (USDOT), is responsible for establishing additional vehicle standards and for revising existing standards.

Compliance with federal fuel economy standards is determined on the basis of each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the U.S. The Corporate Average Fuel Economy (CAFE) program, which is administered by the EPA, was created to determine vehicle manufacturers' compliance with the fuel economy standards. The EPA calculates a CAFE value for each manufacturer based on city and highway fuel economy test results and vehicle sales. Based on the information generated under the CAFE program, the USDOT is authorized to assess penalties for noncompliance.

U.S. Federal Climate Change Policy

According to the EPA, "the United States government has established a comprehensive policy to address climate change" that includes slowing the growth of emissions; strengthening science, technology, and institutions; and enhancing international cooperation. To implement this policy, "the Federal government is using voluntary and incentive-based programs to reduce emissions and has established programs to promote climate technology and science." The EPA administers multiple programs that encourage voluntary GHG reductions, including ENERGY STAR, Climate Leaders, and Methane Voluntary Programs.

The following are actions taken at the federal level relating to GHG emissions:

Clean Vehicles. Congress first passed the Corporate Average Fuel Economy law in 1975 to increase the fuel economy of cars and light duty trucks. The law has become more stringent over time. On May 19,

2009, President Obama put in motion a new national policy to increase fuel economy for all new cars and trucks sold in the United States. On April 1, 2010, the EPA and the USDOT's National Highway Safety Administration announced a joint final rule establishing a national program that would reduce GHG emissions and improve fuel economy for new cars and trucks sold in the United States.

The first phase of the national program applies to passenger cars, light duty trucks, and medium duty passenger vehicles, covering model years 2012 through 2016. They require these vehicles to meet an estimated combined average emissions level of 250 grams of CO_2 per mile, equivalent to 35.5 miles per gallon if the automobile industry were to meet this CO_2 level solely through fuel economy improvements. The EPA and the National Highway Safety Administration issued final rules on a second phase joint rulemaking, establishing national standards for light duty vehicles for model years 2017 through 2025 in August 2012. The standards for model years 2017 through 2025 apply to passenger cars, light duty trucks, and medium duty passenger vehicles. The final standards are projected to result in an average industry fleetwide level of 163 grams/mile of CO2 in model year 2025, which is equivalent to 54.5 miles per gallon (mpg) if achieved exclusively through fuel economy improvements.

The EPA and the USDOT issued final rules for the first national standards to reduce GHG emissions and improve fuel efficiency of heavy-duty trucks and buses on September 15, 2011, which became effective November 14, 2011. For combination tractors, the agencies adopted engine and vehicle standards that began in the 2014 model year and achieved up to a 20 percent reduction in CO2 emissions and fuel consumption by the 2018 model year. For heavy-duty pickup trucks and vans, the agencies adopted separate gasoline and diesel truck standards, which phased in starting in the 2014 model year.

Mandatory Reporting of Greenhouse Gases. The Consolidated Appropriations Act of 2008, passed in December 2007, requires the establishment of mandatory GHG reporting requirements. On September 22, 2009, the EPA issued the Final Mandatory Reporting of Greenhouse Gases Rule, which became effective January 1, 2010. The rule requires reporting of GHG emissions from large sources and suppliers in the United States and is intended to collect accurate and timely emissions data to inform future policy decisions. Under the rule, suppliers of fossil fuels or industrial GHGs, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons or more per year of GHG emissions are required to submit annual reports to the EPA.

Cap and Trade. Cap-and-trade refers to a policy tool where emissions are limited to a certain amount and can be traded or provides flexibility on how the emitter can comply. There is no federal GHG cap-and-trade program currently; however, some states have joined to create initiatives to provide a mechanism for cap and trade.

The Western Climate Initiative partner jurisdictions have developed a comprehensive initiative to reduce regional GHG emissions to 15 percent below 2005 levels by 2020. The partners are California, British Columbia, Manitoba, Ontario, and Quebec. Currently, only California and Quebec are participating in the cap-and-trade program.

STATE

The California Legislature has enacted a series of statutes in recent years addressing the need to reduce GHG emissions across the State. These statutes can be categorized into four broad categories: (i) statutes

setting numerical statewide targets for GHG reductions, and authorizing the California Air Resources Board (CARB) to enact regulations to achieve such targets; (ii) statutes setting separate targets for increasing the use of renewable energy for the generation of electricity throughout the State; (iii) statutes addressing the carbon intensity of vehicle fuels, which prompted the adoption of regulations by CARB; and (iv) statutes intended to facilitate land use planning consistent with statewide climate objectives. The discussion below will address each of these key sets of statutes, as well as Executive Orders and CARB "Scoping Plans" intended to achieve GHG reductions under the first set of statutes and recent building code requirements intended to reduce energy consumption.

Statutes Setting Statewide GHG Reduction Targets

Assembly Bill 32 (Global Warming Solutions Act)

In 2006, the California State Legislature enacted the California Global Warming Solutions Act of 2006 (Health & Safety Code Section 38500 et seq.), also known as Assembly Bill (AB) 32 (Stats. 2006, ch. 488). AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and a cap on statewide GHG emissions. AB 32 required that statewide GHG emissions be reduced to 1990 levels by 2020. This reduction was accomplished through an enforceable statewide cap on GHG emissions that was phased in starting in 2012. To effectively implement the cap, AB 32 directed CARB to develop and implement regulations to reduce statewide GHG emissions from stationary sources.

Senate Bill 32

SB 32 (Stats. 2016, Ch. 249) added Section 38566 to the Health and Safety Code. It provides that "[i]n adopting rules and regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emissions reductions authorized by [Division 25.5 of the Health and Safety Code], [CARB] shall ensure that statewide greenhouse gas emissions are reduced to at least 40 percent below the statewide GHG emissions limit no later than December 31, 2030." In other words, SB 32 requires California, by 2030, to reduce its statewide GHG emissions so that they are 40 percent below those that occurred in 1990.

Executive Orders S-3-05, B-30-15, and B-55-18

The 2020 statewide GHG reduction target in AB 32 was consistent with the second of three statewide emissions reduction targets set forth in former Governor Arnold Schwarzenegger's 2005 Executive Order known as S-3-05, which is expressly mentioned in AB 32. (See Health & Safety Code Section 38501, subd. (i).) That Executive Branch document included the following GHG emission reduction targets: by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce GHG emissions to 1990 levels; by 2050, reduce GHG emissions to 80 percent below 1990 levels. To meet the targets, the Governor directed several State agencies to cooperate in the development of a climate action plan. The Secretary of California EPA leads the Climate Action Team, whose goal is to implement global warming emission reduction programs identified in the Climate Action Plan and to report on the progress made toward meeting the emission reduction targets established in the executive order.

In 2015, Governor Brown issued Executive Order, B-30-15, which created a "new interim statewide GHG emission reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030 is established

in order to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050." SB 32 codified this target.

In 2018, the Governor issued Executive Order B-55-18, which established a statewide goal to "achieve carbon neutrality as soon as possible, and no later than 2045, and maintain and achieve negative emissions thereafter." The order directs the CARB to work with other State agencies to identify and recommend measures to achieve those goals. As discussed below, the 2022 Scoping Plan lays out a path towards achieving carbon neutrality by 2045.

Senate Bill 350

Senate Bill 350 (SB 350) (Stats. 2015, Ch. 547) added to the Public Utilities Code language that puts into statute the 2050 GHG reduction target identified in Executive Order S-3-05, albeit in the limited context of new state policies (i) increasing the overall share of electricity that must be produced through renewable energy sources and (ii) directing certain State agencies to begin planning for the widespread electrification of the California vehicle fleet. Section 740.12(a)(1)(D) of the Public Utilities Code states that "[t]he Legislature finds and declares [that] … [r]educing emissions of [GHGs] to 40 percent below 1990 levels by 2030 and to 80 percent below 1990 levels by 2050 will require widespread transportation electrification." Furthermore, Section 740.12(b) states that the California Public Utilities Commission (CPUC), in consultation with CARB and the California Energy Commission (CEC), must "direct electrical corporations to file applications for programs and investments to accelerate widespread transportation electrification to reduce dependence on petroleum, meet air quality standards, … and reduce emissions of greenhouse gases to 40 percent below 1990 levels by 2030 and to 80 percent below 1990 levels by 2050."

AB 1279

In September 2022, the Legislature enacted AB 1279 (Stats. 2022, Ch. 337). AB 1279 declares the policy of the state to achieve net-zero GHG emissions as soon as possible, but no later than 2045, and achieve and maintain net negative GHG emissions thereafter. Additionally, the bill requires that by 2045, statewide anthropogenic GHG emissions be reduced to at least 85 percent below 1990 levels.

Statutes Setting Target for the Use of Renewable Energy for the Generation of Electricity

California Renewables Portfolio Standard

SB X1-2 (Stats. 2011, 1st Ex. Sess., Ch. 1) set aggressive statutory targets for renewable electricity, culminating in the requirement that 33 percent of the State's electricity come from renewables by 2020. This legislation applies to all electricity retailers in the State, including publicly owned utilities, investor-owned utilities, electricity service providers, and community choice aggregators. All these entities were required to meet renewable energy goals of 20 percent of retail sales from renewables by the end of 2013, 25 percent by the end of 2016, and 33 percent by the end of 2020. (See Pub. Utility Code, Section 399.11 et seq. [subsequently amended].) SB 350, discussed below, increases the Renewable Portfolio Standard to require 50 percent of electricity generated to be from renewables by 2030. (Pub. Utility Code, Section 399.11, subd (a); see also Section 399.30, subd. (c)(2).) In 2018, Senate Bill 100 (Stats. 2018, Ch. 312) revised the above-described deadlines and targets so that the State will have to achieve a 50 percent renewable resources target by December 31, 2026 (instead of by 2030) and achieve a 60 percent target

by December 31, 2030. The legislation also establishes a State policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of retail sales of electricity to California end-use customers and 100- percent of electricity procured to serve all State agencies by December 31, 2045.

Statutes and CARB Regulations Addressing the Carbon Intensity of Petroleum-based Transportation Fuels

Assembly Bill 1493, Pavley Clean Cars Standards

In 2002, the Legislature enacted Assembly Bill 1493 ("Pavley Bill") (Stats. 2002, Ch. 200), which directed CARB to develop and adopt regulations that achieve the maximum feasible reduction of GHGs emitted by passenger vehicles and light-duty trucks beginning with model year 2009. (See Health and Safety Code Section 43018.5.) In September 2004, pursuant to this directive, CARB approved regulations to reduce GHG emissions from new motor vehicles beginning with the 2009 model year. These regulations created what are commonly known as the "Pavley standards." In September 2009, CARB adopted amendments to the Pavley standards to reduce GHG emissions from new motor vehicles through the 2016 model year. These regulations created what are commonly known as the "Pavley II standards." (See California Code of Regulations, Title 13, Sections 1900, 1961, and 1961.1 *et seq*.)

In 2012, CARB adopted an Advanced Clean Cars (ACC) program aimed at reducing both smog-causing pollutants and GHG emissions for vehicles model years 2017-2025. This historic program, developed in coordination with the USEPA and NHTSA, combined the control of smog-causing (criteria) pollutants and GHG emissions into a single coordinated set of requirements for model years 2015 through 2025. The regulations focus on substantially increasing the number of plug-in hybrid cars and zero-emission vehicles in the vehicle fleet and on making fuels such as electricity and hydrogen readily available for these vehicle technologies. The components of the ACC program are the Low-Emission Vehicle (LEV) regulations that reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles, and the Zero-Emission Vehicle (ZEV) regulation, which requires manufacturers to produce an increasing number of pure ZEVs (meaning battery electric and fuel cell electric vehicles), with provisions to also produce plug-in hybrid electric vehicles in the 2018 through 2025 model years. (See California Code of Regulations, Title 13, Sections 1900, 1961, 1961.1, 1961.2, 1961.3, 1965, 1968.2, 1968.5, 1976, 1978, 2037, 2038, 2062, 2112, 2139, 2140, 2145, 2147, 2235, and 2317 et seq.)

It is expected that the Pavley regulations will reduce GHG emissions from California passenger vehicles by about 34 percent below 2016 levels by 2025, all while improving fuel efficiency and reducing motorists' costs.

Statute Intended to Facilitate Land Use Planning Consistent with Statewide Climate Objectives

California Senate Bill 375 (Sustainable Communities Strategy)

This 2008 legislation built on AB 32 by setting forth a mechanism for coordinating land use and transportation on a regional level for the purpose of reducing GHGs. The focus is to reduce miles traveled by passenger vehicles and light trucks. CARB is required to set GHG reduction targets for each metropolitan region for 2020 and 2035. Each of California's metropolitan planning organizations then prepares a sustainable communities strategy that demonstrates how the region will meet its GHG reduction target through integrated land use, housing, and transportation planning. Once adopted by the metropolitan planning organizations, the sustainable communities strategy is to be incorporated into that

region's federally enforceable regional transportation plan. If a metropolitan planning organization is unable to meet the targets through the sustainable communities strategy, then an alternative planning strategy must be developed that demonstrates how targets could be achieved, even if meeting the targets is deemed to be infeasible.

Climate Change Scoping Plans

2022 Scoping Plan Update

In accordance with AB 32, the CARB developed the first Scoping Plan in 2008 to outline the State's strategy to achieve 1990 level emissions by year 2020. In May 2014, the CARB released and adopted the *First Update to the Climate Change Scoping Plan* to identify the next steps in reaching AB 32 goals and evaluate the progress that has been made between 2000 and 2012. A newer version of the Scoping Plan was then adopted by the CARB in December 2017 (entitled *California's 2017 Climate Change Scoping Plan*). Lastly, the most recent version of the Scoping Plan was adopted by the CARB in November 2022 (entitled *Final 2022 Scoping Plan for Achieving Carbon Neutrality*) (2022 Scoping Plan), which was designed consistent with the long-term GHG reduction targets embedded in AB 1279. Since adoption of the 2008 Scoping Plan and the subsequent updates in 2014, 2017, and 2022, State agencies have adopted programs identified in the plan, and the Legislature has passed additional legislation to achieve the GHG reduction targets. Statewide strategies to reduce GHG emissions include the Low Carbon Fuel Standard, California Appliance Energy Efficiency regulations, California Building Standards (e.g., CALGreen and the 2022 Building and Energy Efficiency Standards), zero carbon electricity by 2045, and changes in the corporate average fuel economy standards (e.g., Pavley I and California Advanced Clean Cars).

Statutes Intended to Reduce Emissions of Short-lived Climate Pollutants

SB 605 and SB 1383

SB 605 (2014) required CARB to complete a comprehensive strategy to reduce emissions of short-lived climate pollutants in the state, and SB 1383 (2016) required CARB to approve and implement that strategy by January 1, 2018. SB 1383 also establishes specific targets for the reduction of short-lived climate pollutants (40 percent below 2013 levels by 2030 for methane and HFCs, and 50 percent below 2013 levels by 2030 for anthropogenic black carbon) and provides direction for reductions from dairy and livestock operations and landfills. Accordingly, CARB adopted its Short-Lived Climate Pollutant Reduction Strategy (Reduction Strategy) in March 2017. The Reduction Strategy establishes a framework for the statewide reduction of emissions of black carbon, methane, and fluorinated gases.

Statute Intended to Achieve Carbon Neutrality and Foster Climate Adaptation and Resilience

Assembly Bill 1757

AB 1757 (September 2022) requires the California Natural Resources Agency to determine a range of targets for natural carbon sequestration, and for nature-based climate solutions that reduce GHG emissions for future years 2030, 2038, and 2045. These targets are to be determined by no later than January 1, 2024, and are established to support the State's goals to achieve carbon neutrality and foster climate adaptation and resilience.

Building Code Requirements Intended to Reduce GHG Emissions

California Energy Code

The California Energy Code (CCR Title 24, Part 6), which is incorporated into the Building Energy Efficiency Standards, was first established in 1978 in response to a legislative mandate to reduce California's energy consumption. Although these standards were not originally intended to reduce GHG emissions, increased energy efficiency results in decreased GHG emissions because energy efficient buildings require less electricity and thus less consumption of fossil fuels, which emit GHGs. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods.

The most recent Title 24 standards are the 2022 Title 24 standards. Buildings permitted on or after January 1, 2023, must comply with the 2022 Standards. The California Energy Commission updates the standards every three years. The CEC estimates that the 2022 Title 24 standards will reduce 10 million metric tons of GHG over 30 years. When compared to the 2019 Title 24 standards, the 2022 update focuses on: encouraging electric heat pump technology and use; establishing electric-ready requirements when natural gas is installed; expanding solar photovoltaic (PV) system and battery storage standards; and strengthening ventilation standards to improve indoor air quality.

California Green Building Standards Code

The purpose of the California Green Building Standards Code (CALGreen) (CCR Title 24, Part 11) is to improve public health and safety and to promote the general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices in the following categories: 1) planning and design; 2) energy efficiency; 3) water efficiency and conservation; 4) material conservation and resource efficiency; and 5) environmental quality. CALGreen, which became effective on January 1, 2011, instituted mandatory minimum environmental performance standards for all ground-up new construction of commercial, low-rise residential uses, and State-owned buildings, as well as schools and hospitals. The mandatory standards require the following:

- 20 percent mandatory reduction in indoor water use relative to baseline levels;
- 50 percent construction/demolition waste must be diverted from landfills;
- Mandatory inspections of energy systems to ensure optimal working efficiency; and
- Low-pollutant emitting exterior and interior finish materials such as paints, carpets, vinyl flooring, and particle boards.

The voluntary standards require the following:

Tier I: 15 percent improvement in energy requirements, stricter water conservation requirements for specific fixtures, 65 percent reduction in construction waste, 10 percent recycled content, 20 percent permeable paving, 20 percent cement reduction, and cool/solar reflective roof.

Tier II: 30 percent improvement in energy requirements, stricter water conservation requirements for specific fixtures, 75 percent reduction in construction waste, 15 percent recycled content, 30 percent permeable paving, 30 percent cement reduction, and cool/solar reflective roof.

The latest version of CALGreen is the 2022 CALGreen Code, which became effective on January 1, 2023. Between 2010 and 2022, continuous updates and additions have been made to CALGreen, including water conservation and recycling, electric vehicle infrastructure and charging, and changes intended to eliminate conflicts with the California Energy Code, which is Part 6 of Title 24.

Title 20

CCR Title 20 requires manufacturers of appliances to meet State and federal standards for energy and water efficiency. The CEC certifies an appliance based on a manufacturer's demonstration that the appliance meets the standards. New appliances regulated under Title 20 include refrigerators, refrigerator-freezers, and freezers; room air conditioners and room air-conditioning heat pumps; central air conditioners; spot air conditioners; vented gas space heaters; gas pool heaters; plumbing fittings and plumbing fixtures; fluorescent lamp ballasts; lamps; emergency lighting; traffic signal modules; dishwaters; clothes washers and dryers; cooking products; electric motors; low-voltage dry-type distribution transformers; power supplies; televisions and consumer audio and video equipment; and battery charger systems. Title 20 presents protocols for testing each type of appliance covered under the regulations, and appliances must meet the standards for energy performance, energy design, water performance, and water design. Title 20 contains three types of standards for appliances: federal and State standards for federally regulated appliances, State standards for federally regulated appliances, and State standards for non-federally regulated appliances.

Senate Bill 1

SB 1 (Murray) (August 2006) established a $3 billion rebate program to support the goal of the state to install rooftop solar energy systems with a generation capacity of 3,000 megawatts through 2016. SB 1 added sections to the Public Resources Code, including Chapter 8.8 (California Solar Initiative), that require building projects applying for ratepayer-funded incentives for photovoltaic systems to meet minimum energy efficiency levels and performance requirements. Section 25780 established that it is a goal of the state to establish a self-sufficient solar industry. The goals included establishing solar energy systems as a viable mainstream option for homes and businesses within 10 years of adoption and placing solar energy systems on 50% of new homes within 13 years of adoption. SB 1, also termed "Go Solar California," was previously titled "Million Solar Roofs.

Solid Waste

In 1989, AB 939, known as the Integrated Waste Management Act (PRC Sections 40000 et seq.), was passed because of the increase in waste stream and the decrease in landfill capacity. The statute established the California Integrated Waste Management Board, which oversees a disposal reporting system. AB 939 mandated a reduction of waste being disposed where jurisdictions were required to meet diversion goals of all solid waste through source reduction, recycling, and composting activities of 25 percent by 1995 and 50 percent by 2000.

AB 341 (Chapter 476, Statutes of 2011 [Chesbro]) amended the California Integrated Waste Management Act of 1989 to include a provision declaring that it is the policy goal of the state that not less than 75 percent of solid waste generated be source-reduced, recycled, or composted by 2020, and annually thereafter. In addition, AB 341 required the California Department of Resources Recycling and Recovery (CalRecycle) to develop strategies to achieve the state's policy goal.

AB 1826 (Chapter 727, Statutes of 2014, effective 2016) requires businesses to recycle their organic waste (i.e., food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste) depending on the amount of waste they generate per week. This law also requires local jurisdictions across the state to implement an organic waste recycling program to divert organic waste generated by businesses, including multifamily residential dwellings that consist of five or more units. The minimum threshold of organic waste generation by businesses subject to the law decreases over time, which means an increasingly greater proportion of the commercial sector will be required to comply.

REGIONAL

South Coast Air Quality Management District

The SCAQMD adopted a Policy on Global Warming and Stratospheric Ozone Depletion in April 1990. The policy commits the SCAQMD to consider global impacts in rulemaking and in drafting revisions to the Air Quality Management Plan (AQMP). In March 1992, the SCAQMD Governing Board reaffirmed this policy and adopted amendments to the policy to include the following directives:

- Phase out the use and corresponding emissions of CFCs, methyl chloroform (1,1,1-trichloroethane or TCA), carbon tetrachloride, and halons by December 1995;
- Phase out the large quantity use and corresponding emissions of HFCs by the year 2000;
- Develop recycling regulations for HFCs (e.g., SCAQMD Rules 1411 and 1415);
- Develop an emissions inventory and control strategy for methyl bromide; and
- Support the adoption of a California GHG emission reduction goal.

The legislative and regulatory activity detailed above is expected to require significant development and implementation of energy efficient technologies and shifting of energy production to renewable sources.

South Coast Air Quality Management District Air Quality Management Plan

SCAQMD's AQMP is the regional blueprint for achieving air quality standards in the South Coast Air Basin (SCAB), an area that includes Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino counties. Through a combination of regulatory and incentive approaches via partnerships at all levels of government, healthy air quality is within reach.

SCAQMD approved the Final 2022 AQMP on December 2, 2022. The Final 2022 AQMP builds upon measures already in place from previous AQMPs to reduce air pollution and meet the federal O_3 standard established by the EPA in 2015. It includes a variety of additional actions and strategies such as regulation, accelerated deployment of available cleaner technologies (e.g., zero emission emissions technologies, when cost-effective and feasible, and low NO_x technologies in other applications), best management

practices, co-benefits from existing programs (e.g., climate and energy efficiency), incentives, and other FCAA measures to achieve the 2015 eight-hour O_3 standard.

Southern California Association of Governments (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)

SCAG is the metropolitan planning organization (MPO) and regional transportation planning agency that implements the Regional Transportation Plan/Sustainable Communities Strategy [RTP/SCS]) for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties and addresses regional issues relating to transportation, the economy, community development, and the environment. In 2024, SCAG adopted the 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), which is an update to the previous 2020-2045 RTP/SCS. The 2024-2050 RTP/SCS carries forward policy direction established in the 2020-2045 RTP/SCS, as well as more recent Regional Council actions that address emerging issues facing the region. The 2024-2050 RTP/SCS outlines a vision for a more resilient and equitable future, with investment, policies, and strategies for achieving the region's shared goals through 2050. As with the previous RTP/SCS, the 2024-2050 RTP/SCS is a long-term plan for the southern California region that details investment in the transportation system and development in communities. SCAG worked closely with local jurisdictions to develop the 2024-2050 RTP/SCS, which incorporates current demographics and anticipated future population, household, and employment growth patterns based, in part, upon local growth forecasts, projects and programs, and includes complementary regional policies and initiatives. The Plan outlines a forecasted development pattern that demonstrates how the region can sustainably accommodate needed housing. In addition, the 2024-2050 RTP/SCS is supported by a combination of transportation and land use strategies that outline how the region can achieve California's GHG-emission-reduction goals and federal Clean Air Act requirements.

The 2024-2050 RTP/SCS includes a suite of strategies that describes how the region can attain the GHG emission-reduction targets set by CARB by achieving a 19 percent reduction by 2035 compared to the 2005 level. SCAG's 2024-2050 RTP/SCS builds on the land use policies that were incorporated into the 2020 RTP/SCS and provides specific strategies for successful implementation. These strategies include implementing the Sustainable Communities Program (SCP), a funding program designed to support the implementation of the 2024-2050 RTP/SCS by providing planning resources to local jurisdictions to plan for active and multimodal transportation, sustainable land use, and affordable housing. In an effort to reduce GHGs, the 2024-2050 RTP/SCS strategies promote an overall land use pattern that focus new housing and employment in infill areas well served by transit.

In addition, the 2024-2050 RTP/SCS includes goals and strategies to promote active transportation and improve transportation demand management (TDM). These strategies support local planning and projects that promote growth in priority development areas, increase access to transit, expand understanding and consideration of public health in the development of local plans and projects, and support improvements in sidewalk quality, local bike networks, and neighborhood mobility areas. The 2024-2050 RTP/SCS proposes to better align active transportation investments with land use and transportation strategies, increase competitiveness of local agencies for federal and State funding, and to expand the potential for all people to use active transportation.

LOCAL

City of Laguna Niguel CEQA Manual

The City of Laguna Niguel CEQA Manual provides the City and project applicants with local guidelines, procedures, requirements, and thresholds of significance for the environmental review process within the City of Laguna Niguel consistent with the California Environmental Quality Act (Public Resources Code [PRC] Section 21000 et seq.), referred to as "CEQA" or "CEQA Statutes," and the State CEQA Guidelines (Title 14, California Code of Regulations (CCR), Division 6, Chapter 3, Section 15000 et seq.). The City's CEQA Manual applies to all public and private projects under the jurisdiction of the City of Laguna Niguel that constitute a "project" and therefore subject to CEQA review.

4.7.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

CEQA Guidelines Appendix G contains the Initial Study Environmental Checklist, which includes questions related to greenhouse gas emissions. The City relies on the questions included in Appendix G as the thresholds of significance for assessing impacts from greenhouse gas emissions (City of Laguna Niguel CEQA Manual, Revised February 24, 2023). A significant impact will occur if implementation of the proposed Project will:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment (refer to Impact Statement GHG-1); or
- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases (refer to Impact Statement GHG-2).

GENERAL PLAN BUILDOUT

There is no GHG threshold for the programmatic portion of the Project (i.e., General Plan buildout). Specifically, the City's CEQA Manual does not provide GHG thresholds at the programmatic level. Additionally, the SCAQMD does not have any current thresholds for programmatic projects. Any GHG numeric threshold is required to be adopted by a City via resolution, ordinance, or regulation, and needs to include a public review process, and supported by substantial evidence. Since an adopted GHG numeric threshold is not available at the programmatic level, emissions associated with General Plan Update buildout during operation are provided for informational purposes only.

CHET HOLIFIELD FEDERAL BUILDING DEMOLITION

The City's CEQA Manual and the State CEQA Guidelines do not provide numeric or qualitative thresholds of significance for evaluating GHG emissions. In the absence of other thresholds of significance, the City relies on SCAQMD's draft thresholds for the purpose of evaluating the GHG impacts associated with proposed general development projects. Therefore, for the smaller and simpler non-industrial projects, such as those identified on the air quality decision tree (Figure 3) in the City's CEQA Manual, the GHG threshold of significance in GHG question (a) is 3,000 MTCO2e/year. For larger and/or more complicated projects, the five-tier outline specified in the City's CEQA Manual is used to evaluate level of significance for State CEQA Guidelines Appendix G, GHG question (a).

Therefore, the analysis relies on SCAQMD's draft thresholds for the purpose of evaluating the GHG impacts associated with the demolition of the Chet Holifield Federal Building (CHFB) site. Further, in absence of a local Climate Action Plan (CAP), evaluating level of significance for State CEQA Guidelines Appendix G, GHG question (b), relies on an analysis of consistency with the RTP/SCS and whether the Project meets the numeric thresholds specified in GHG question (a). A project is generally less than significant if it does not conflict with any policies from the current RTP/SCS, as applicable, and the project's GHG emissions are less than the thresholds established in the five-tier outline outlined in the City's CEQA Manual.

ANALYSIS APPROACH AND METHODOLOGY

Cumulative impacts are the collective impacts of one or more past, present, and future projects that, when combined, result in adverse changes to the environment. In determining the significance of a project's contribution to anticipated adverse future conditions, a lead agency should generally undertake a two-step analysis. The first question is whether the *combined* effects from *both* the proposed Project *and* other projects would be cumulatively significant. If the agency answers this inquiry in the affirmative, the second question is whether "the project's *incremental* effects are cumulatively considerable" and thus significant in and of themselves. The cumulative global project list for this issue (climate change) comprises anthropogenic (i.e., human-made) GHG emissions sources across the globe. No project alone would reasonably be expected to contribute to a noticeable incremental change to the global climate, but rather effects are shown to be caused by the cumulative emissions from across the globe. However, legislation and executive orders on the subject of climate change in California have established a statewide context and process for developing an enforceable statewide cap on GHG emissions. Given the nature of environmental consequences from GHGs and global climate change, CEQA requires that lead agencies consider evaluating the cumulative impacts of GHGs. Small contributions to this cumulative impact (from which significant effects are occurring and are expected to worsen over time) may be potentially considerable and, therefore, significant.

Quantitative disclosure of the Project's GHG emissions is provided below. Additionally, an analysis of the proposed Project's consistency with the California Statewide 2030 GHG emissions target of 40 percent below 1990 levels by 2030 (as encapsulated by SB 32), as well as a qualitative analysis of the Project's consistency with the California statewide net-zero target by 2045 (as encapsulated in AB 1279), is also provided.

4.7.5 IMPACTS AND MITIGATION MEASURES

GHG-1: Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Impact Analysis: Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Implementation of the General Plan Update would contribute to increases of GHG emissions that are associated with global climate change. Estimated GHG emissions attributable to future development would be primarily associated with increases of CO_2 and other GHG pollutants, such as CH_4 and N_2O, from mobile sources and utility usage.

CONSTRUCTION

Subsequent development associated with implementation of the General Plan Update would generate GHGs during the construction phase of the Project. However, since specific development projects are not currently proposed, except for the assumption that the CHFB site would be demolished as part of a future redevelopment effort, overall Project GHG emissions related to construction activities associated with the General Plan Update cannot be accurately quantified.

Chet Holifield Federal Building Demolition

Demolition of the CHFB site would involve crushing, grading, and hauling, utilizing off-road construction equipment powered exclusively by diesel and gasoline fuel.[8] Additionally, construction-related traffic would include vehicles used by workers and vendors traveling to and from the site, as well as on-road haul trucks transporting materials from site clearing, demolition, and soil import/export for grading.

Off-road equipment usage associated with demolition of the CHFB site was calculated using data on equipment mix, daily hours of operation, horsepower, load factors, and phase duration; refer to CalEEMod construction output in Appendix B. Other modeling assumptions that were made for the CalEEMod modeling associated with the demolition of the CHFB site, based on available data (including information provided by a demolition contractor) are:

- Demolition activities were assumed to begin in early 2026 and extend to early 2027.[9]
- Demolition would occur for a 1,000,000 square foot building, as well as 2,526,481 square feet of asphalt.
- Demolition activity equipment types and number were provided by a demolition contractor.
- A total of approximately 79,686 tons of demolition debris (which assumes crushing onsite) would be generated during demolition-related activities.
- Worker, hauling, and on-site trips and trip lengths were provided by the demolition contractor:
    - 35 daily one-way worker trips at 18.5 miles in length
    - 7 daily one-way hauling trips at 102.4 miles in length
    - 7 daily on-site truck trips at 0.25 miles in length

Demolition of the CHFB site would result in GHG emissions from the combustion of diesel and gasoline fuels from on- and off-site construction equipment. Onsite GHG emissions are produced by construction equipment (excavators, loaders, haul trucks, etc.) that would be used for the demolition of the CHFB site and parking lot pavement. Offsite GHG emissions would be generated from vehicles used for worker commutes, vehicle delivery, and removal of demolition debris.

Estimated maximum construction-related GHG emissions associated with demolition of the CHFB site are summarized in Table 4.7-1, *Maximum CHFB Site Demolition GHG Emissions (Metric Tons/year)*. These

[8] The majority of construction equipment that is used for demolition activities are gas or diesel powered. Therefore, demolition activities associated with the CHFB site are not anticipated to use natural gas or electricity.
[9] This is a conservative assumption, since demolition activities that occur in later years (after 2026), would have lower emissions when compared to the modeled emissions, since construction-related vehicles (both on- and off-road) would improve average vehicle efficiency over time.

emissions include all worker vehicle, vendor vehicle, hauler vehicle, and off-road construction vehicle GHG emissions. For the purposes of this analysis, demolition of the CHFB site is assumed to commence in 2026 and finish in 2027. It should be noted that this schedule is an approximation and may change over time. A regularized construction schedule was utilized for modelling purposes for the sake of simplicity.

Table 4.7-1
Maximum CHFB Site Demolition GHG Emissions (Metric Tons/year)

Year	Bio-CO_2	NBio-CO_2	Total CO_2	CH_4	N_2O	R	CO_2e
2027	0	1,826.0	1,826.0	0.1	0.1	0.3	1,846.0
Source: CalEEMod version 2022.1							

As shown in Table 4.7-1, short-term GHG emissions from CHFB site demolition are estimated at a maximum of 1,846 metric tons of CO_2e. The SCAQMD recommends that construction-related emissions be amortized over an assumed 30-year life of a project. As such, the amortized demolition emissions would be 62 metric tons of CO_2e. These emissions do not include the GHG emissions associated with construction of a future selected land use, if any. Construction emissions are generally a small proportion of GHG emissions when added to those generated during the operations phase. The SCAQMD and City do not have a significance threshold for construction-only related GHG emissions. If the demolition emissions are compared against the SCAQMD GHG threshold of 3,000 metric tons of CO_2e, identified in the City's CEQA Manual, the GHG emissions related to CHFB site demolition of 1,846 metric tons of CO_2e (or the 62 metric tons 30-year amortized emissions) would be substantially below the SCAQMD's threshold and would not result in a significant impact related to GHG emissions. Moreover, as described in further detail under the *Consistency with Applicable GHG Plans, Policies, or Regulations* discussion below, demolition of the CHFB site would not conflict with the 2024-2050 RTP/SCS or the latest CARB Scoping Plan.

OPERATION

The operational phase of subsequent development associated with buildout of the General Plan Update Land Use Element would generate GHG emissions primarily from operational vehicle trips and building energy (electricity and natural gas) usage; refer to Table 4.7-2, *Operational GHG Emissions 2045 (Metric Tons/Year)*. Other sources of GHG emissions would be secondary. Table 4.7-2 shows the emissions associated with the buildout of land uses envisioned within the General Plan Update Land Use Element, inclusive of existing development that would occur within Laguna Niguel through 2045.[10]

[10] Operational GHG emissions are provided for informational purposes only.

Table 4.7-2
Operational GHG Emissions 2045 (Metric Tons/Year)

Category	Bio-CO_2	NBio-CO_2	Total CO_2	CH_4	N_2O	R	CO_2e
Mobile	-	559,694	559,694	18	20	61	566,205
Area	3,277	6,978	10,255	10	-	-	10,537
Energy	-	66,776	66,776	8	1	-	67,150
Water	715	2,394	3,109	74	2	-	5,492
Waste	3,797	-	3,797	379	-	-	13,284
Refrigeration	-	-	-	-	-	444	444
Total	**7,789**	**635,843**	**643,632**	**490**	**23**	**505**	**663,112**
Source: CalEEMod version 2022.1							

As shown in Table 4.7-2, operational impacts associated with buildout of the General Plan Update Land Use Element would total approximately 663,112 metric tons of CO_2e annually. The majority of emissions associated with buildout of the General Plan Update Land Use Element are from mobile sources related to vehicle trips from land uses within the City. The proposed General Plan Update includes a land use plan, as well as goals and policies, consistent with State and regional strategies to reduce GHG emissions, as described in detail under Impact GHG-2, below).

Buildout of the General Plan Update Land Use Element would primarily accommodate new residential and non-residential development in and around existing urbanized areas. As shown in Table 2-17, *General Plan Update Growth Assumptions Compared to Existing Conditions*, the majority of the potential growth opportunities are located within specific areas of the City. These areas include the Laguna Niguel Gateway Specific Plan (Gateway Specific Plan), the Opportunity Areas (e.g., Marketplace at Laguna Niguel, CHFB site, and Town Center), and Hospitality Overlay sites. The proposed General Plan Update Land Use Element provides the opportunity for development of a mix of uses within proximity to each other. Development within these focused areas is envisioned to include improved access to amenities that support active (non-motorized) transportation opportunities as well as public transit. For instance, the Metrolink rail line's Laguna Niguel/Mission Viejo station is located within the Gateway Specific Plan area. The Orange County Transportation Authority also operates bus routes within the City that connect with other destinations in Orange County. Accordingly, as discussed further below, the Project is consistent with plans and policies designed to achieve the State's GHG reduction goals; refer to Impact GHG-2.

CONCLUSION

General Plan Buildout

The General Plan Update Land Use Element envisions redevelopment and intensification of uses within specified growth areas, with the potential to integrate a mix of complementary land uses that would encourage reduced vehicle trips, VMT, and associated transportation-related GHG emissions.

Overall, subsequent development associated with implementation of the General Plan Update would be required to comply with regulations imposed by the State of California and the SCAQMD aimed at the

reduction of air pollutant emissions, as described above. Additionally, as described in detail under Impact GHG-2, subsequent development associated with implementation of the General Plan Update would not conflict with any applicable plans, policies, or regulations, including the CARB's 2022 Scoping Plan, the SCAG's latest RTP/SCS, and AB 1279. While compliance with relevant plans, policies, and regulations would reduce GHG emissions, the associated reductions of GHG emissions are not quantifiable, especially at the programmatic level. Therefore, it cannot be determined that subsequent individual development projects associated with implementation of the General Plan Update Land Use Element, would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. There is the potential that subsequent individual development projects consistent with the General Plan Update Land Use Element may exceed one or more of the SCAQMD GHG thresholds for individual development projects, resulting in a significant impact requiring mitigation.

Mitigation Measure GHG-1 requires subsequent projects with the potential to have a significant GHG impact, as determined by the City based on the screening criteria provided in the City's CEQA Manual, to prepare and submit a GHG emissions technical analysis that evaluates the proposed project's construction- and operation-related GHG emissions impacts in accordance with the methodologies and significance thresholds in the City's CEQA Manual for review and approval by the City. If the assessment determines the project would exceed the City's adopted thresholds, mitigation measures for individual development projects would be required to reduce GHG emissions to below applicable threshold(s).

Although implementation of Mitigation Measure GHG-1 would reduce potential construction- and operation-related GHG emissions from individual development projects associated with implementation of the General Plan Update Land Use Element, it cannot be stated with certainty that individual development projects would reduce GHG emissions to a less than significant level even with implementation of Mitigation Measure GHG-1. Therefore, the proposed Project would result in a significant and unavoidable impact.

Chet Holifield Federal Building Demolition

During demolition of the CHFB site, construction-related emissions would remain below the SCAQMD GHG threshold of 3,000 metric tons of CO_2e. Therefore, demolition of the CFHB site would have a less than significant impact relative to the potential to generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. No mitigation measures would be required.

Mitigation Measures:

GHG-1: As part of the development review process, for individual development projects the Laguna Niguel Community Development Department shall determine if a greenhouse gas (GHG) emissions technical analysis is required, based on the screening criteria provided in the City of Laguna Niguel CEQA Manual.

Applicants of individual development projects with the potential to have a significant GHG impact shall have a GHG technical analysis prepared by a qualified environmental professional. This analysis shall be prepared in accordance with the methodologies and significance thresholds in

the City's CEQA Manual and submitted for review and approval by the Laguna Niguel Community Development Department.

If construction- or operational-related GHG emissions for an individual development project are determined to potentially exceed the City's adopted thresholds of significance, appropriate mitigation measures shall be identified and implemented to reduce GHG emissions to below the applicable threshold(s). These measures shall be incorporated as conditions of approval for the project.

The following are examples of potential mitigation measures from the California Air Pollution Control Officers Association (CAPCOA) *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity*. Mitigation measures shall be selected based on the nature of the project and characteristics of the GHG emission source(s). These measures include, but are not limited to:

Land Use & Development Planning

GHG emissions can be mitigated through smart urban planning, including:

- Prioritizing infill development and repurposing underutilized land.
- Constructing mixed-use, high-density developments near transit hubs.
- Retaining mature trees and planting new vegetation to improve air quality.
- Promoting sustainable waste management practices, including methane recovery.

Green Building Measures

Projects can integrate environmentally sustainable features aligned with CALGreen and local building codes. Some strategies include:

- Using energy-efficient materials for construction and renovation.
- Installing energy-saving lighting, heating, cooling systems, and appliances.
- Designing buildings with passive environmental controls to maximize natural heating and cooling.
- Incorporating passive solar design and high-reflectivity materials to improve energy efficiency.
- Installing electric vehicle charging stations to support clean transportation.
- Developing renewable energy sources and promoting energy conservation.

Project Design & Emission Reduction

Lead agencies can include design elements that reduce emissions, such as:

- Adopting energy-efficient building techniques.
- Utilizing low-emission construction materials.
- Encouraging waste recycling and reuse to minimize environmental impact.
- Implementing technologies to improve energy efficiency and reduce consumption.

Transportation & Mobility Strategies

To limit transportation-related emissions, the guidelines propose:

- Expanding access to transit, bike lanes, and pedestrian networks.
- Encouraging carpooling, bike-sharing, and neighborhood electric vehicle networks.
- Improving infrastructure for biking and walking to reduce reliance on automobiles.
- Providing employee incentives for transit use and alternative commuting options.
- Reducing parking availability or unbundling parking costs to discourage single-occupancy vehicle trips.
- Using fuel-efficient and zero-emission vehicles.

Level of Significance: Buildout of the General Plan Update could generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, resulting in a significant and unavoidable impact. Demolition of the CHFB site would be less than significant.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

LAND USE ELEMENT

Goal LU-1: **Land Use Planning.** Establish a balanced land use pattern that integrates residential, commercial, and employment uses with open space and public services to support a vibrant, sustainable community that offers a high quality of life.

Policy LU-1.1: **Promote Mixed-Use Development.** Encourage mixed-use zoning in strategic locations to combine residential, commercial, and employment uses. This approach aims to create vibrant, walkable neighborhoods that enhance community engagement and drive economic activity.

Policy LU-1.3: **Employment/Housing Balance.** Strive to balance employment and housing levels within the community to provide more opportunities for residents to work locally. Laguna Niguel is "housing rich" with a forecasted jobs-housing ratio between 0.62-0.64 through 2045, significantly lower than the projected jobs-housing ratio of 1.61 for Orange County during the same period. A more balanced job-to-housing ratio enables residents to live and work in Laguna Niguel, fostering a greater sense of community and convenience. Improving this balance also improves economic resilience by allowing the community to better adapt to economic fluctuations, with one sector helping to buffer downturns in the other.

Policy LU-1.4: **Diversified Housing Options.** Support a diverse range of housing development options and densities, ensuring that residents across income levels, age groups, and those with special needs can live within the community.

Policy LU-1.10: **Sustainable Development Practices.** Implement policies that encourage the efficient use of land and infrastructure to reduce environmental impacts and support long-term community sustainability.

Policy LU-1.11: **Mobility and Connectivity.** Prioritize transportation planning and infrastructure that connects residential, commercial, and employment areas efficiently, with a focus on improving transportation options, including pedestrian paths and bicycle lanes to promote sustainable and non-motorized transportation options when evaluating land use options and development projects.

Policy LU-1.12: **Residential and Non-Residential Capacities.** Ensure the levels of residential and non-residential building development remain within the established baseline General Plan buildout limits (Maximum Development Intensities – MDIs) for the Sub-profile Areas.

Policy LU-2.8: **Pedestrian-Friendly Environments.** Prioritize pedestrian-oriented design and connectivity by incorporating thoughtfully planned tree-lined sidewalks, pathways, and active street fronts throughout new developments. This includes a focus on human-scale building frontages that create visually appealing and pedestrian-friendly environments, as well as pedestrian safe connections to surrounding streets.

MOBILITY ELEMENT

Goal M-1: **Transportation Network.** A well-planned and comprehensive multimodal transportation system that connects neighborhoods, jobs, shopping, recreation, and transit hubs.

Policy M-1.1: **Balanced Circulation Network**. Support the design, management, maintenance, and enhancement of a multimodal roadway network that accommodates the City's current and future development as outlined in the Land Use Element. This includes maintaining and adapting the Laguna Niguel's Circulation Plan Figure M-1 and related infrastructure to ensure safe, efficient, and well-connected links between neighborhoods, workplaces, shopping, recreation, and transit hubs.

Policy M-1.2: **Multimodal Transportation**. Support an integrated transportation network as a system that accommodates and promotes various modes of travel, such as walking, bicycling, public transit, enhancing multimodal connectivity throughout the City and contributing to environmental sustainability.

Policy M-1.3: **Mobility Hubs.** Support the development and enhancement of mobility hubs Figure M-8 to serve as centralized, convenient points linking a variety of transportation options.

Policy M-1.5: **Land Use Planning**. Align transportation planning with land use decisions to support a multimodal system that minimizes traffic congestion and reduces environmental impacts from future developments.

Policy M-1.7: **Vehicle Miles Traveled.** For qualifying development projects, ensure the preparation of a Vehicle Miles Traveled analysis in accordance with the City's Transportation Assessment Guidelines and compliance with applicable state law(s) aimed at reducing vehicle travel distances from and within the City.

Policy M-1.8: **Travel Demand Management.** Encourage the development and implementation of travel demand management programs to reduce peak-hour traffic congestion and help reduce vehicles miles traveled within the community.

Goal M-2: **Active Transportation.** A balanced transportation network that supports walking, bicycling, and other non-motorized modes of travel, fostering active lifestyles, environmental sustainability, and enhancing the overall quality of life for the Laguna Niguel community.

Policy M-2.1: **Active Transportation.** Maintain and enhance the City's pedestrian, bicycle, and multi-use trail networks to support safe, convenient, well-connected, and efficient non-motorized travel for both recreational and commuting purposes. New development projects should make positive contributions towards these active transportation efforts with connected street systems and dedicated pedestrian friendly paths.

Policy M-2.2: **Connectivity and Accessibility**. Prioritize infrastructure improvements that enhance connectivity between neighborhoods, workplaces, schools, recreation, shopping areas, and transit hubs, ensuring safe and accessible routes for all users.

Policy M-2.3: **Active Lifestyles and Environmental Sustainability**. Support active transportation to reduce automobile reliance, promote environmental sustainability, and encourage active lifestyles throughout the community.

Policy M-2.8 **Last-Mile Connectivity.** Coordinate active transportation routes, such as bike paths and pedestrian walkways, with transit stops to improve last-mile connections, promoting greater transit ridership, active lifestyles, and environmental sustainability.

Goal M-3: **Public Transit.** A safe, efficient, and accessible public transit system that enhances connectivity, reduces traffic congestion, supports environmental sustainability, and meets the diverse needs of the community.

Policy M-3.1: **Transit Collaboration.** Collaborate with Orange County Transportation Authority, Metrolink, Southern California Association of Governments, and other regional agencies to expand and enhance public transit service in Laguna Niguel.

Policy M-3.7: **Public Transit Promotion.** Support public outreach programs encouraging public transit use by people living in, working in, or visiting Laguna Niguel. This includes highlighting the benefits of public transit and providing resources to help individuals navigate local and regional transit options effectively.

RESOURCE MANAGEMENT ELEMENT

Goal RM-5: **Air Quality and Greenhouse Gases.** Support a healthy and sustainable community by thoughtfully considering and addressing the effects of air pollutants and greenhouse gas emissions.

Policy RM-5.1: **Air Quality and Greenhouse Gas Emissions Collaboration.** Collaborate with federal, state, and regional agencies on matters related to improving overall air quality and addressing greenhouse gas emissions reduction goals.

Policy RM-5.2: **Sustainable Infrastructure.** Consider implementing sustainable technologies and practices in the development and maintenance of public infrastructure projects.

Policy RM-5.3: **Air Quality and Greenhouse Gas Public Engagement.** Encourage community participation in air quality and greenhouse gas reduction planning efforts.

Policy RM-5.4: **Sustainable Development.** Review new qualifying development projects to ensure compliance with State air quality emissions thresholds and greenhouse gas emissions reduction targets.

GHG-2: Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Impact Analysis: As previously discussed, the City of Laguna Niguel CEQA Manual provides guidance on the evaluation of potential GHG impacts. To address whether the General Plan Update would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases, the City's guidance relies on an analysis of consistency with the RTP/SCS *and whether the project meets the numeric thresholds specified in GHG question (a).*

SCAG RTP/SCS CONSISTENCY

General Plan Buildout

The 2024-2050 RTP/SCS is supported by a combination of transportation and land use strategies that help the region achieve State GHG emissions reduction goals and FCAA requirements, preserve open space areas, improve public health and roadway safety, support our vital goods movement industry, and utilize resources more efficiently. GHG emissions resulting from development-related mobile sources are the most potent source of emissions, and therefore Project comparison to the 2024-2050 RTP/SCS is an appropriate indicator of whether the Project would inhibit the GHG reduction goals promulgated by the State. The Project's consistency with the 2024-2050 RTP/SCS goals is analyzed in detail in Table 4.7-3, *Project Consistency with the 2024-2050 RTP/SCS*.

As depicted in Table 4.7-3, the Project would be consistent with the 2024-2050 RTP/SCS through various polices. The General Plan Update's goals and policies would support development that is encouraged by the 2024-2050 RTP/SCS to reduce VMT and expand multi-modal transportation options in order for the region to achieve GHG reductions from the land use and transportation sectors required by SB 375, which, in turn, advances the State's long-term climate policies. By furthering implementation of SB 375, the General Plan Update supports regional land use and transportation GHG reductions consistent with State regulatory requirements. Therefore, the Project would be consistent with the GHG reduction-related actions and strategies contained in the 2024-2050 RTP/SCS.

Table 4.7-3
Project Consistency with the 2024-2050 RTP/SCS

SCAG Goals	Consistency Analysis
Mobility: Build and maintain an integrated multimodal transportation network	**Consistent**. The proposed General Plan Update includes policies related to building and maintaining an integrated multimodal transportation system. For example, proposed General Plan Update Land Use Element Policy LU-1.11 prioritizes transportation planning and infrastructure that connects residential, commercial, and employment areas efficiently, with a focus on improving transportation options, including pedestrian paths and bicycle lanes to promote sustainable and non-motorized transportation options when evaluating land use options and development projects. Proposed Mobility Element Goal M-1 and related policies emphasizes a well-planned and comprehensive multimodal transportation system that connects neighborhoods, jobs, shopping, recreation, and transit hubs. Further, Policy M-1.2 supports an integrated transportation network as a system that accommodates and promotes various modes of travel, such as walking, bicycling, public transit, enhancing multimodal connectivity throughout the City.
Communities: Develop, connect and sustain communities that are livable and thriving	**Consistent.** The City's 2021-2029 Housing Element, which was certified in February 2024 and is not part of the General Plan Update Project, provides a framework to support a variety of housing types and densities to accommodate the City's fair share of housing needs in accordance with SCAG's Regional Housing Needs Assessment (RHNA) allocation. The General Plan Update Land Use Element helps implement the 2021-2029 Housing Element through its land use designations. The General Plan Update policies further support the SCAG goal of livable and thriving communities. For example, Policy LU-1.1 encourages mixed-use zoning in strategic locations to combine residential, commercial, and employment uses to create vibrant, walkable neighborhoods that enhance community engagement and drive economic activity. Policy LU-1.3 strives to balance employment and housing levels within the community to provide more opportunities for residents to work locally. Policy LU-1.4 supports a diverse range of housing development options and densities. Policy LU-1.10 is aimed at implementing policies that encourage the efficient use of land and infrastructure to reduce environmental impacts and support long-term community sustainability. Policy M-1.1 supports the design, management, maintenance, and enhancement of a multimodal roadway network that accommodates the City's current and future development.

Table 4.7-3 (continued)
Project Consistency with the 2024-2050 RTP/SCS

SCAG Goals	Consistency Analysis
Environment: Create a healthy region for the people of today and tomorrow	**Consistent.** The General Plan Update includes policies related to creating a healthy, resilient, and sustainable region. For example, proposed General Plan Update Land Use Element Goal LU-1 promotes a balanced land use pattern, and the policies within this goal promote mixed uses and neighborhood-serving uses, which would support sustainability policies. Further, proposed Mobility Element Goal M-1 and related policies focus on implementing a well-planned comprehensive multimodal transportation system that connects neighborhoods, jobs, shopping, recreation, and transit hubs. Other policies within the Mobility Element include traffic calming on local streets, travel demand management, and complete streets, which represent examples of sustainability policies. Also, under proposed Resource Management Element Policy RM-5.4, the City would review new qualifying development projects to ensure compliance with State air quality emissions thresholds and greenhouse gas emissions reduction targets; and Policy RM-6.1 ensures State energy compliance by adhering to all power generation requirements and encouraging renewable energy expansion. Other policies within the Resources Management Element of the proposed General Plan Update further support sustainability policies. For example, Goal RM-5 and related policies support a healthy and sustainable community by thoughtfully considering and addressing the effects of air pollutants and greenhouse gas emissions.
Economy: Support a sustainable, efficient and productive regional economic environment that provides opportunities for all residents	**Consistent.** The General Plan Update includes policies related to economic development and increasing economic opportunities for all residents. Policy LU-1.1 encourages mixed-use zoning in strategic locations to combine residential, commercial, and employment uses to create vibrant, walkable neighborhoods that enhance community engagement and drive economic activity. Policy LU-1.3 strives to balance employment and housing levels within the community to provide more opportunities for residents to work locally. Policy LU-1.4 supports a diverse range of housing development options and densities. Proposed Mobility Element Goal M-1 and related policies emphasize a well-planned and comprehensive multimodal transportation system that connects neighborhoods, jobs, shopping, recreation, and transit hubs.

Source: Southern California Association of Governments (SCAG), *SoCal: 2024-2050 Regional Transportation Strategy/Sustainable Communities Strategy*, April 2024.

Compliance with applicable State standards, such as the latest version of Title 24 Building Energy Efficiency Standards and the California Renewables Portfolio Standard, would ensure consistency with State and regional GHG reduction planning efforts. The goals stated in the 2024-2050 RTP/SCS were used to determine consistency with the planning efforts previously stated. As shown in Table 4.7-3, the proposed Project would be consistent with the stated goals of the 2024-2050 RTP/SCS. Buildout, as identified in the General Plan Update Land Use Element, would result in a decrease of 0.93 percent in VMT per capita over existing conditions, and a reduction of total VMT compared with the existing General Plan of

approximately 4.6 percent,[11] which would result in a reduction in emissions of O_3 precursors and PM associated with mobile sources of emissions. Therefore, the proposed Project would not result in any significant impacts or interfere with SCAG's ability to achieve the region's mobile source GHG reduction targets.

Chet Holifield Federal Building Demolition

Demolition of the CHFB site does not currently involve site-specific development, and the demolition activities would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. As shown in Table 4.7-1, short-term GHG emissions from CHFB site demolition are estimated at a maximum of 1,846 metric tons of CO_2e. The SCAQMD recommends that construction-related emissions be amortized over an assumed 30-year life of a project. As such, the amortized demolition emissions would be 62 metric tons of CO_2e. These emissions do not include the GHG emissions associated with construction of a future selected land use, if any. Construction emissions are generally a small proportion of GHG emissions when added to those generated during the operations phase. The SCAQMD and City do not have a significance threshold for construction-only related GHG emissions. If the demolition emissions are compared against the SCAQMD GHG threshold of 3,000 metric tons of CO_2e, identified in the City's CEQA Manual, the GHG emissions related to CHFB site demolition of 1,846 metric tons of CO_2e (or the 62 metric tons 30-year amortized emissions) would be substantially below the SCAQMD's threshold and would not result in a significant impact related to GHG emissions.

2022 SCOPING PLAN CONSISTENCY

The goal to reduce GHG emissions to 1990 levels by 2020 (EO S-3-05) was codified by the California Legislature as AB 32. In 2008, CARB approved a Scoping Plan as required by AB 32. The Scoping Plan has a range of GHG reduction actions which include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms such as a cap-and-trade system, and an AB 32 implementation fee to fund the program. The 2022 Scoping Plan identifies additional GHG reduction measures necessary to achieve the 2030 target, as well as to achieve the State's target of carbon neutrality by year 2045, as encapsulated by AB 1279. These measures build upon those identified in the previous Scoping Plan updates. Although a number of these measures are currently established as policies and measures, some measures have not yet been formally proposed or adopted. It is expected that these measures or similar actions to reduce GHG emissions will be adopted subsequently as required to achieve Statewide GHG emissions targets.

General Plan Buildout

Table 4.7-4, *Project Consistency with the 2022 Scoping Plan*, summarizes the Project's consistency with applicable policies and measures of the 2022 Scoping Plan. As indicated in Table 4.7-4, the Project would not conflict with any of the provisions of the 2022 Scoping Plan and would support four of the action categories through energy efficiency, water conservation, recycling, and landscaping.

[11] Correspondence with Zawwar Saiyed, P.E., M.S. of LLG, on June 12, 2025. Buildout of the current General Plan would generate 4,035,359 VMT, while buildout of the proposed General Plan would generate 3,850,543 VMT.

Table 4.7-4
Project Consistency with the 2022 Scoping Plan

Sector/Source	Category/Description	Consistency Analysis
Area		
SCAQMD Rule 445 (Wood Burning Devices)	Restricts the installation of wood-burning devices in new development.	Mandatory Compliance. Approximately 15 percent of California's major anthropogenic sources of black carbon include fireplaces and wood burning stoves.[1] The General Plan Update Land Use Element does not propose site-specific development, and subsequent development would not include hearths (woodstove and fireplaces) as mandated by this rule.
Energy		
California Renewables Portfolio Standard, Senate Bill 350 (SB 350) and Senate Bill 100 (SB 100)	Increases the proportion of electricity from renewable sources to 33 percent renewable power by 2020. SB 350 requires 50 percent by 2030. SB 100 requires 44 percent by 2024, 52 percent by 2027, and 60 percent by 2030. It also requires the State Energy Resources Conservation and Development Commission to double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation.	No Conflict. The Project would utilize electricity provided by Southern California Edison (SCE) and San Diego Gas & Electric (SDG&E), which is required to meet the 2030, 2045, and 2050 performance standards. In 2022, 33 percent of SCE's electricity came from renewable resources.[2] By 2030 SCE plans to achieve 80 percent carbon-free energy.[3]
California Code of Regulations, Title 24, Building Standards Code	Requires compliance with energy efficiency standards for residential and nonresidential buildings.	Mandatory Compliance. Subsequent development consistent with the General Plan Update Land Use Element would be required to meet the applicable requirements of the adopted Title 24 Building Energy Efficiency Standards, including installation of rooftop solar panels and additional CALGreen requirements (see discussion under CALGreen Code requirements below).

Table 4.7-4 (continued)
Project Consistency with the 2022 Scoping Plan

Sector/Source	Category/Description	Consistency Analysis
California Green Building Standards (CALGreen) Code Requirements	All bathroom exhaust fans are required to be ENERGY STAR compliant.	Mandatory Compliance. The General Plan Update Land Use Element does not propose site-specific development. Project-specific construction plans for subsequent development would be required to demonstrate that energy efficiency appliances, including bathroom exhaust fans, and equipment are ENERGY STAR compliant as part of its compliance with the CALGreen Code.
	HVAC system designs are required to meet American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) standards.	Mandatory Compliance. The General Plan Update Land Use Element does not propose site-specific development. Project-specific construction plans would be required to demonstrate that the HVAC system meets the ASHRAE standards as part of its compliance with the CALGreen Code.
	Air filtration systems are required to meet a minimum efficiency reporting value (MERV) 8 or higher.	Mandatory Compliance. The General Plan Update Land Use Element does not propose site-specific development. Specific development projects would be required to install air filtration systems (MERV 8 or higher) as part of its compliance with the adopted Title 24 Building Energy Efficiency Standards.
	Refrigerants used in newly installed HVAC systems shall not contain any chlorofluorocarbons.	Mandatory Compliance. The General Plan Update Land Use Element does not propose site-specific development. Specific development projects would be required to meet this requirement as part of its compliance with the CALGreen Code.
	Parking spaces shall be designed for carpool or alternative fueled vehicles. Up to eight percent of total parking spaces is required for such vehicles.	Mandatory Compliance. The General Plan Update Land Use Element does not propose site-specific development. Specific development projects would be required to meet this requirement as part of its compliance with the CALGreen Code.

Table 4.7-4 (continued)
Project Consistency with the 2022 Scoping Plan

Sector/Source	Category/Description	Consistency Analysis
Mobile Sources		
Mobile Source Strategy (Cleaner Technology and Fuels)	Reduce GHGs and other pollutants from the transportation sector through transition to zero-emission and low-emission vehicles, cleaner transit systems, and reduction of vehicle miles traveled.	Consistent. The Project would be consistent with this strategy by supporting the use of zero-emission and low-emission vehicles; refer to CALGreen Code discussion above. In addition, the Project would result in a reduction in overall VMT when compared to the existing General Plan, which would lead to a reduction in GHGs and other pollutants.
Senate Bill (SB) 375	SB 375 establishes mechanisms for the development of regional targets for reducing passenger vehicle GHG emissions. Under SB 375, CARB is required, in consultation with the State's Metropolitan Planning Organizations, to set regional GHG reduction targets for the passenger vehicle and light-duty truck sector for 2020 and 2035.	Consistent. As demonstrated in Table 4.7-3 the Project would comply with the SCAG 2024-2050 RTP/SCS, and therefore, the Project would be consistent with SB 375.
Water		
CCR, Title 24, Building Standards Code	Title 24 includes water efficiency requirements for new residential and non- residential uses.	Mandatory Compliance. Refer to the discussion under the adopted Title 24 Building Standards Code and CALGreen Code above.
Water Conservation Act of 2009 (Senate Bill X7-7)	The Water Conservation Act of 2009 sets an overall goal of reducing per capita urban water use by 20 percent by December 31, 2020. Each urban retail water supplier shall develop water use targets to meet this goal. This is an implementing measure of the Water Sector of the AB 32 Scoping Plan. Reduction in water consumption directly reduces the energy necessary and the associated emissions to convene, treat, and distribute the water; it also reduces emissions from wastewater treatment.	Consistent. Refer to the discussion under the adopted Title 24 Building Standards Code and CALGreen Code above. Also, refer to Section 4.9, *Hydrology and Water Quality*.

Table 4.7-4 (continued)
Project Consistency with the 2022 Scoping Plan

Sector/Source	Category/Description	Consistency Analysis
Solid Waste		
California Integrated Waste Management Act (IWMA) of 1989 and Assembly Bill (AB) 341	The IWMA mandates that State agencies develop and implement an integrated waste management plan which outlines the steps to divert at least 50 percent of solid waste from disposal facilities. AB 341 directs the California Department of Resources Recycling and Recovery (CalRecycle) to develop and adopt regulations for mandatory commercial recycling and sets a Statewide goal for 75 percent disposal reduction by the year 2020.	Mandatory Compliance. The General Plan Update Land Use Element does not propose site-specific development. Subsequent development would be required to comply with AB 341, as applicable, which requires commercial solid waste recycling and diversion. This applies to businesses (including public entities) that generate four cubic yards or more of commercial solid waste per week or multifamily residential dwelling of five units or more to arrange for recycling services. This would reduce the overall amount of solid waste disposed of at landfills. The decrease in solid waste would in return decrease the amount of methane released from decomposing solid waste.

Notes:
1. California Air Resources Board, *California's 2017 Climate Change Scoping Plan*, Figure 4: California 2013 Anthropogenic Black Carbon Emission Sources, November 2017.
2. California Energy Commission, *2022 Power Content Label Southern California Edison,* https://www.sce.com/sites/default/files/custom-files/PDF_Files/SCE_2022_Power_Content_Label_B&W.pdf, accessed July 21, 2025.
3. Southern California Edison, *The Clean Power and Electrification Pathway,* https://newsroom.edison.com/internal_redirect/cms.ipressroom.com.s3.amazonaws.com/166/files/20187/g17-pathway-to-2030-white-paper.pdf, accessed July 21, 2025.
4. California Energy Commission, *2013 California Energy Efficiency Potential and Goals Study*, Appendix Volume I, August 15, 2013.

Chet Holifield Federal Building Demolition

The demolition of the CHFB site does not currently involve site-specific development, and the demolition activities would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. As discussed in detail above, the SCAQMD and City do not have a significance threshold for construction-only related GHG emissions. If the demolition emissions are compared against the SCAQMD GHG threshold of 3,000 metric tons of CO_2e, identified in the City's CEQA Manual, the GHG emissions related to CHFB site demolition of 1,846 metric tons of CO_2e (or the 62 metric tons 30-year amortized emissions) would be substantially below the SCAQMD's threshold and would not result in a significant impact related to GHG emissions. Therefore, demolition of the CHFB site would be consistent with the GHG reduction-related actions and strategies contained in the 2022 Scoping Plan and would result in less than significant impacts.

AB 1279 CONSISTENCY

AB 1279 declares the State's objective to achieve net-zero GHG emissions as soon as possible, but no later than 2045, and to achieve and maintain net negative GHG emissions thereafter. This is in addition to, and does not replace or supersede, Statewide GHG emissions reduction targets. CARB's 2022 Scoping Plan is designed to ensure that California would meet the State's GHG emissions goals as encapsulated in AB 1279. Therefore, consistency with the 2022 Scoping Plan is considered sufficient to ensure consistency with AB 1279, for which the 2022 Scoping Plan is based on.

General Plan Buildout

As demonstrated above, the proposed General Plan Update Land Use Element would not conflict with any of the provisions of the 2022 Scoping Plan and would support four of the action categories through energy efficiency, water conservation, recycling, and landscaping. Therefore, implementation of the General Plan Update Land Use Element would not conflict with AB 1279.

Chet Holifield Federal Building Demolition

As demonstrated above, demolition of the CHFB site would not conflict with any of the provisions of the 2022 Scoping Plan; therefore, demolition of the CHFB site would not conflict with AB 1279.

CONCLUSION

General Plan Buildout

The General Plan Update Land Use Element envisions redevelopment and intensification of uses within specified growth areas, with the potential to integrate a mix of complementary land uses that would encourage reduced vehicle trips, VMT, and associated transportation-related GHG emissions.

Overall, subsequent individual development associated with implementation of the General Plan Update Land Use Element would be required to comply with regulations imposed by the State of California and the SCAQMD aimed at the reduction of air pollutant emissions, as described above. In addition, subsequent development projects would also not be anticipated to conflict with the CARB's 2022 Scoping Plan, the SCAG RTP/SCS, or AB 1279.

Although the General Plan Update Land Use Element would be consistent with the GHG reduction-related actions and strategies contained in the 2024-2050 RTP/SCS, to address whether the General Plan Update Land Use Element would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases, the City's CEQA Manual relies on an analysis of consistency with the RTP/SCS *and whether the project meets the numeric thresholds specified in GHG question (a)*. Project-specific information is not available to accurately determine whether subsequent development consistent with the General Plan Update Land Use Plan would meet the numeric thresholds specified in the City's CEQA Manual (as discussed above in Impact GHG-1). In compliance with Mitigation Measure GHG-1, individual projects would be required to prepare and submit a GHG emissions technical analysis that evaluates the proposed project's construction- and operation-related GHG emissions impacts for the City's review and approval. If the assessment determines the project would exceed the City's adopted thresholds, mitigation measures for individual development projects would be required to reduce GHG emissions.

Although implementation of Mitigation Measure GHG-1 would reduce potential construction- and operation-related GHG emissions from individual development projects associated with implementation of the General Plan Update Land Use Element, it cannot be stated with certainty that individual development projects would reduce GHG emissions to a less than significant level even with the implementation of Mitigation Measure GHG-1 and project-specific GHG reduction measures. Therefore, the proposed Project would potentially conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases, resulting in a significant and unavoidable impact.

Chet Holifield Federal Building Demolition

Demolition of the CHFB site would not conflict with CARB's 2022 Scoping Plan, the SCAG RTP/SCS, or AB 1279. Therefore, demolition of the CFHB site would have a less than significant impact relative to the potential for the proposed Project to conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions, and no mitigation measures would be required.

Mitigation Measures: Refer to Mitigation Measure GHG-1.

Level of Significance: Buildout of the General Plan Update Land Use Element could conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases, resulting in a significant and unavoidable impact. Demolition of the CHFB site would be less than significant.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan Update goals and policies cited above in GHG-1.

4.7.6 CUMULATIVE IMPACTS

Section 3.0, *Basis of Cumulative Analysis*, identifies projected regional growth having the potential to interact with the proposed Project to the extent that a significant cumulative effect may occur. The geographic setting for GHG emissions is global and therefore would be the same for the region.

Would the Project, combined with other related cumulative projects, generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Impact Analysis: The topic of GHG emissions is inherently cumulative, since GHG emissions are global in nature. Though significance thresholds can be developed by air districts, as well as State and federal regulatory agencies, these thresholds and their related goals are ultimately designed to effect change at a global level.

General Plan Buildout

As demonstrated in the analysis provided above, project-specific information is not available to accurately determine whether subsequent development consistent with the General Plan Update Land Use Plan would meet the numeric thresholds specified in the City's CEQA Manual (as discussed above in Impact GHG-1) and be consistent with the 2045 GHG target for the State of California (AB 1279), even with the implementation of Mitigation Measure GHG-1.

As with the Project, related cumulative development within the region would be required to evaluate the proposed project's construction- and operation-related GHG emissions impacts in the context of the thresholds established by the agency in which the specific project is located. If the evaluation determines a project would exceed adopted thresholds, mitigation measures would be required to reduce GHG emissions. However, there is the potential that related cumulative projects would result in a significant and unavoidable impact even with the implementation of mitigation measures, resulting in a cumulative impact. The General Plan Update's incremental effect associated with the generation of GHG emissions with the potential to have a significant impact on the environment would be cumulatively considerable.

Chet Holifield Federal Building Demolition

As discussed, the SCAQMD and City do not have a significance threshold for construction-only related GHG emissions. If the demolition emissions are compared against the SCAQMD GHG threshold of 3,000 metric tons of CO_2e, identified in the City's CEQA Manual, the GHG emissions related to CHFB site demolition of 1,846 metric tons of CO_2e (or the 62 metric tons 30-year amortized emissions) would be substantially below the SCAQMD's threshold and would not result in a significant impact related to GHG emissions. As GHG emissions are inherently cumulative and demolition of the CHFB site would not result in a significant GHG emissions impact, the incremental effects associated with the generation of GHG emissions from future demolition of the CHFB site with the potential to have a significant impact on the environment would not be cumulatively considerable.

Mitigation Measures: Refer to Mitigation Measure GHG-1.

Level of Significance: Buildout of the General Plan Update Land Use Element and related cumulative development could have the potential to generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, resulting in a significant and unavoidable cumulative impact. Cumulative impacts associated with demolition of the CHFB site would be less than significant.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan goals and policies cited above.

Would the Project, combined with other related cumulative projects, conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Impact Analysis:

General Plan Buildout

As discussed above, the General Plan Update Land Use Element would be consistent with the GHG reduction-related actions and strategies contained in the 2024-2050 RTP/SCS, 2022 Scoping Plan, and AB 1279. However, Project-specific information is not available to accurately determine whether subsequent development consistent with the General Plan Update Land Use Plan would meet the numeric thresholds specified in the City's CEQA Manual (as discussed above in Impact GHG-1) and be consistent with the 2045 GHG target for the State of California (AB 1279), even with the implementation of Mitigation Measure GHG-1. Therefore, the General Plan Update Land Use Element would potentially conflict with an

applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases, resulting in a significant and unavoidable impact.

Similar to the Project, related cumulative development within the region would be required to evaluate whether a proposed project would be consistent with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. The General Plan Update's incremental effect associated with the potential to conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases would be cumulatively considerable.

Chet Holifield Federal Building Demolition

Demolition of the CHFB site would not conflict with the CARB's 2022 Scoping Plan, the SCAG RTP/SCS, or AB 1279. Therefore, the incremental effect from future demolition of the CHFB site associated with the potential to conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHG would not be cumulatively considerable.

Mitigation Measures: Refer to Mitigation Measure GHG-1.

Level of Significance: Buildout of the General Plan Update Land Use Element and related cumulative development could have the potential to conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases, resulting in a significant and unavoidable cumulative impact. Cumulative impacts associated with demolition of the CHFB site would be less than significant.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan goals and policies cited above.

4.7.7 SIGNIFICANT UNAVOIDABLE IMPACTS

The General Plan Update would result in a significant unavoidable impact in the following areas:

- General Plan implementation would generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment at the project level for construction and operation.
- General Plan implementation would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases at the project level.
- General Plan implementation combined with other related cumulative projects would generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment for construction and operation.
- General Plan implementation combined with other related cumulative projects would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

If the City approves the proposed General Plan Update, the City will be required to make findings in accordance with Section 15091 of CEQA and prepare a Statement of Overriding Considerations for consideration by the City's decisionmakers in accordance with Section 15093 of the CEQA Guidelines.

4.7.8 REFERENCES

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4.8 HAZARDS AND HAZARDOUS MATERIALS

4.8.1 PURPOSE

This section identifies existing hazards and hazardous materials sites within the Planning Area and provides an analysis of potential impacts associated with implementation of the General Plan Update.

4.8.2 ENVIRONMENTAL SETTING

For the purpose of this analysis, the term "hazardous material" refers to both hazardous substances and hazardous waste. A material is defined as "hazardous" if it appears on a list of hazardous materials prepared by a federal, tribal, state, or local regulatory agency, or if it possesses characteristics defined as "hazardous" by such an agency. A "hazardous waste" is a solid waste that exhibits toxic or hazardous characteristics (i.e., ignitability, corrosivity, reactivity, and/or toxicity).

HAZARDOUS MATERIALS AND WASTE

Hazardous Materials

A hazardous material is a substance or combination of substances which, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may either (1) cause or significantly contribute to an increase in mortality or an increase in serious, irreversible, or incapacitating irreversible illness; or (2) pose a substantial present or potential hazard to human health and safety, or the environment when improperly treated, stored, transported, or disposed. Hazardous materials are mainly associated with industries involving chemical byproducts from manufacturing, petrochemicals, and hazardous building materials.

Hazardous Waste

Hazardous waste is the subset of hazardous materials that have been abandoned, discarded, or recycled and is not properly contained, including contaminated soil or groundwater with concentrations of chemicals, infectious agents, or toxic elements sufficiently high to increase human mortality or to destroy the ecological environment. If a hazardous material is spilled and cannot be effectively picked up and used as a product, it is considered to be hazardous waste. If hazardous material is unused, and it is obvious there is no realistic intent to use the material, it is also considered to be a hazardous waste. Examples of hazardous materials include flammable and combustible materials, corrosives, explosives, oxidizers, poisons, materials that react violently with water, radioactive materials, and chemicals.

Transportation of Hazardous Materials

The transportation of hazardous materials within California is subject to various federal, state, and local regulations. The City of Laguna Niguel has no direct authority to regulate the transport of hazardous materials on state highways or rail lines; rather, transportation of hazardous materials by truck and rail is regulated by the U.S. Department of Transportation (DOT). DOT regulations establish criteria for safe handling procedures. It is illegal to transport explosives or inhalation hazards on any public highway not designated for that purpose, unless the use of the highway is required to permit delivery, or the loading

of such materials (California Vehicle Code Section 31602(b), 32104(a)). The California Highway Patrol (CHP) designates routes to be used for the transportation of hazardous materials. Transportation of hazardous materials is restricted to these routes, except in cases where additional travel is required from that route to deliver or receive hazardous materials to and from users.

HAZARDOUS SITES

The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the State, local agencies, and developers to comply with CEQA requirements in providing information about the location of hazardous materials release sites. Government Code Section 65962.5 requires the California Environmental Protection Agency (CalEPA) to develop at least annually an updated Cortese List. The California Department of Toxic Substances Control (DTSC) is responsible for a portion of the information contained in the Cortese List. Other state and local government agencies are required to provide additional hazardous material release information for the Cortese List.

The Cortese List is composed of the following sources:

EnviroStor Data Management System

The DTSC maintains the EnviroStor Data Management System, which provides information on hazardous waste facilities (both permitted and corrective action) as well as any available site cleanup information. This site cleanup information includes Federal Superfund Sites, State Response Sites, Voluntary Cleanup Sites, School Cleanup Sites, Corrective Action Sites, Tiered Permit Sites, and Evaluation/Investigation Sites. The hazardous waste facilities include Permitted–Operating, Post-Closure Permitted, and Historical Non-Operating.

There are no active cleanup site locations with an address in the Planning Area listed in the EnviroStor database. There are four sites within the City that are not active, as listed in Table 4.8-1, *EnviroStor Database Site/Facility List*.

Table 4.8-1
EnviroStor Database Site/Facility List

Site Name	Program Type	Status	Address Description
Elementary School	School Evaluation	No Action Required	Aliso Creek Road/Niguel Heights Boulevard
Green Tree Electronic Recycling	Inspection	No Action	28052 Camino Capistrano #107
Laguna Niguel Elementary School	School Evaluation	Inactive – Needs Evaluation	Moulton Parkway/Aliso Niguel
Proposed Community School #8	School Evaluation	No Action Required	Paseo De Colinas

Source: California Department of Toxic Substances Control, *EnviroStor Site/Facility Search*. Available at: https://www.envirostor.dtsc.ca.gov/public/search?basic=True. Accessed February 2025.

Three sites are under "School Evaluation," where two of the three sites (Elementary School and Proposed Community School #8) are designated as "No Action Required", and the third one (Laguna Niguel Elementary) is considered "Inactive-Needs Evaluation". "No Action Required" identifies sites where a Phase I Environmental Assessment was completed and resulted in a no action required determination. "Inactive-Needs Evaluation" identifies non-active sites where DTSC has determined a Preliminary Endangerment Assessment or other evaluation is required. The fourth site (Green Tree Electronic Recycling) is listed under "Inspection" and is designated as "No Action." A Phase I Environmental Site Assessment (ESA) was prepared for the "Elementary School" location in 2001. According to the Phase I ESA, no evidence of potentially impacted soil and/or groundwater was identified at the site, meaning no further investigations into the release of hazardous materials are warranted. The Green Tree Electronic Recycling facility received an inspection on July 25, 2022, and no violations were found. The cleanup status for the "Laguna Niguel Elementary School" facility is identified as "inactive – needs evaluation as of 12/27/2000." The database indicates the site was believed to historically have been used as a sheep and/or cattle pastureland with the potential for contamination; however, no potential contaminants of concern have been specified, and no documents or additional information are provided. A Phase I ESA was prepared for the "Proposed Community School #8" location in 2006 and found no known environmental conditions associated with the site, meaning no further investigations are needed.[1]

GeoTracker

GeoTracker is the California State Water Resource Control Board's (SWRCB) data management system for managing sites that impact groundwater, especially those that require groundwater cleanup (Underground Storage Tanks, Department of Defense, Site Cleanup Program).

There are 36 locations within the City that are listed in the GeoTracker database for Leaking Underground Storage Tanks (LUST). Table 4.8-2, *GeoTracker Database Sites*, lists the site name for LUSTs and the status of each site. As shown in the table, all LUST sites in Laguna Niguel have a status of Completed – Case Closed.

Table 4.8-2
GeoTracker Database Sites

Site Name	Global ID#	Status
Action Moving	T0605902623	Completed - Case Closed
Allen Oldsmobile Cadillac	T0605902605	Completed - Case Closed
Birtcher Niguel Corp	T0605902518	Completed - Case Closed
Boukather & Assoc (Star Motors)	T0605902370	Completed - Case Closed
Cafe Auto Spa	T0605969039	Completed - Case Closed
Chet Holifield building	T0605902473	Completed - Case Closed
Chevron #9-3783	T0605902465	Completed - Case Closed
Clark Foam Products	T0605902373	Completed - Case Closed
Crown Valley Car Wash	T0605902517	Completed - Case Closed

[1] California Department of Toxic Substances Control, *EnviroStor Site/Facility Search*. Available at: https://www.envirostor.dtsc.ca.gov/public/search?basic=True. Accessed February 2025.

Table 4.8-2 (continued)
GeoTracker Database Sites

Site Name	Global ID#	Status
El Niguel Country Club	0605902468	Completed - Case Closed
El Niguel Country Club	T0605910588	Completed - Case Closed
Exxon	T0605902474	Completed - Case Closed
Fluorocarbons	T0605902434	Completed - Case Closed
Fuel Injection Engineering Co	T0605902445	Completed - Case Closed
Gkn Rentals	T0605902436	Completed - Case Closed
Laguna Niguel Post Office	T0605902565	Completed - Case Closed
Laguna Niguel Regional Park	T0605902365	Completed - Case Closed
Laguna Niguel Touchless Carwash	T0605902388	Completed - Case Closed
Mission Viejo Glass	T0605902422	Completed - Case Closed
Mobil	T0605902563	Completed - Case Closed
Monarch Laguna Associates/Regis Homes Corp	T0605902583	Completed - Case Closed
OC Fire Station #49	T0605993889	Completed - Case Closed
Orange County Fire Station #49	T0605902478	Completed - Case Closed
Orange County Fire Station #5	T0605902522	Completed - Case Closed
Pacific Bell	T0605902411	Completed - Case Closed
Pennysaver	T0605902619	Completed - Case Closed
Rancho Reservoir Pump Station	T0605902529	Completed - Case Closed
SBC	T0605962422	Completed - Case Closed
Sepulveda Building Materials	T0605918260	Completed - Case Closed
Sepulveda Building Materials	T0605902397	Completed - Case Closed
Shell Oil (28662 Camino Capistrano)	T0605902381	Completed - Case Closed
Shell Oil (30011 Crown Valley)	T0605902451	Completed - Case Closed
South County Fueling Station	T0605902572	Completed - Case Closed
Texaco	T0605902493	Completed - Case Closed
Texaco	T0605902595	Completed - Case Closed
US Post Office	T0605902599	Completed - Case Closed

Source: California State Water Resources Control Board. GeoTracker, https://geotracker.waterboards.ca.gov/search, accessed June 10, 2025.

Solid Waste Information System (SWIS)

The Solid Waste Information System (SWIS) is a database of solid waste facilities that is maintained by the California Department of Resources Recycling and Recovery (CalRecycle). The SWIS database identifies active, planned, and closed sites, including landfills, transfer stations, material recovery facilities,

composting sites, transformation facilities, waste tire sites, and closed disposal sites. There are no facilities listed in the SWIS database located within the City.[2]

AIRPORTS

There are no local, major, military, or private airports located within the City. The Santa Ana Airport, also locally referred to as the John Wayne Airport, is approximately 13.6 miles north of the City. The airport is owned and operated by the County of Orange and is the primary airport serving the County of Orange region. According to the Orange County Airport Land Use Commission, Laguna Niguel is not located in the Santa Ana Airport Influence Area.[3]

OTHER POTENTIAL HAZARDS

Wildland Fire Hazards

The State has charged the California Department of Forestry and Fire Protection (CAL FIRE) with the identification of Fire Hazard Severity Zones (FHSZ) within State Responsibility Areas (SRA) and Local Responsibility Areas (LRA). The FHSZ maps are used by the State Fire Marshall as a basis for the adoption of applicable building code standards. Figure 4.17-1, *Fire Hazard Severity Zones* (provided in Section 4.17, Wildfire), shows areas of the City located within a FHSZ. Aliso and Wood Canyons Wilderness Park, located immediately west of the City, include areas identified as Very High and Moderate FHSZ within a SRA. This topic is discussed in detail in Section 4.17, *Wildfire*, of this EIR.

Asbestos-Containing Materials

Asbestos, a natural fiber used in the manufacturing of different building materials, has been identified as a human carcinogen. Most friable (i.e., easily broken or crushed) asbestos-containing materials (ACM) were banned in building materials by 1978. By 1989, most major manufacturers had voluntarily removed non-friable ACM (i.e., flooring, roofing, and mastics/sealants) from the market. These materials, however, were not banned completely. The Planning Area includes existing development from and prior to the 1960s; therefore, the presence of ACM is likely in some structures, including the Chet Holifield Federal Building (CHFB), which was built between 1968 and 1971.

Lead-Based Paint

Lead-based paint (LBP) has been identified by the Occupational Safety and Health Administration (OSHA), the Environmental Protection Agency (EPA), and the Department of Housing and Urban Development (HUD) as a potential health risk to humans, particularly children, based on its effects to the central nervous system, kidneys, and bloodstream. The risk of lead-based paint has been classified by HUD based upon the age and condition of the painted surface. The Planning Area includes existing development from and prior to the 1960s; therefore, the presence of lead-based paint is likely in some structures, including the CHFB, which was built between 1968 and 1971.

[2] California Department of Resources Recycling and Recovery (CalRecycle), *SWIS Facility/Site Search*. Available at: https://www2.calrecycle.ca.gov/SolidWaste/Site/Search. Accessed June 10, 2025.
[3] John Wayne Airport Orange County. *Airport Land Use Commission*. Available at: https://www.ocair.com/about/administration/airport-governance/commissions/airport-land-use-commission/. Accessed February 27, 2024.

Oil Wells

The California Department of Conservation, Geologic Energy Management Division (CalGEM) oversees the drilling, operation, maintenance, and plugging and abandonment of oil, natural gas, and geothermal energy wells. Regulatory programs emphasize the development of oil, natural gas, and geothermal resources in the State through sound engineering practices that protect the environment, prevent pollution, and ensure public safety.

According to CalGEM, there is one plugged and abandoned well located in the southeastern portion of the Planning Area.[4] CalGEM is responsible for implementing Public Resources Code (PRC) Section 3208.1, which authorizes CalGEM to order the reabandonment of a previously abandoned well when construction of any structure over or in proximity to a well could result in a hazard. CalGEM's Construction Site Well Review Program assists local permitting agencies in identifying and reviewing the status of oil or gas wells located near or beneath proposed structures. Before issuing building or grading permits, local permitting agencies review and implement CalGEM's preconstruction well requirements.

EMERGENCY RESPONSE

The existing Laguna Niguel General Plan addresses the topic of emergency preparedness and services within the Seismic and Public Safety Element. The City prepared an all-hazards Emergency Plan in 2015 that is designed to provide the framework for responding to major emergency disasters. The main goals for this plan are to (1) prepare for, (2) respond to, and (3) recover from an emergency or disaster that affects the City. The City is a member of the Orange County Operational Area and the Orange County Emergency Management Organization. Both entities provide "mutual aid" to communities via the Orange County Sheriff's Department, Orange County Fire Authority, and the California Office of Emergency Services.

In addition, Laguna Niguel's Local Hazard Mitigation Plan (LHMP) addresses several natural disasters (e.g., earthquake/geologic, severe weather, drought, and extreme heat) that may affect the City. The LHMP serves to organize resources, assess potential risks, describe hazards, identify at-risk populations and assets, and set goals, objectives, and tools to reduce the effects of these hazards, minimize property and infrastructure damage, strengthen resources from local and regional public safety facilities, and increase education and awareness of hazard mitigation planning and emergency preparedness. The Laguna Niguel LHMP was adopted by the City Council on January 16, 2024.[5]

4.8.3 REGULATORY SETTING

FEDERAL

Environmental Protection Agency

The U.S. EPA is the agency primarily responsible for enforcement and implementation of Federal laws and regulations pertaining to hazards and hazardous materials. These laws include requirements for facilities

[4] California Department of Conservation, Geologic Energy Management Division (CalGEM). *Well Finder Mapping Application*. Available at: https://maps.conservation.ca.gov/doggr/wellfinder/. Accessed August 22, 2023.
[5] City of Laguna Niguel. *Local Hazard Mitigation Plan*. Available at: https://www.cityoflagunaniguel.org/1485/Local-Hazard-Mitigation-Plan

that process hazardous materials (i.e., treatment, storage, disposal). U.S. EPA provides oversight for Federal Superfund investigation/remediation projects, evaluates remediation technologies, and develops hazardous materials disposal restrictions and treatment standards.

Resource Conservation and Recovery Act of 1976, as amended by the Hazardous and Solid Waste Amendments of 1984

The Resource Conservation and Recovery Act (RCRA) establishes the framework for a national system of solid waste control. This act established EPA's "cradle to grave" control (generation, transportation, treatment, storage, and disposal) over hazardous materials and wastes. RCRA Subtitle C establishes standards for the generation, transportation, treatment, storage, and disposal of hazardous waste in the United States. In California, the DTSC has authorization to implement the RCRA Subtitle C requirements and the associated regulations.

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 introduced active federal involvement to emergency response, site remediation, and spill prevention, most notably the Superfund program. CERCLA was intended to be comprehensive in encompassing both the prevention of, and response to, uncontrolled hazardous material releases, as well as addressing environmental response, providing mechanisms for reacting to emergencies and to chronic hazardous material releases. In addition to establishing procedures to prevent and remedy problems, CERCLA establishes a system for compensating appropriate individuals and assigning appropriate liability. It is designed to plan for and respond to failure in other regulatory programs and to remedy problems resulting from action taken before the era of comprehensive regulatory protection.

The Superfund Amendments and Reauthorization Act (SARA) amended CERCLA in October of 1986. SARA required Superfund actions to consider the requirements found in other State and Federal laws, provided new enforcement authorities and settlement tools, and increased State involvement in each phase of the Superfund program. SARA also required the EPA to revise the Hazard Ranking System (HRS), which is the tool the EPA uses to place uncontrolled waste sites on the National Priorities List. The HRS was modified to accurately assess the sites and their risk to human health and the environment.

Emergency Planning and Community Right-to-Know Act

The Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986 was established under Title III of the Superfund Amendments and Reauthorization Act. It requires industries to report the storage, use, and release of specific chemicals to federal, state, tribal, territorial, and local authorities. These reports are also used to form strategies to prepare and protect communities from potential risks.

Disaster Mitigation Act of 2000

The Disaster Mitigation Act of 2000 amended the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act). It created the framework for state, local, territorial, and tribal authorities to engage in hazard mitigation planning in order to receive specific types of non-emergency disaster assistance. Additional laws have been passed since the establishment of the Disaster Mitigation Act of 2000 to help shape hazard mitigation policy.

Toxic Substances Control Act

The Toxic Substances Control Act (TSCA) of 1976 provides the EPA with authority to regulate standards related to chemical substances and mixtures, such as reporting, testing requirements, and restrictions. TSCA addresses the production, importation, use, and disposal of particular chemicals such as polychlorinated biphenyls (PCBs), asbestos, radon, and lead-based paint. The EPA evaluates new and existing chemicals, along with their risks, and proposes strategies to prevent or reduce pollution.

National Response Framework

The National Response Framework (NRF) was created as a guide to explain how the U.S. responds to all types of disasters and emergencies, including natural disasters, man-made hazards, and cyberattacks. With its support from the National Incident Management System, the NRF helps jurisdictions, citizens, businesses, and nongovernmental organizations develop community and continuity plans.

Hazardous Materials Transportation Act

The Hazardous Materials Transportation Act, as amended, is the statute regulating hazardous materials transportation in the United States. The purpose of the Hazardous Materials Transportation Act is to provide adequate protection against the risks to life and property inherent in transporting hazardous materials in interstate commerce, giving USDOT and other agencies the authority to issue and enforce rules and regulations governing the safe transportation of hazardous materials.

Natural Gas Pipeline Safety Act

The Natural Gas Pipeline Safety Act authorizes the U.S. Department of Transportation Office of Pipeline Safety to regulate pipeline transportation of natural (flammable, toxic, or corrosive) gas and other gases as well as the transportation and storage of liquefied natural gas. The Office of Pipeline Safety regulates the design, construction, inspection, testing, operation, and maintenance of pipeline facilities. While the federal government is primarily responsible for developing, issuing, and enforcing pipeline safety regulations, the pipeline safety statutes provide for state assumption of the intrastate regulatory, inspection, and enforcement responsibilities under an annual certification. To qualify for certification, a state must adopt the minimum federal regulations and may adopt additional or more stringent regulations as long as they are not incompatible.

Occupational Safety and Health Administration

The Occupational Safety and Health Administration (OSHA) is the federal agency responsible for ensuring worker safety. These regulations provide standards for safe workplaces and work practices, including those relating to hazardous materials handling.

STATE

California Environmental Protection Agency

The California Environmental Protection Agency (CalEPA) develops, implements, and enforces environmental laws that regulate air, water, soil, pesticide use, and waste recycling and reduction. CalEPA consists of the California Air Resources Board (CARB), the Department of Pesticide Regulation (DPR), the Department of Resources Recycling and Recovery (CalRecycle), the Department of Toxic Substances

Control (DTSC), the Office of Environmental Health Hazard Assessment (OEHHA), and the State Water Resources Control Board (SWRCB).

State Oversight of Hazards and Hazardous Materials

DTSC is primarily responsible for regulating the handling, use, and disposal of toxic materials. The SWRCB regulates discharge of potentially hazardous materials to waterways and aquifers and administers the basin plans for groundwater resources in the various regions of the state. The Regional Water Quality Control Board (RWQCB) oversees surface and groundwater. Programs intended to protect workers from exposure to hazardous materials and from accidental upset are covered under OSHA at the federal and state level (Cal OSHA) and the California Department of Health Services at the state level. Air quality is regulated through CARB and the South Coast Air Quality Management District (SCAQMD). The State Fire Marshal is responsible for the protection of life and property through the development and application of fire prevention engineering, education, and enforcement; CAL FIRE provides fire protection services for State and privately-owned wildlands.

California Department of Forestry and Fire Protection

The California Department of Forestry and Fire Protection (CAL FIRE) serve over 31 million acres of California's privately-owned wildlands. The Board of Forestry and Fire Protection is a government-appointed body within CAL FIRE. It is responsible for developing the general forest policy of the state, for determining CAL FIRE's guidance policies, and for representing the State's interest in federal forestland in California.

Assembly Bill (AB) 337, requires CAL FIRE to assess fire risks in certain areas and identify places that are at high risk for fires. Senate Bill (SB) 63 requires FHSZ classifications for Moderate, High, and Very High zones. AB 211 requires local agencies to adopt Moderate, High, and Very High FHSZ designations within 120 days of the state recommendations.

California Code of Regulations

Title 3 of the California Code of Regulations (CCR) pertains to the application of pesticides and related chemicals. Parties applying regulated substances must continuously evaluate application equipment, the weather, the treated lands, and all surrounding properties. CCR Title 3 prohibits any application that would:

- Contaminate persons not involved in the application;
- Damage non-target crops or animals or any other public or private property; and
- Contaminate public or private property or create health hazards on said property.

Title 8 of the CCR establishes California Occupational Safety and Health Administration (Cal OSHA) requirements related to public and worker protection. Topics addressed in CCR Title 8 include materials exposure limits, equipment requirements, protective clothing, hazardous materials, and accident prevention. Construction safety and exposure standards for lead and asbestos are set forth in CCR Title 8.

Title 14 of the CCR establishes minimum standards for solid waste handling and disposal.

Title 17 of the CCR establishes regulations relating to the use and disturbance of materials containing naturally occurring asbestos.

Title 19 of the CCR establishes a variety of emergency fire response, fire prevention, and construction and construction materials standards.

Title 22 of the CCR sets forth definitions of hazardous waste and special waste. The section also identifies hazardous waste criteria and establishes regulations pertaining to the storage, transport, and disposal of hazardous waste.

Title 26 of the CCR is a combination of state regulations pertaining to hazardous materials and waste that are presented in other regulatory sections. CCR Title 26 mandates specific management criteria related to hazardous materials identification, packaging, and disposal. In addition, CCR Title 26 establishes requirements for hazardous materials transport, containment, treatment, and disposal. Finally, staff training standards are set forth in CCR Title 26.

Title 27 of the CCR sets forth a variety of regulations relating to the construction, operation, and maintenance of the state's landfills. CCR Title 27 establishes a landfill classification system and categories of waste. Each class of landfill is constructed to contain specific types of waste (household, inert, special, and hazardous).

California Department of Conservation, California Geologic Energy Management Division (CalGEM)

CalGEM is responsible for implementing PRC Section 3208.1, which authorizes CalGEM to order the reabandonment of a previously abandoned well when construction of any structure over or in proximity to a well could result in a hazard. CalGEM's Construction Site Well Review Program assists local permitting agencies in identifying and reviewing the status of oil or gas wells located near or beneath proposed structures. Before issuing building or grading permits, local permitting agencies review and implement CalGEM's preconstruction well requirements.

California Health and Safety Code

Division 11 of the California Health and Safety Code establishes regulations related to a variety of explosive substances and devices, including high explosives and fireworks. Section 12000 et seq. establishes regulations related to explosives and explosive devices, including permitting, handling, storage, and transport (in quantities greater than 1,000 pounds).

California Health and Safety Code Division 12 establishes requirements for buildings used by the public, including essential services buildings, earthquake hazard mitigation technologies, school buildings, and postsecondary buildings. Section 13000 et seq. establishes state fire regulations and broadly applicable regulations, such as standards for buildings and fire protection devices, in addition to regulations for specific land uses, such as childcare facilities and high-rise structures.

California Health and Safety Code Division 20 establishes DTSC authority and sets forth hazardous waste and underground storage tank regulations. In addition, the division creates a state superfund framework that mirrors the Federal program.

California Health and Safety Code Division 26 establishes California Air Resources Board (CARB) authority. The division designates CARB as the air pollution control agency per federal regulations and charges the Board with meeting CAA requirements.

California Health and Safety Code Section 17920.10 defines "lead hazards" as deteriorated lead-based paint, lead-contaminated dust, lead-contaminated soil, or disturbing lead-based paint without containment, when present in amounts equal to or exceeding thresholds established in regulations and likely to endanger public or occupant health due to proximity. The section specifies that in the absence of new regulations from the State Department of Health Services, existing regulations in Title 17 of the California Code of Regulations interpret key terms like "deteriorated lead-based paint" and "lead-contaminated dust".

California Health and Safety Code Section 105256 outlines the authority and penalties related to lead-based paint hazard abatement. It states that when the department or a local enforcement agency determines that a condition at a location or premises, or the activity of any person, is creating or has created a lead hazard, they may order the owner to abate or correct the hazard, or order the person whose activity is creating the hazard to cease and desist, providing a reasonable opportunity to correct the issue. It is unlawful for any person to refuse or disobey such an order, and a violation of this provision is punishable by a fine not exceeding one thousand dollars ($1,000).

California Vehicle Code Section 31600 (Transportation of Explosives)

The California Vehicle Code establishes requirements related to the transportation of explosives in quantities greater than 1,000 pounds, including licensing and route identification.

California Public Resources Code

The State's fire safety regulations are set forth in PRC Section 4290, which include the establishment of SRA.

PRC Section 4291 sets forth defensible space requirements, which are applicable to anyone who "…owns, leases, controls, operates, or maintains a building or structure in, upon, or adjoining a mountainous area, forest-covered lands, brush-covered lands, grass-covered lands, or land that is covered with flammable material" (Section 4291(a)).

California Building Code (California Code of Regulations Title 24)

The California Building Code (CBC) contains general building design and construction requirements relating to fire and life safety, structural safety, and access compliance. CBC provisions provide minimum standards to safeguard life or limb, health, property, and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all buildings and structures and certain equipment. Chapter 7A of the CBC, specifically addresses wildfire exposure, mandating fire-resistant construction for new buildings and structures in designated high-risk areas, including the Wildland-Urban Interface (WUI). This code focuses on preventing the intrusion of flames and embers, thereby reducing conflagration losses

California Fire Code

The 2022 California Fire Code (CCR Title 24, Part 9) establishes regulations to safeguard against the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises. The Fire Code also establishes requirements intended to provide safety for and assistance to firefighters and emergency responders during emergency operations. The provisions of the Fire Code apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure throughout California. The Fire Code includes regulations regarding fire-resistance-rated construction, fire protection systems such as alarm and sprinkler systems, fire services features such as fire apparatus access roads, means of egress, fire safety during construction and demolition, and wildland-urban interface areas.

Water Code

Division 7 of the California Water Code, commonly referred to as the Porter-Cologne Water Quality Control Act, created the SWRCB and the RWQCB. In addition, water quality responsibilities are established for the SWRCB and RWQCBs. The California Water Code regulates discharges such as hazardous substances, requires permits for certain activities, and addresses various sources of pollution. The Act also includes standards to ensure adequate protection of water quality and statewide uniformity in the siting, operation, and closure of specific waste disposal sites.

REGIONAL AND LOCAL

South Coast Air Quality Management District

The SCAQMD shares responsibility with CARB for ensuring that all State and federal ambient air quality standards are achieved and maintained over the SCAQMD area. This area approximately 10,743 square miles and includes all of Orange County and the urban portions of Los Angeles, Riverside and San Bernardino counties.

The SCAQMD reviews projects to ensure that they would not (1) cause or contribute to any new violation of any air quality standard; (2) increase the frequency or severity of any existing violation of any air quality standard; or (3) delay the timely attainment of any air quality standard or any required interim emission reductions or other milestones of any federal attainment plan.

The SCAQMD is responsible for limiting emissions that can be generated throughout the SCAB by various stationary, area, and mobile sources. Specific rules and regulations have been adopted by the SCAQMD Governing Board that limit the emissions that can be generated by various uses and activities and identify specific pollution reduction measures which must be implemented in association with various uses and activities. These rules regulate the emissions of not only the federal and State criteria pollutants, but also TACs and acutely hazardous materials. The rules are also subject to ongoing refinement by SCAQMD.

Among SCAQMD rules that may be applicable to future development projects in the City are Rule 401 (Visible Emissions), Rule 402 (Nuisance), Rule 403 (Fugitive Dust), Rule 1113 (Architectural Coatings), Rule 1138 (Control of Emissions from Restaurant Operations), Rule 1146.2 (Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers and Process Heaters), and Rule 1403 (Asbestos Emissions from Demolition/Renovation Activities). Compliance with SCAQMD Rule 1403 requires the owner or

operator of any demolition or renovation activity to have an asbestos survey performed prior to demolition and to provide notification to SCAQMD prior to commencing demolition activities. Demolition activities for structures that have asbestos containing materials would need to comply with the requirements of this Rule.

SCAQMD Rule 1403 is a regulation established by the SCAQMD to control asbestos emissions from building demolition, renovation, and asbestos removal activities within its jurisdiction. The rule's primary purpose is to protect public health and the environment by specifying work practice requirements to limit the release of asbestos fibers into the air during these activities. A key requirement of Rule 1403 is the mandatory asbestos survey, which must be conducted by a certified professional before any renovation or demolition begins, regardless of the building's age, size, or the owner's prior knowledge of the materials.

Orange County Sherriff's Department Local Hazard Mitigation Plan 2021

The 2021 County of Orange and Orange County Fire Authority Local Hazard Mitigation Plan (LHMP) is a multi-jurisdiction plan developed jointly between the County of Orange, a local government, and the Orange County Fire Authority, a Joint Powers Authority. The document is an update to the 2015 LHMP. The purpose of the LHMP is to promote sound public policy designed to protect residents, critical facilities, infrastructure, key resources, private property, and the environment from natural hazards in unincorporated areas, fire hazards in the Fire Authority service area, and County and Fire Authority owned facilities. This policy document will increase public awareness, list resources for risk reduction and loss prevention, and identify activities to guide the County toward building a resilient, safer, and sustainable community.

Laguna Niguel Local Hazard Mitigation Plan 2023

The City of Laguna Niguel Local Hazard Mitigation Plan (LHMP) establishes mitigation strategies (a list of actions, measures, projects) to help reduce and/or eliminate impacts from threats and hazards within the City of Laguna Niguel. The plan is an update to the previous plan and assesses relevant existing conditions and capabilities within the City; identifies potential threats and hazards and their impacts within the City; and proposes mitigation measures to address the impacts to the threats and hazards within the City. The City of Laguna Niguel LHMP was reviewed and adopted by the City Council on January 16, 2024, under Resolution No. 2024-1461.

Unified County of Orange and Orange County Operational Area Emergency Operations Plan (OAEOP)

Unified County of Orange and Orange County Operational Area Emergency Operations Plan (OAEOP) was most recently adopted in 2023. The OAEOP provides guidance and procedures for Orange County and the County as the Operational Area to prepare for and respond to emergencies that are natural, technological, conflict-related, and human-caused incidents creating situations, which all requires a coordinated response. The policy document provides guidance for management concepts, identifies organizational structures and relationships, and describes responsibilities and functions of the emergency organization to protect life and property within Orange County.

City of Laguna Niguel Emergency Plan

The City of Laguna Niguel Emergency Operations Plan was adopted in 2002 and revised in 2015. This plan is designed to provide the framework for responding to major emergency disasters in the Planning Area. The main goals for this plan are to (1) prepare for, (2) respond to, and (3) recover from an emergency or disaster that affects the Planning Area.

City of Laguna Niguel Municipal Code

There are various references to hazards and hazardous materials in Laguna Niguel Municipal Code. Section 9-1-45.22 discusses hazardous waste and materials. Section 6-3-220 outlines additional designations of hazardous materials. Section 6-3-260 make information available to fire departments and emergency response personnel, upon request, regarding hazardous wastes, extremely hazardous wastes, and underground tanks, when the information is obtained by the health officer.

Laguna Niguel Municipal Code 7, Division 4, Article 9, *Temporary Street Closure*, provides regulations related to the closure of public streets. In accordance with Section 7-4-900, *Generally*, a street closure permit issued by the Public Works Department is required prior to temporary closure of a public street. Any closed street is required to maintain a 15-foot-wide emergency vehicle lane at all times and to be kept clear of all obstructions to provide emergency vehicular access.

Title 8, Division 1, *Buildings and Construction Generally*, adopts various building standards codes, including the 2022 California Building Code and California Residential Code, as amended to account for local conditions.

Section 9-1-289, *Fire Protection*, requires appropriate fire protection for any subdivision proposed to be located in a high fire hazard area, including through firebreaks, fuel modification programs, access roads, sufficient water supply, landscaping and open spaces, and such other methods that the fire chief has determined will ensure the public health, safety and welfare of the future occupants of the subdivision and the adjacent area.

Section 9-1-54.5, *Fuel Modification Regulations*, establishes fuel modification regulations that apply whenever a fuel modification plan has been required as a condition of development approval or through other requirements. Fuel modification plans, when required, are reviewed and approved by the OCFA and City of Laguna Niguel Community Development Director prior to issuance of a grading permit or prior to issuance of a building permit if there is no grading permit. A fuel modification maintenance program providing for continuous maintenance of fuel modification areas shall also be prepared and implemented.

Title 9, Division 1, Article 2, Subarticle 8, *Hillside Protection*, contains the City's Hillside Protection Ordinance. The stated goal of the Hillside Protection Ordinance is, in part, to protect the public health and safety by preserving very steep hillsides in open space and by minimizing geologic hazards, erosion and other potential dangers associated with hillside areas. The Hillside Protection Ordinance places restrictions on grading on steep slopes and contains other hillside protections to limit development in hillside areas.

Title 9, Division 3, *Fire Protection and Explosives*, includes several articles related to wildfire and fire protection. Article 1, *2022 Edition of the California Fire Code*, adopts the 2022 Edition of the California Fire

Code, as amended to account for local conditions. Article 2, *Fire Regulations*, establishes restrictions and other regulations related to activities that may cause fires, as well as firebreaks and other fuel management practices. Article 3, *Fire Protection in State Responsibility Areas*, establishes that the City elects to assume responsibility for the prevention and suppression of all fires on all lands in the City, including lands within SRAs. Article 7, *Very High Fire Hazard Severity Zone*, contains a map of designated very high fire hazard severity zones within the City.

City of Laguna Niguel CEQA Manual

The City of Laguna Niguel CEQA Manual provides the City and project applicants with local guidelines, procedures, requirements, and thresholds of significance for the environmental review process within the City of Laguna Niguel consistent with the California Environmental Quality Act (Public Resources Code [PRC] Section 21000 et seq.), referred to as "CEQA" or "CEQA Statutes," and the State CEQA Guidelines (Title 14, California Code of Regulations (CCR), Division 6, Chapter 3, Section 15000 et seq.). The City's CEQA Manual applies to all public and private projects under the jurisdiction of the City of Laguna Niguel that constitute a "project" and therefore subject to CEQA review.

4.8.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

CEQA Guidelines Appendix G contains the Initial Study Environmental Checklist, which includes questions related to hazards and hazardous materials. The City relies on the questions included in Appendix G as the thresholds of significance for assessing impacts from hazards and hazardous materials (City of Laguna Niguel CEQA Manual, Revised February 24, 2023). A significant impact will occur if implementation of the proposed Project will:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials (refer to Impact Statement HAZ-1);
- 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 (refer to Impact Statement HAZ-2);
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school (refer to Impact Statement HAZ-3);
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment (refer to refer to Impact Statement HAZ-4);
- 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 the project result in a safety hazard or excessive noise for people residing or working in the project area (refer to Section 7.0, *Effects Found Not To Be Significant*);
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan (refer to Impact Statement HAZ-5); and/or
- Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires (refer to Impact Statement (HAZ-6).

4.8.5 IMPACTS AND MITIGATION MEASURES

HAZ-1: Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Impact Analysis:

CONSTRUCTION

Construction activities associated with subsequent projects would potentially involve the removal of existing improvements (e.g., structures, pavement/asphalt, soils, etc.) to allow for new development. Generally, the exposure of persons to hazardous materials could occur in the following manners: (1) improper handling or use of hazardous materials or hazardous wastes during construction or operation of subsequent development, particularly by untrained personnel; (2) an accident during transport; (3) environmentally unsound disposal methods; or (4) fire, explosion, or other emergencies. The severity of potential effects varies with the activity conducted, the concentration and type of hazardous materials or wastes present, and the proximity of sensitive receptors.

Although site-specific development projects are not proposed as part of the General Plan Update, except for the assumption that the CHFB site will be demolished as part of a future redevelopment effort, subsequent construction activities may involve the routine transport, use, or disposal of hazardous materials, such as petroleum-based fuels or hydraulic fluid used in construction equipment. The construction contractor would be required to use standard construction controls and safety procedures that would avoid and minimize the potential for hazards associated with the transport and use of hazardous materials. Standard construction practices would be observed such that any materials released are appropriately contained and remediated as required by local, State, and federal law, including but not limited to, the Hazardous Materials Transportation Act, the CCR, the California Health and Safety Code, the California Vehicle Code, the California Public Resources Code, and the City of Laguna Niguel Municipal Code.

Compliance with applicable laws and regulations governing the routine use, storage, transportation, and disposal of hazardous materials would ensure all potentially hazardous materials are used and handled in an appropriate manner and would minimize the potential for safety impacts. For example, all spills or leakage of petroleum products during construction activities are required to be immediately contained, the hazardous material identified, and the material remediated in compliance with applicable State and local regulations for the cleanup and disposal of that contaminant. All contaminated waste would be required to be collected and disposed of at an appropriately licensed disposal or treatment facility. Compliance with the existing regulatory requirements would reduce potential impacts associated with the routine use, storage, transport, and disposal of hazardous materials during construction activities to a less than significant level; refer to impact discussion HAZ-2 regarding the potential release of hazardous materials into the environment.

Chet Holifield Federal Building Demolition

While no specific development projects are proposed as part of the General Plan Update, it is assumed that the CHFB site will be demolished as part of a future redevelopment effort. As discussed above,

construction activities, including demolition of the CHFB site, may involve the routine transport, use, or disposal of hazardous materials, such as petroleum-based fuels or hydraulic fluid used in construction equipment. The construction contractor would be required to use standard construction controls and safety procedures that would avoid and minimize the potential for hazards associated with the transport and use of hazardous materials during demolition activities. Standard construction practices would be observed such that any materials released are appropriately contained and remediated as required by local, State, and federal law, including but not limited to, the Hazardous Materials Transportation Act, the CCR, the California Health and Safety Code, the California Vehicle Code, the California Public Resources Code, and the City of Laguna Niguel Municipal Code.

As discussed in more detail below in impact discussion HAZ-2, due to the age of the CHFB, lead contaminated surfaces and ACMs are known or suspected to be present throughout the CHFB.[6] All contaminated waste, including lead contaminated surfaces and ACMs, would be required to be collected and disposed of at an appropriately licensed disposal or treatment facility. Compliance with the existing regulatory requirements would reduce potential impacts associated with the routine use, storage, transport, and disposal of hazardous materials during construction activities to a less than significant level.

OPERATION

Subsequent projects would potentially involve the use of hazardous materials. The amounts and types of hazardous materials vary by land use and associated operations. Many types of businesses use various chemicals and hazardous materials during routine business operations. Residential uses do not typically involve the use or storage of hazardous substances other than limited quantities of hazardous materials such as solvents, fertilizers, pesticides, and other materials used for regular maintenance of buildings and landscaping by property owners.

Hazardous materials regulations related to the use, handling, and transport of hazardous materials are codified in Titles 8, 22, and 26 of the CCR, and their enabling legislation set forth in the California Health and Safety Code. These laws were established at the State level to ensure compliance with federal regulations to reduce the risk to human health and the environment from the routine use of hazardous substances. These regulations must be implemented by employers/businesses, as appropriate, and are monitored by the State (e.g., Cal OSHA in the workplace or DTSC for hazardous waste) and/or the County.

The haulers and users of hazardous materials are listed with and regulated and monitored by the DTSC, and the Orange County Health Care Agency, Environmental Health Division. Facilities that store hazardous materials on-site are required to maintain a Hazardous Materials Business Plan in accordance with State regulations. In the event of the accidental release of hazardous materials, the local Certified Unified Program Agencies (CUPA) (i.e., Orange County Health Care Agency Environmental Health Division) and emergency management agencies (e.g., Orange County Sheriff's Department and Orange County Fire Authority) would respond.

All subsequent development projects would be required to comply with the provisions of federal, State, and local requirements related to hazardous materials identified above. Compliance with these

[6] Potomac-Hudson Engineering, Inc., *Final Environmental Impact Statement for the Chet Holifield Federal Building Tenant Relocation Laguna Niguel, California*, March 2021.

requirements would ensure that risks resulting from the routine transportation, use, storage, or disposal of hazardous materials or hazardous wastes associated with implementation of the General Plan Update would be less than significant.

In addition to the requirements associated with federal, State, and local regulations, the General Plan Update includes policies to further minimize potential impacts associated with hazardous materials among other issues. Proposed Public Safety Element Policy PS-2.1 directs the City to promote proper handling, transport, treatment, storage, and disposal of hazardous materials in accordance with applicable federal, state, and local regulations. Proposed Public Safety Element PS-2.2 directs the City to coordinate with the Orange County Fire Authority to ensure that businesses that handle hazardous materials or extremely hazardous substances at reportable quantities prepare, submit, and maintain required disclosures and emergency plans in compliance with State, County, and local regulations. Proposed Public Safety Element Policy PS-2.3 directs the City to collaborate with the Orange County Fire Authority and other responding agencies to ensure emergency preparedness and response strategies are in place to effectively address hazardous materials incidents in the City. Public Safety Element PS-2.4 directs the City to collaborate with the City's waste service provider(s) and the County of Orange to increase public awareness about the importance of proper household hazardous waste disposal. This includes educational materials on available services, programs, and disposal methods, while highlighting the environmental impacts of improper disposal. Public Safety Element PS-2.5 ensures land uses involving the storage, transfer, or processing of hazardous materials are appropriately located and designed to minimize risk and comply with all applicable hazardous materials regulations. Public Safety Element PS-2.6 ensures that hazardous waste cleanup sites are remediated in compliance with the Orange County Health Care Agency and all other applicable regulatory agencies or requirements prior to any reuse or redevelopment of the subject site.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

PUBLIC SAFETY ELEMENT

Goal PS-2: **Hazardous Waste and Materials.** Minimize the risk of injury and damage to property and the environment caused by hazardous waste and materials contamination.

Policy PS-2.1: **Hazardous Materials Regulatory Compliance.** Promote proper handling, transport, treatment, storage, and disposal of hazardous materials in accordance with applicable federal, state, and local regulations.

Policy PS-2.2: **Hazardous Materials Emergency Plan.** Coordinate with the Orange County Fire Authority to ensure that businesses that handle hazardous materials or extremely hazardous substances at reportable quantities prepare, submit, and maintain required disclosures and emergency plans in compliance with state, county, and local regulations.

Policy PS-2.3: **Hazardous Materials Emergency Response.** Collaborate with the Orange County Fire Authority and other responding agencies to ensure emergency preparedness and

response strategies are in place to effectively address hazardous materials incidents in the City.

Policy PS-2.4: **Public Education (Hazardous Waste Disposal).** Collaborate with the City's waste service provider(s) and the County of Orange to increase public awareness about the importance of proper household hazardous waste disposal. This includes educational materials on available services, programs, and disposal methods, while highlighting the environmental impacts of improper disposal.

Policy PS-2.5: **Uses Involving Hazardous Materials**. Ensure land uses involving the storage, transfer, or processing of hazardous materials are appropriately located and designed to minimize risk and comply with all applicable hazardous materials regulations.

Policy PS-2.6: **Hazardous Materials Cleanup**. Ensure that hazardous waste cleanup sites are remediated in compliance with the Orange County Health Care Agency and all other applicable regulatory agencies or requirements prior to any reuse or redevelopment of the subject site.

HAZ-2: Would the project 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?

Impact Analysis:

CONSTRUCTION

Construction activities associated with subsequent projects, including the potential demolition of the CHFB site, could result in upset and/or accident conditions involving the release of hazardous materials into the environment. Potentially hazardous materials used during construction include substances, such as paints, sealants, lubricants, solvents, adhesives, cleaners, and diesel fuel. There is potential for these materials to spill or to create hazardous conditions. The materials used, however, would not be in such quantities or stored in such a manner as to pose a significant safety hazard, as their storage and use would be in accordance with all applicable regulations. These activities would also be short-term and would cease upon completion of construction.

Nonetheless, to prevent hazardous conditions, existing local, State, and federal laws, such as those listed under Section 4.8.3, Regulatory Setting, are required to be enforced at construction sites. For example, compliance with existing regulations would ensure construction workers and the general public are not exposed to any risks related to hazardous materials during demolition and construction activities. Cal/OSHA has regulations concerning the use of hazardous materials, including requirements for safety training, exposure warnings, availability of safety equipment, and preparation of emergency action/prevention plans. All spills or leakage of petroleum products during construction activities are required to be immediately contained, the hazardous material identified, and the material remediated in compliance with applicable State and local regulations for the cleanup and disposal of that contaminant. All contaminated waste encountered would be required to be collected and disposed of at an appropriately licensed disposal or treatment facility.

DEMOLITION

Specific development projects have not been identified as part of the General Plan Update. However, subsequent development could involve the demolition of existing structures and buildings as areas within the City are redeveloped, including the CHFB site.

The Planning Area includes existing development from and prior to the 1960s; therefore, the presence of lead-based paint, ACMs, and/or other contaminants, which are typically present in buildings and structures constructed prior to 1978, are likely present in some structures. Due to the age of the CHFB, lead contaminated surfaces and ACMs are known or suspected to be present throughout the CHFB.[7] LBP that is deteriorating (i.e., chipping, peeling, or cracking) may eventually generate lead-containing dust that can be inhaled or ingested. Asbestos fibers typically do not present a health hazard when they are encapsulated within ACM that is in good condition. However, these fibers can become airborne when ACM is either damaged or disturbed or becomes degraded and may be inhaled by building occupants.

All demolition activities within the Planning Area, including demolition of the CHFB site, that could result in the release of ACMs or lead-based paint would be conducted according to federal and State regulations which govern the renovation and demolition of structures where ACMs and lead-based paint are present. The National Emission Standards for Hazardous Air Pollutants mandates that building owners conduct an asbestos survey to determine the presence of ACMs prior to the commencement of any remedial work, including demolition. In addition, SCAQMD Rule 1403 requires abatement of ACMs prior to any demolition activities if ACM material is found. If paint is separated from building materials (chemically or physically) during demolition of structures, the paint waste must be evaluated independently from the building material by a qualified Environmental Professional in accordance with California Code of Regulations Title 8. If lead-based paint is found, abatement would be required to be completed by a qualified Lead Specialist prior to any demolition activities. Mitigation Measure HAZ-1 would require subsequent development, including demolition of the CHFB site, that would involve the demolition of a structure with the potential for LBP or ACMs (built before 1978), prepare a comprehensive survey for ACM and LBP to identify the locations and quantities of ACMs and LBP in the structure. The ACM and LBP surveys would be conducted in accordance with applicable SCAQMD regulations. If ACMs or LBPs are identified during the surveys, the applicant would be required to retain a licensed or certified contactor to remove and dispose of all ACMs and LBP in accordance with California Code of Regulations Title 8, Sections 1529 and 1532.1. Subsequent development that would involve demolition of a structure with the potential for LBP or ACMs, which would include the demolition of the CHFB, would be required to comply Mitigation Measure HAZ-1, California *Health and Safety Code* Sections 17920.10 and 105256 and California Code of Regulations Title 8, Section 1532.1, as well as SCAQMD Rule 1403, regarding the potential for LBP and ACMs, which would reduce potential impacts to a less than significant level.

Polychlorinated biphenyls (PCBs) were widely used in industrial applications, including electrical equipment before being banned in 1979 due to environmental and health concerns. Electrical transformers or other equipment with the potential to contain PCBs could be located within the Planning

[7] Potomac-Hudson Engineering, Inc., *Final Environmental Impact Statement for the Chet Holifield Federal Building Tenant Relocation Laguna Niguel, California*, March 2021.

Area. Although not specifically identified, due to the age of the CHFB, it is possible that some transformers or electrical equipment may remain on site that could potentially contain PCBs.[8]

If PCBs are identified within the Planning Area, including the CHFB site, appropriate abatement actions for their disposal would be required in accordance with regulatory requirements, and soil beneath transformers would be evaluated for evidence of releases. If any releases are detected in the underlying soils, this would be a significant impact requiring mitigation; refer to the Soil and Groundwater Contamination discussion below.

SOIL AND GROUNDWATER CONTAMINATION

Subsequent projects may involve the development of sites with aboveground storage tanks (ASTs), underground storage tanks (USTs) or other storage and site operational conditions with the potential for soil and groundwater contamination. Construction and site-disturbance activities associated with subsequent projects, including on the CHFB site, could involve grading and excavation activities with the potential to expose construction workers and the public to previously unknown hazardous substances present in the soil or groundwater.

Exposure to contaminants could occur if contaminants migrated to surrounding areas or if contaminated zones were disturbed at the contaminated location. Grading and excavation activities could also reveal previously unidentified USTs. Although UST removal activities could pose risks to workers and the public, potential risks would be minimized by managing the tank removal according to existing Orange County Health Care Agency Environmental Health Division standards. Potential impacts to groundwater would be dependent upon the type of contaminant, the amount released, and depth to groundwater at the time of the release.

The public could also be exposed to hazardous materials if new development or redevelopment were to be located on a current or historical hazardous material site. There are no active hazardous waste facilities cleanup sites within the Planning Area listed in the EnviroStor database; refer also to impact discussion HAZ-3, regarding hazardous materials sites compiled pursuant to Government Code Section 65962.5. There are 36 LUST sites listed within the Planning Area, but all cases have been completed and closed.

Subsequent development with implementation of the General Plan Update would be reviewed at the project level to determine whether any development sites are listed on a hazardous materials site or have experienced historic or current operational activities involving hazardous materials with the potential for contamination. Mitigation Measure HAZ-2 requires the preparation of a Phase I ESA based on the screening criteria provided in the City's CEQA Manual. If the Phase I ESA identifies recognized environmental conditions (REC) in connection with the project site, including if the site is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.2, a Phase II Investigation would be required to determine the potential for release of hazardous materials. A Phase II investigation generally includes site sampling, such as soil, groundwater, and soil gas, to assess potential sources of environmental impacts and either confirm the extent of contamination or identify the need for additional studies. If contamination is present, measures would be identified in accordance with the

[8] Potomac-Hudson Engineering, Inc., *Final Environmental Impact Statement for the Chet Holifield Federal Building Tenant Relocation Laguna Niguel, California*, March 2021.

appropriate agency's requirements (Regional Water Quality Control Board, Orange County Environmental Health Department, Department of Toxic Substances Control, and/or South Coast Air Quality Management District) to prevent, minimize, and control the identified hazardous materials during construction and operation. Compliance with the applicable regulatory requirements and Mitigation Measure HAZ-2 would reduce potential impacts to less than significant.

Chet Holifield Federal Building Demolition

The CHFB site is not listed on a hazardous materials site. Six USTs were removed from the CHFB site in 1993. Currently, the site has one 4,000-gallon UST that is used to store diesel for the emergency generator and diesel fire pump. An additional diesel-fired emergency generator located outside the southwest corner of the CHFB has a belly tank with an estimated capacity of 3,000 gallons. Soil contamination from leaking USTs was identified on-site at two storage tank areas in the western and southern portions of the property. A total of 1,800 cubic yards of impacted soil was removed near USTs west of the building, and a total of 70 cubic yards of impacted soil was removed south of the building. Impacted soil was transported to a local landfill for disposal. Additional soil sampling was performed in these areas after excavation. No impacted soil was identified on the west side of the building and approximately 5 to 10 cubic yards of impacted soil was estimated to remain south of the building. Two groundwater monitoring wells were installed at the property, one at each removal area, and sampled in July 1993 and June 1994. No detectable concentrations contaminants were detected in the sampled groundwater during the sampling events. However, due to the documented historic storage, use, and presence of hazardous materials within the CHFB site, there is the potential for contaminated soil to be encountered during demolition. This would be a significant impact requiring mitigation.

To prevent exposure to workers or the release of hazardous waste and materials to the environment, a Phase I ESA would be required in compliance with Mitigation Measure HAZ-2. As discussed above, if the Phase I ESA identifies RECs in connection with the CHFB site, a Phase II Investigation would be required to determine the potential for release of hazardous materials. A Phase II investigation generally includes site sampling, such as soil, groundwater, and soil gas, to assess potential sources of environmental impacts and either confirm the extent of contamination or identify the need for additional studies. If contamination is present, measures would be identified in accordance with the appropriate agency's requirements (RWQCB, Orange County Environmental Health Department, DTSC, and/or SCAQMD) to prevent, minimize, and control the identified hazardous materials during construction and operation. With implementation of Mitigation Measure HAZ-2, potential impacts associated with the reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment resulting from demolition of the CHFB site would be reduced to a less than significant level.

In addition to the requirements associated with federal, State, and local regulations, the General Plan Update includes policies that would further minimize potential impacts associated with potentially contaminated sites. Public Safety Element Policy PS-2.1 directs the City to promote proper handling, transport, treatment, storage, and disposal of hazardous materials in accordance with applicable federal, State, and local regulations. Public Safety Element Policy PS-2.3 directs the City to collaborate with the Orange County Fire Authority and other responding agencies to ensure emergency preparedness and response strategies are in place to effectively address hazardous materials incidents in the City. Public

Safety Element PS-2.6 ensures that hazardous waste cleanup sites are remediated in compliance with the Orange County Health Care Agency and all other applicable regulatory agencies or requirements prior to any reuse or redevelopment of the subject site.

OPERATIONS

Long-term operational activities associated with new development could result in upset and/or accident conditions involving the release of hazardous materials into the environment. The General Plan Update does not propose site-specific development; thus, specific hazardous materials that could be accidentally released cannot be predicted at this time. Typical incidents that could occur due to the accidental release of hazardous materials include leaking underground storage tanks, spills during transport, pipeline rupture, inappropriate storage or use, and/or natural disasters. If not cleaned up immediately and completely, these and other types of incidents could cause contamination of soil, surface water, and groundwater, and generate toxic fumes. Depending on the nature and extent of the contamination, groundwater supplies could become unsuitable for use as a domestic water source. Human exposure to contaminated soil or water could have potential health effects depending on a variety of factors, including the nature of the contaminant and the degree of exposure.

The transport, storage, handling, and disposal of hazardous materials by developers, contractors, business owners, and others are required to comply with federal, state, and local regulations. Facilities that use hazardous materials are required to obtain permits under the RCRA, which gives the EPA the authority to control the generation, transportation, treatment, storage, and disposal of hazardous waste. Additionally, federal and state hazardous materials regulations govern the transportation of hazardous materials. Locally, the Orange County Health Care Agency, Environmental Health Division is the CUPA for Orange County and is responsible for consolidating, coordinating, and making consistent administrative requirements, permits, inspections, and enforcement activities of state standards regarding the transportation, use, and disposal of hazardous materials in Orange County including the Planning Area. Permits issued by the CUPA would include preventative requirements and best practices for the use of hazardous materials related to the specific project and operations. As required by the CUPA, a Hazardous Materials Business Plan would detail the location and quantities of hazardous materials stored onsite, accompanied by the appropriate Materials Safety Data Sheets. That information would be made available to emergency responders, such as firefighters and medical personnel, who would, in part, use such information to contain the hazardous materials and avoid the creation of a significant hazard. Therefore, substantial hazards to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during long-term operation activities with the General Plan Update would be less than significant.

The General Plan Update includes policies to further minimize potential impacts associated with upset and accident conditions involving the release of hazard materials into the environment. Public Safety Element Policy PS-2.1 directs the City to promote proper handling, transport, treatment, storage, and disposal of hazardous materials in accordance with applicable federal, State, and local regulations. Public Safety Element PS-2.2 directs the City to coordinate with the Orange County Fire Authority to ensure that businesses that handle hazardous materials or extremely hazardous substances at reportable quantities prepare, submit, and maintain required disclosures and emergency plans in compliance with State,

county, and local regulations. Public Safety Element Policy PS-2.3 directs the City to collaborate with the Orange County Fire Authority and other responding agencies to ensure emergency preparedness and response strategies are in place to effectively address hazardous materials incidents in the City. Public Safety Element PS-2.4 directs the City to collaborate with the City's waste service provider(s) and the County of Orange to increase public awareness about the importance of proper household hazardous waste disposal. This includes educational materials on available services, programs, and disposal methods, while highlighting the environmental impacts of improper disposal. Public Safety Element PS-2.5 directs the City to ensure land uses involving the storage, transfer, or processing of hazardous materials are appropriately located and designed to minimize risk and comply with all applicable hazardous materials regulations.

Mitigation Measures:

HAZ-1: Prior to the issuance of a demolition permit for any structure constructed before 1978, the applicant shall conduct a comprehensive survey for asbestos-containing material (ACM) and lead based paint (LBP) to identify the locations and quantities of ACMs and LBP in the structure. The ACM and LBP surveys shall be conducted in accordance with applicable South Coast (Air Quality Management District (AQMD) regulations. The survey results shall be submitted to the Laguna Niguel Community Development Department prior to issuance of a demolition permit. If ACMs or LBPs are identified during the surveys, the applicant shall retain a licensed or certified contactor to remove and dispose of all ACMs and LBP in accordance with California Code of Regulations Title 8, Sections 1529 and 1532.1.

HAZ-2: As part of the development review process for qualifying projects, the Laguna Niguel Community Development Department shall determine if the proposed project is required to have a Phase I Environmental Site Assessment (ESA) prepared, based on the screening criteria provided in the City of Laguna Niguel CEQA Manual. Projects that are not subject to CEQA, without ground disturbance, or the potential to impact hazardous materials may not need a Phase I ESA.

If required, the applicant shall have a Phase I ESA prepared by a qualified environmental engineer consistent with the City of Laguna Niguel CEQA Manual.

If the Phase I ESA identified recognized environmental conditions (REC) in connection with the project site, including if the project site is included on a list of hazardous materials sites complied pursuant to Government Code Section 65962.5, a Phase II investigation shall be required to determine the potential for release of hazardous materials. The Phase II investigation generally includes site sampling, such as soil, groundwater, and soil gas, to assess potential sources of environmental impacts and either confirm the extent of contamination or identify the need additional studies. All assessments, supporting studies, and the results of any testing shall be provided to the Laguna Niguel Community Development Department.

If contamination is present, the applicant shall implement appropriate abatement, management, or disposal actions in accordance with applicable regulatory requirements to prevent, minimize, and control hazardous materials during construction and operation. Relevant regulatory agencies include, for example, the Regional Water Quality Control Board, Orange County Environmental Health Department, Department of Toxic Substances Control, and/or South Coast Air Quality Management District.

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

PUBLIC SAFETY ELEMENT

Goal PS-2: **Hazardous Waste and Materials.** Minimize the risk of injury and damage to property and the environment caused by hazardous waste and materials contamination.

Policy PS-2.1: **Hazardous Materials Regulatory Compliance.** Promote proper handling, transport, treatment, storage, and disposal of hazardous materials in accordance with applicable federal, state, and local regulations.

Policy PS-2.2: **Hazardous Materials Emergency Plan.** Coordinate with the Orange County Fire Authority to ensure that businesses that handle hazardous materials or extremely hazardous substances at reportable quantities prepare, submit, and maintain required disclosures and emergency plans in compliance with state, county, and local regulations.

Policy PS-2.3: **Hazardous Materials Emergency Response.** Collaborate with the Orange County Fire Authority and other responding agencies to ensure emergency preparedness and response strategies are in place to effectively address hazardous materials incidents in the City.

Policy PS-2.4: **Public Education (Hazardous Waste Disposal).** Collaborate with the City's waste service provider(s) and the County of Orange to increase public awareness about the importance of proper household hazardous waste disposal. This includes educational materials on available services, programs, and disposal methods, while highlighting the environmental impacts of improper disposal.

Policy PS-2.5: **Uses Involving Hazardous Materials**. Ensure land uses involving the storage, transfer, or processing of hazardous materials are appropriately located and designed to minimize risk and comply with all applicable hazardous materials regulations.

Policy PS-2.6: **Hazardous Materials Cleanup**. Ensure that hazardous waste cleanup sites are remediated in compliance with the Orange County Health Care Agency and all other applicable regulatory agencies or requirements prior to any reuse or redevelopment of the subject site.

HAZ-3: Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Impact Analysis: The Planning Area is served by a variety of preschools, elementary, middle, and high schools; refer to Section 4.13, *Public Services*, of this EIR. The General Plan Update does not propose to change the land use designation of any existing school sites or change the land use designation of any properties for new school sites. Schools currently located within the Planning Area are located in proximity to a variety of uses including both residential and non-residential uses.

As noted above, subsequent development could involve the use, transport, storage, or disposal of hazardous materials during construction or operation. Additionally, construction activities associated with subsequent development could expose the public to unknown hazardous materials present in existing improvements and soil or groundwater, which would require remediation activities. Site-specific development is not proposed as part of the General Plan Update. However, subsequent development within the Planning Area could potentially emit or handle hazardous materials within one-quarter mile of an existing or proposed school during construction and operation.

CONSTRUCTION

CEQA Guidelines Section 15186, *School Facilities*, requires that school projects, as well as projects proposed to be located near schools, examine potential health impacts resulting from exposure to hazardous materials, wastes, and substances. As discussed above, subsequent development would be reviewed at the project level to determine whether any development sites are listed on a hazardous materials site or have experienced historic or current operational activities involving hazardous materials with the potential for contamination. Any development activities that may occur on documented hazardous materials sites or sites with the potential for contamination would be required to undergo site characterization to determine the extent of contamination, if any. If contamination is present, remediation, management and disposal activities would be required to occur under the supervision of the appropriate regulatory agencies, such as the RWQCB, Orange County Health Department, DTSC, and/or SCAQMD. Compliance with the applicable regulatory requirements, including but not limited to, the Hazardous Materials Transportation Act, the CCR, the California Health and Safety Code, the California Vehicle Code, the California Public Resources Code, and the City of Laguna Niguel Municipal Code, and Mitigation Measures HAZ-1 and HAZ-2, described above, would reduce potential impacts associated with subsequent construction activities involving potential hazardous emissions, hazardous materials, substances, or waste within one-quarter mile of a school to a less than significant level.

Chet Holifield Federal Building Demolition

The CHFB site is located approximately 0.18 miles east of Aliso Viejo High School. As previously discussed, hazardous materials are known or anticipated to occur within the CHFB site. Therefore, due to the site's proximity to Aliso Viejo High School, demolition and associated ground disturbing activities have the potential to emit or handle hazardous materials within one-quarter mile of an existing school. As discussed in Impact Statement HAZ-2, to prevent exposure to workers or the release of hazardous waste and materials to the environment, the project applicant would be required to comply with Mitigation Measures HAZ-1 and HAZ-2, which includes a comprehensive survey for ACM and LBP and a Phase I ESA be prepared. As discussed above, the comprehensive survey for ACM and LBP would identify the locations and quantities of ACMs and LBP in the CHFB. The ACM and LBP surveys would be conducted in accordance with applicable SCAQMD regulations. Removal and disposal of any ACMs and LBPs would be required to be conducted by a licensed or certified contactor in accordance with California Code of Regulations Title 8, Sections 1529 and 1532.1. Additionally, consistent with Mitigation Measure HAZ-2, if the Phase I ESA identifies RECs in connection with the CHFB site, a Phase II Investigation would be required to determine the potential for release of hazardous materials. A Phase II investigation generally includes site sampling, such as soil, groundwater, and soil gas, to assess potential sources of environmental impacts and either confirm the extent of contamination or identify the need for additional studies. If contamination is

present, measures would be identified in accordance with the appropriate agency's requirements (RWQCB, Orange County Environmental Health Department, DTSC, and/or SCAQMD) to prevent, minimize, and control the identified hazardous materials during construction and operation. Therefore, with the implementation of Mitigation Measures HAZ-1 and HAZ-2, potential impacts associated with the hazardous emissions or hazardous materials, substances or waste resulting from demolition of the CHFB site within one-quarter mile of an existing school would be reduced to a less than significant level.

OPERATION

Subsequent development would be guided by the General Plan land use designations and the maximum development intensities (MDIs) within each Sub-profile Area; refer to Section 2.0, *Project Description*. Development consistent with the General Plan Update has the potential to result in new hazardous waste generators within one-quarter mile of an existing or proposed school. The amounts and types of hazardous materials would vary by land use. For example, small amounts of hazardous materials, such as cleaners, solvents, paints, pesticides are used by residential, institutional, and office uses. Commercial businesses that involve the sale of hazardous materials, such as fueling stations, and commercial and industrial operations that use hazardous materials in their business operations typically have larger amounts of hazardous materials on-site.

The transport, storage, handling, and disposal of hazardous materials by developers, contractors, business owners, and others are required to comply with federal, state, and local regulations. Facilities that use hazardous materials are required to obtain permits under the RCRA, which gives the EPA the authority to control the generation, transportation, treatment, storage, and disposal of hazardous waste. Additionally, federal and state hazardous materials regulations govern the transportation of hazardous materials. Permitting requirements for individual hazardous material handlers or emitters would require evaluation and notification where potential hazardous materials handling and emissions could occur in proximity to existing schools. As required by the CUPA, a Hazardous Materials Business Plan would detail the location and quantities of hazardous materials stored onsite, accompanied by the appropriate Materials Safety Data Sheets. Information would be made available to emergency responders, such as firefighters and medical personnel, who would, in part, use such information to contain the hazardous materials and avoid the creation of a significant hazard. Implementation of the safety procedures and regulations mandated by applicable federal, State, and local laws would ensure that potential risks resulting from hazardous emissions or hazardous materials, substances or waste resulting from potential project operations accommodated by the General Plan Update within one-quarter mile of an existing school would be reduced to a less than significant level.

In addition to the requirements associated with federal, State, and local regulations, the General Plan Update includes policies that would further minimize potential impacts associated with hazardous emissions or hazardous materials, substances, or waste within one-quarter mile of a school. Public Safety Element Policy PS-2.1 directs the City to promote proper handling, transport, treatment, storage, and disposal of hazardous materials in accordance with applicable federal, State, and local regulations. Public Safety Element PS-2.2 directs the City to coordinate with the Orange County Fire Authority to ensure that businesses that handle hazardous materials or extremely hazardous substances at reportable quantities prepare, submit, and maintain required disclosures and emergency plans in compliance with State,

County, and local regulations. Public Safety Element Policy PS-2.3 directs the City to collaborate with the Orange County Fire Authority and other responding agencies to ensure emergency preparedness and response strategies are in place to effectively address hazardous materials incidents in the City. Public Safety Element PS-2.4 directs the City to collaborate with the City's waste service provider(s) and the County of Orange to increase public awareness about the importance of proper household hazardous waste disposal. This includes educational materials on available services, programs, and disposal methods, while highlighting the environmental impacts of improper disposal. Public Safety Element PS-2.5 ensures land uses involving the storage, transfer, or processing of hazardous materials are appropriately located and designed to minimize risk and comply with all applicable hazardous materials regulations. Public Safety Element PS-2.6 ensures that hazardous waste cleanup sites are remediated in compliance with the Orange County Health Care Agency and all other applicable regulatory agencies or requirements prior to any reuse or redevelopment of the subject site.

Mitigation Measures: Refer to Mitigation Measures HAZ-1 and HAZ-2.

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

PUBLIC SAFETY ELEMENT

Goal PS-2: **Hazardous Waste and Materials.** Minimize the risk of injury and damage to property and the environment caused by hazardous waste and materials contamination.

Policy PS-2.1: **Hazardous Materials Regulatory Compliance.** Promote proper handling, transport, treatment, storage, and disposal of hazardous materials in accordance with applicable federal, state, and local regulations.

Policy PS-2.2: **Hazardous Materials Emergency Plan.** Coordinate with the Orange County Fire Authority to ensure that businesses that handle hazardous materials or extremely hazardous substances at reportable quantities prepare, submit, and maintain required disclosures and emergency plans in compliance with state, county, and local regulations.

Policy PS-2.3: **Hazardous Materials Emergency Response.** Collaborate with the Orange County Fire Authority and other responding agencies to ensure emergency preparedness and response strategies are in place to effectively address hazardous materials incidents in the City.

Policy PS-2.4: **Public Education (Hazardous Waste Disposal).** Collaborate with the City's waste service provider(s) and the County of Orange to increase public awareness about the importance of proper household hazardous waste disposal. This includes educational materials on available services, programs, and disposal methods, while highlighting the environmental impacts of improper disposal.

Policy PS-2.5: **Uses Involving Hazardous Materials**. Ensure land uses involving the storage, transfer, or processing of hazardous materials are appropriately located and designed to minimize risk and comply with all applicable hazardous materials regulations.

Policy PS-2.6: **Hazardous Materials Cleanup**. Ensure that hazardous waste cleanup sites are remediated in compliance with the Orange County Health Care Agency and all other applicable regulatory agencies or requirements prior to any reuse or redevelopment of the subject site.

HAZ-4: Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Impact Analysis: There are no active hazardous waste facilities cleanup sites within the Planning Area listed in the EnviroStor database. There are 36 LUST sites listed within the Planning Area, but all cases have been completed and closed. Additionally, there are no facilities listed in the SWIS database located within the City. These sites comprise the Cortese List, compiled pursuant to Government Code Section 65962.5. Furthermore, the CHFB site is not located on a list of hazardous materials sites.

Although site-specific development is not currently proposed, except for the assumption that the CHFB site will be demolished as part of a future redevelopment effort, there is the potential that subsequent development associated with implementation of the General Plan Update could occur on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 at that time. Any development activities that may occur on documented hazardous materials sites would be required to disclose to the City whether the project is located on or near a listed site, consistent with Government Code Section 65962.5. Additionally, Mitigation Measure HAZ-2 would require applicable projects prepare a Phase I ESA. If the Phase I ESA identified a REC in connection with the project site, including if the project site is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, a Phase II investigation would be required to determine the potential for release of hazardous materials and environmental contamination. If contamination is present, measures would be identified in accordance with the appropriate agency's requirements (RWQCB, Orange County Environmental Health Department, DTSC, and/or SCAQMD) to prevent, minimize, and control the identified hazardous materials during construction and operation. Implementation of site-specific remediation activities required under the purview of the regulatory agencies would ensure the site is adequately remediated to allow for development of the site with the specific land use being proposed. Thus, compliance with existing regulations, including site-specific requirements, would reduce potential impacts involving development of a site on a list of hazardous materials sites to a less than significant level.

The proposed General Plan Update includes policies that would further minimize potential impacts associated with the development of hazardous materials sites. Public Safety Element Policy PS-2.1 directs the City to promote proper handling, transport, treatment, storage, and disposal of hazardous materials in accordance with applicable federal, State, and local regulations. Public Safety Element PS-2.5 ensures land uses involving the storage, transfer, or processing of hazardous materials are appropriately located and designed to minimize risk and comply with all applicable hazardous materials regulations. Public Safety Element PS-2.6 ensures that hazardous waste cleanup sites are remediated in compliance with the Orange County Health Care Agency and all other applicable regulatory agencies or requirements prior to any reuse or redevelopment of the subject site.

Mitigation Measures: Refer to Mitigation Measure HAZ-2.

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

PUBLIC SAFETY ELEMENT

Goal PS-2: **Hazardous Waste and Materials.** Minimize the risk of injury and damage to property and the environment caused by hazardous waste and materials contamination.

Policy PS-2.1: **Hazardous Materials Regulatory Compliance.** Promote proper handling, transport, treatment, storage, and disposal of hazardous materials in accordance with applicable federal, state, and local regulations.

Policy PS-2.2: **Hazardous Materials Emergency Plan.** Coordinate with the Orange County Fire Authority to ensure that businesses that handle hazardous materials or extremely hazardous substances at reportable quantities prepare, submit, and maintain required disclosures and emergency plans in compliance with state, county, and local regulations.

Policy PS-2.3: **Hazardous Materials Emergency Response.** Collaborate with the Orange County Fire Authority and other responding agencies to ensure emergency preparedness and response strategies are in place to effectively address hazardous materials incidents in the City.

Policy PS-2.4: **Public Education (Hazardous Waste Disposal).** Collaborate with the City's waste service provider(s) and the County of Orange to increase public awareness about the importance of proper household hazardous waste disposal. This includes educational materials on available services, programs, and disposal methods, while highlighting the environmental impacts of improper disposal.

Policy PS-2.5: **Uses Involving Hazardous Materials**. Ensure land uses involving the storage, transfer, or processing of hazardous materials are appropriately located and designed to minimize risk and comply with all applicable hazardous materials regulations.

Policy PS-2.6: **Hazardous Materials Cleanup**. Ensure that hazardous waste cleanup sites are remediated in compliance with the Orange County Health Care Agency and all other applicable regulatory agencies or requirements prior to any reuse or redevelopment of the subject site.

HAZ-5: Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Impact Analysis: The General Plan Update is a policy document that does not include any site-specific designs or proposals, except for the assumption that the CHFB site will be demolished as part of a future redevelopment effort. Demolition of the CHFB site would not alter the existing site, access, or adjacent roadways and would not involve the introduction of any new uses. Subsequent projects associated with buildout of the General Plan Update Land Use Element could result in new development and intensification of existing development within the Planning Area. As demonstrated in Table 2-17, *General*

Plan Update Growth Assumptions Compared to Existing Conditions, the General Plan Update Land Use Element identifies opportunities for new growth and development within the City. The majority of the potential growth opportunities are located within specific areas of the City. These areas include the Laguna Niguel Gateway Specific Plan (Gateway Specific Plan), the Opportunity Areas (e.g., Marketplace at Laguna Niguel, CHFB site, and Town Center), and Hospitality Overlay sites.

The Orange County OAEOP addresses the planned response to extraordinary situations associated with natural disasters and/or human caused incidents, including wildfires, and outlines mutual aid provisions within the Orange County OA. The City's EOP addresses the City's planned response to natural or human-caused disasters and describes the organizational structures, roles, responsibilities, policies, and protocols for providing emergency support. The General Plan Update does not propose revisions to the City's adopted EOP or Orange County OAEOP. Neither the City's EOP nor the Orange County OAEOP specifically designate evacuation routes; rather, evacuation measures would be implemented based on the specific emergency and area affected. As discussed in the Orange County OAEOP Evacuation Annex, evacuation routes will be selected by law enforcement officials and approved by the Incident Commander at the time of the evacuation decision. Evacuation routes will be chosen based on the relative safety of roadway infrastructure and current traffic conditions. Subsequent projects associated with buildout of the General Plan Update Land Use Element are not anticipated to remove or impede evacuation routes, and the General Plan Update does not include land uses, policies, or other components that conflict with adopted emergency response or evacuation plans. Any subsequent development projects would be subject to all applicable City regulations, reviews, and requirements pertaining to emergency response, emergency access, and maintaining emergency evacuation routes, as well as further CEQA analysis of project-specific impacts.

The General Plan Update proposed Circulation Plan would maintain existing conditions on Camino Los Padres, which consists of the removal of the previously contemplated Camino Los Padres extension from its current terminus to Camino Capistrano, beyond the City limits. The current terminus is located at the easternmost City boundary and is currently planned to extend east outside of the City through undeveloped land. The roadway does not occur under existing conditions and is therefore not included within an adopted emergency response plan or emergency evacuation plan. This portion of the Planning Area (Community Profile Area 11) is not within the primary growth opportunity areas identified by the General Plan Update Land Use Element. As indicated in Table 2-17, minimal non-residential growth could occur within the Community Profile Area; however, no new residential growth would occur. Therefore, removal of this planned extension would not impair emergency evacuation within the area. This area is currently served by existing roadways, including Golden Lantern, which would continue to provide access to evacuation routes within and outside of the Planning Area.

The General Plan Update proposed Circulation Plan would reduce the number of travel lanes on La Paz between Aliso Creek Road and Crown Valley Parkway from two lanes in each direction to one lane in each direction. This portion of the Planning Area (Community Profile Areas 5 and 6) is not within the primary growth opportunity areas identified by the General Plan Update Land Use Element. As indicated in Table 2-17, minimal residential growth could occur within these Community Profile Areas. Additionally, existing residential neighborhoods east of La Paz are currently served by major roadways which would continue to be used for emergency access and evacuation routes, including Aliso Creek Road, Crown Valley

Parkway, and Moulton Parkway. Therefore, the reduction of lanes would not impair emergency evacuation within the area.

The General Plan Update proposed Circulation Plan would maintain existing travel lane conditions on Golden Lantern between Sweet Meadow Lane and Sardina Lane, which consists of the removal of the previously contemplated roadway widening. This segment of Golden Lantern would continue as a Primary Arterial, consistent with existing conditions and would not impact an adopted emergency response plan or emergency evacuation plan. As discussed above, this portion of the Planning Area (Community Profile Area 11) is not within the primary growth opportunity areas identified by the General Plan Update Land Use Element and although minimal non-residential growth could occur within the Community Profile Area, no new residential growth would occur. Therefore, removal of this planned widening would not impair emergency evacuation within the area. Any subsequent development projects with buildout of the General Plan Update Land Use Element would be subject to all applicable City regulations, reviews, and requirements pertaining to emergency response, emergency access, and maintaining emergency evacuation routes, as well as further CEQA analysis of project-specific impacts.

The General Plan Update does not include any site-specific development. However, Project implementation would allow for increased development in the City. Although the Planning Area is highly urbanized and existing infrastructure, including roads, are generally in place, road and infrastructure improvements may occur to accommodate new development. As described in Table 2-16, *Planned Transportation Improvements*, the General Plan Circulation Plan includes proposed changes to existing roadways and intersections to accommodate the future growth outlined in the proposed General Plan Update Land Use Element. Implementation of the proposed improvements would be designed and conducted to comply with standard engineering practices under the purview of the City's Public Works Department. Since the improvements would be implemented to accommodate future growth with the General Plan Update, the Project would not interfere with an adopted emergency response plan or emergency evacuation plan. The Project plans for and supports implementation of emergency response and emergency evacuation.

Development activities within the Planning Area are not anticipated to result in the substantial modification of roadways surrounding specific development sites or the placement of any permanent physical barriers on adjacent roadways. Subsequent development would be designed, constructed, and maintained in accordance with applicable standards, including vehicular access to ensure that adequate emergency access and evacuation would be maintained. The City's development review process provides the mechanism in which site-specific development proposals, including review of the site plans for compliance with the City's General Plan and Zoning regulations are conducted. Site-specific development review would include a review of the proposed development's land use compatibility and review of all on- and off-site improvements to ensure site design, ingress and egress, and site distance standards have been implemented and that no hazardous conditions occur. Further, development would occur consistent with the proposed General Plan Update Land Use Element, which addresses and plans for compatible land use development within the City. Prior to implementation, any improvements would be subject to detailed review and future consideration by the City's Public Works engineering staff and other relevant City departments. An evaluation of the roadway alignments, intersection geometrics, and traffic control features would be conducted at the project design level. Roadway improvements would occur in

accordance with the City's roadway design guidelines and meet design guidelines in the MUTCD. Additionally, roadway improvements would be consistent with the Laguna Niguel Municipal Code, including Title 7, Division 4, *Traffic Ordinances*, which adopts the City traffic manual; the manual defines engineering policies, procedures, and interpretations of traffic engineering practice.

There is the potential that activities associated with subsequent site-specific development projects, including demolition of the CHFB, could involve traffic lanes located immediately adjacent to a development site to be temporarily closed or controlled by construction personnel during construction activities. However, any temporary construction activity would be required to adhere to applicable City standards, including Municipal Code Title 8, Article 9, *Temporary Street Closure*, which requires an application for the closure or partial closure of roads in the Planning Area to be reviewed by the Public Works Department, as well as police services and the OCFA. Approval of the closure by the Director of Public Works requires a finding that: (1) That the proposed activity or use of the street will not unreasonably interfere with traffic circulation in the area; (2) That the proposed activity and use will not be detrimental to the public health, welfare, safety and recreation; and (3) That the proposed activity or use will not entail extraordinary or burdensome expense to the emergency services of the City. Additionally, the applicant of any proposed development would be required to submit appropriate plans for plan review to ensure compliance with zoning, building, and fire codes prior to the issuance of a building permit. The proposed development would be required to comply with all applicable building and fire code requirements and would submit construction plans to OCFA Planning and Development Services for review and approval prior to issuance of any building permit. Approval by the OCFA would ensure that construction and operation of subsequent projects associated with implementation of the General Plan Update would not impair or physically interfere with an adopted emergency response plan or emergency evacuation plan and impacts would be less than significant.

The General Plan Update includes policies to further minimize impacts associated with emergency response and evacuation. Public Safety Element Policy PS-5.1 ensures emergency and disaster staffing levels, equipment and facilities, programs, and practices align with the City's high safety standards, including timely responses and effectively address the community's evolving needs. Public Safety Element Policy PS-5.2 ensures the City's adopted emergency plans, policies, and procedures, including both the City's Local Hazard Mitigation Plan and Emergency Operations Plan, are maintained and updated, as necessary. This involves making sure they stay consistent with the City's current hazards and issues, and comply with Assembly Bill 2140, Senate Bill 379, and any relevant subsequent federal or State legislation. Public Safety Element Policy PS-5.3 directs the City to assess emergency response and evacuation capabilities to address potential disruptions from current and future hazards that may affect the community. Public Safety Element Policy PS-5.4 directs the City to maintain a transportation network that supports effective emergency response and evacuation operations. This includes maintaining both a primary and alternative mobile Emergency Operations Center. Public Safety Element Policy PS-5.5 directs the City to coordinate with agencies and service providers to ensure the resilience of essential public facilities, lifeline services, and infrastructure, and plan for the use of critical facilities during post-disaster response and recovery. Public Safety Element Policy PS-5.6 directs the City to coordinate disaster preparedness and recovery with local key stakeholders (officials, schools, businesses, and organizations), neighboring jurisdictions, other governmental agencies, and utility providers. Public Safety Element Policy

PS-5.8 directs the City to sponsor and promote public awareness and training programs focused on emergency and disaster preparedness, as well as response protocols and procedures. Public Safety Element Policy PS-5.9 directs the City to maintain an Emergency Preparedness page on the City's website that provides links to other resources, such as the Evacuation Zones, Earthquake Preparedness, and other emergency preparedness information. Public Safety Element Policy PS-5.10 directs the City to coordinate with local schools on their emergency and disaster preparedness programs and response protocols and procedures.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

PUBLIC SAFETY ELEMENT

Goal PS-5: **Emergency Preparedness.** Ensure the community is well-prepared for emergency response and disaster management to minimize impacts to persons, property, the environment, and essential services.

Policy PS-5.1: **Emergency Services Staffing and Resources.** Ensure emergency and disaster staffing levels, equipment and facilities, programs, and practices align with the City's high safety standards, including timely responses and effectively address the community's evolving needs.

Policy PS-5.2: **Emergency Preparedness.** Ensure the City's adopted emergency plans, policies, and procedures, including both the City's Local Hazard Mitigation Plan and Emergency Operations Plan, are maintained and updated as necessary. This involves making sure they stay consistent with the City's current hazards and issues, and comply with Assembly Bill 2140, Senate Bill 379, and any relevant subsequent federal or state legislation.

Policy PS-5.3: **Emergency Response and Evacuation.** Assess emergency response and evacuation capabilities to address potential disruptions from current and future hazards that may affect the community.

Policy PS-5.4: **Emergency Transportation Routes.** Maintain a transportation network that supports effective emergency response and evacuation operations. This includes maintaining both a primary and alternative mobile Emergency Operations Center.

Policy PS-5.5: **Disaster Response and Recovery (Critical Facilities).** Coordinate with agencies and service providers to ensure the resilience of essential public facilities, lifeline services, and infrastructure, and plan for the use of critical facilities during post-disaster response and recovery.

Policy PS-5.6: **Disaster Response and Recovery Coordination.** Coordinate disaster preparedness and recovery with local key stakeholders (officials, schools, businesses, and organizations), neighboring jurisdictions, other governmental agencies, and utility providers.

Policy PS-5.7: **Resiliency Infrastructure.** Maintain a local system of public and private resilience hubs, cooling centers, and emergency shelters to provide safe places for residents during hazard events or emergency conditions.

Policy PS-5.8: **Public Education (Emergency Preparedness).** Sponsor and promote public awareness and training programs focused on emergency and disaster preparedness, as well as response protocols and procedures.

Policy PS-5.9: **Emergency Preparedness Information.** Maintain an Emergency Preparedness page on the City's website that provides links to other resources, such as the Evacuation Zones, Earthquake Preparedness, and other emergency preparedness information.

Policy PS-5.10: **School Safety (Emergency Preparedness).** Coordinate with local schools on their emergency and disaster preparedness programs and response protocols and procedures.

HAZ-6: Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Impact Analysis: The potential for wildland fires represents a hazard to people and structures, particularly within areas adjacent to open space or within proximity to wildland fuels. As described in Section 4.17, *Wildfire*, and shown in Figure 4.17-1, the mapped FHSZ areas within the City include:

- The majority of the western portion of the Planning Area, generally west of a north-south line from the intersection of Crown Valley Parkway and Camino del Avion, is within a designated VHFHSZ. This area also contains Moderate and High FHSZs.
- A significant portion of the southeastern Planning Area contains a VHFHSZ, generally bounded by Marina Hills Drive on the north, Golden Lantern on the east, Beacon Hill Way on the south, and Niguel Road on the west. This area is buffered by Moderate and High FHSZ.
- A north-south strip of the southern portion of the Planning Area, in between the two VHFHSZ areas described above and generally located in the Salt Creek Corridor area, between Crown Valley Parkway and Niguel Road, contains Moderate and High FHSZ.
- The northwestern-central portion of the Planning Area, generally bounded by Aliso Creek Road to the north, Moulton Parkway to the east, Crown Valley Parkway to the south, and Alicia Parkway to the west, contains a designated VHFHSZ. This area is buffered by Moderate and High FHSZ.

While no specific development projects are proposed as part of the General Plan Update, except for the assumption that the CHFB site will be demolished as part of a future redevelopment effort, subsequent development with buildout of the General Plan Update Land Use Element could result in new development and intensification of existing development within the Planning Area. The General Plan Update Land Use Element would primarily accommodate new development projects within specific areas of the City, including the Gateway Specific Plan , the Opportunity Areas, and the Hospitality Overlay sites. The Gateway Specific Plan (Community Profile Area 4), Opportunity Area 1 (Community Profile Area 1 - The Marketplace at Laguna Niguel), Opportunity Area 2 (Community Profile Area 1 - the CHFB site), and the Hospitality Overlay site located at Golden Lantern and Camino Del Avion (Community Profile Area 12) are generally developed with urban uses and are not located within FHSZ areas. The western portion of

Opportunity Area 3 (Town Center) is located within a Moderate and High FHSZ and the Hospitality Overlay site located at Pacific Island Drive and Crown Valley Parkway is located within a Very High FHSZ.

The western portion of Opportunity Area 3 (Town Center) is currently developed with commercial uses. The Hospitality Overlay site located at Pacific Island Drive and Crown Valley Parkway is currently undeveloped. Subsequent development consistent with the proposed General Plan Update Land Use Element would provide for increased development within both the Town Center and Hospitality Overlay site with the potential to expose people or structures to areas identified as having moderate and very high fire hazard severity, respectively.

Additionally, the General Plan Update allows for additional development within mapped FHSZs and WUI areas located within and adjacent to the Planning Area, which could expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires. This would be a potentially significant impact.

Subsequent development would be required to comply with the provisions of federal, State, and local requirements related to wildland fire hazards, including State fire safety regulations associated with wildland-urban interfaces, fire-safe building standards, and defensible space requirements. Protection from wildland fires is realized through the creation of defensible areas around structures, the use of fire-resistant building materials, and coordinated emergency response. All new construction is required to adhere to standards and requirements set forth in the CBC, including Chapter 7A which specifically addresses wildfire exposure, mandating fire-resistant construction for new buildings and structures in designated high-risk areas, including the WUI, as well as the Laguna Niguel Municipal Code, which incorporates the California Fire Code. Laguna Niguel Municipal Code Section 9-1-54.5, *Fuel Modification Regulations*, establishes fuel modification regulations that apply whenever a fuel modification plan has been required as a condition of development approval or through other requirements. Fuel modification plans, when required, are reviewed and approved by the OCFA and City of Laguna Niguel Community Development Director prior to issuance of a grading permit or prior to issuance of a building permit if there is no grading permit. A fuel modification maintenance program providing for continuous maintenance of fuel modification areas would also be required to be prepared and implemented. Laguna Niguel Municipal Code Section 9-1-289, *Fire Protection*, requires appropriate fire protection for any subdivision proposed to be located in a high fire hazard area, including through firebreaks, fuel modification programs, access roads, sufficient water supply, landscaping and open spaces, and such other methods that the fire chief has determined will ensure the public health, safety and welfare of the future occupants of the subdivision and the adjacent area. Additionally, special attention would be given to development in hillside areas in the City per Municipal Code Title 9, Subarticle 8, *Hillside Protection*. The Hillside Protection Ordinance places restrictions on grading on steep slopes and contains other hillside protections to limit development in hillside areas. In addition to the above regulatory requirements, subsequent development projects located in High FHSZs and Very High FHSZs would be required to comply with Mitigation Measure WF-1, as described in Section 4.17, *Wildfire*. WF-1 would require site-specific development projects in High FHSZs and Very High FHSZs to develop a project-specific fire prevention plans in accordance with the methodologies, standards, and significance thresholds in the California Fire Code (as locally amended), California Building Code (as locally amended) and the City's CEQA Manual and submitted for review and approval by the Orange County Fire Authority (OCFA) and Laguna Niguel

Community Development Department in accordance with applicable state and local wildfire safety regulations. The site-specific plans would be required to incorporate wildfire safety design features intended to reduce the risk of fire ignition, limit fire spread and facilitate safe and effective emergency response and evacuation. In addition to compliance with the identified regulatory requirements, compliance with Mitigation Measures WF-1 would reduce potential risk of exposure to wildland fires to less than significant.

The General Plan Update Public Safety Element includes goals and policies to further minimize the risk of loss, injury or death involving wildland fires. Public Safety Element Policy PS-4.1 directs the City to ensure Orange County Fire Authority staffing levels, equipment and facilities, programs, and practices align with the City's high safety standards, including timely emergency responses and effectively addressing the community's evolving needs. Public Safety Element Policy PS-4.2 directs the City to maintain accurate and current geographic information system mapping of the City's Fire Hazard Severity Zones. Upon any designation changes by the California Department of Forestry and Fire Protection, update the City's geographic information system mapping accordingly. Public Safety Element Policy PS-4.3 directs the City to ensure that the Orange County Fire Authority reviews applicable development projects for fire-safe design, proximity to adequate emergency services, sufficient water supply and fire flow, and emergency vehicle access, in accordance with current California Building and Fire Codes, including local amendments adopted by the City. Public Safety Element Policy PS-4.4 directs the City to support fuel management/modification requirements consistent with state law and Orange County Fire Authority requirements, and other fuel reduction and weed abatement approaches to reduce significant fire risk. When fuel modification or reduction is required, ensure a balance between fuel management for the benefit of structures and preserving vegetation and sensitive habitats. Public Safety Element Policy PS-4.5 directs the City to coordinate with Orange County Fire Authority to maintain an ongoing fire inspection program to reduce fire hazards associated with multifamily developments, critical facilities, public assembly facilities, industrial buildings, and other nonresidential buildings. Public Safety Element Policy PS-4.8 directs the City to coordinate with Moulton Niguel Water District to ensure the availability and maintenance of adequate water supply systems and fire flow for structural fire suppression.

Mitigation Measures: Refer to Mitigation Measure WF-1.

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

PUBLIC SAFETY ELEMENT

Goal PS-4: **Fire Hazards.** Minimize the risk of injury and damage to property and the environment caused by urban and wildland fire hazards.

Policy PS-4.1: **Fire Authority Staffing and Resources.** Ensure Orange County Fire Authority staffing levels, equipment and facilities, programs, and practices align with the City's high safety standards, including timely emergency responses and effectively address the community's evolving needs.

Policy PS-4.2: **Wildfire Hazard Mapping.** Maintain accurate and current geographic information system mapping of the City's Fire Hazard Severity Zones. Upon any designation changes by California Department of Forestry and Fire Protection, update the City's geographic information system mapping accordingly.

Policy PS-4.3: **Fire-Safe Design.** Ensure Orange County Fire Authority review of applicable development projects for fire-safe design, proximity to adequate emergency services, sufficient water supply and fire flow, and emergency vehicle access, in accordance with current California Building and Fire Codes, including local amendments adopted by the City.

Policy PS-4.4: **Fuel Management/Modification.** Support fuel management/modification requirements consistent with state law and Orange County Fire Authority requirements, and other fuel reduction and weed abatement approaches to reduce significant fire risk. When fuel modification or reduction is required, ensure a balance between fuel management for the benefit of structures and preserving vegetation and sensitive habitats.

Policy PS-4.5: **Urban Fire Risks.** Coordinate with Orange County Fire Authority to maintain an ongoing fire inspection program to reduce fire hazards associated with multifamily developments, critical facilities, public assembly facilities, industrial buildings, and other nonresidential buildings.

Policy PS-4.6: **Critical Facilities (Fire Hazard Zones).** When feasible, locate new essential public facilities and infrastructure (e.g., hospitals, emergency shelters, fire and police stations, emergency command centers, communication facilities, and utilities) outside of Very High Fire Hazard Severity Zones. If located within these zones, utilize construction methods or other measures to minimize risk.

Policy PS-4.7: **Post-Fire Recovery Plan.** Collaborate with agencies such as the California Department of Forestry and Fire Protection, Orange County Fire Authority, and other applicable government and nongovernmental organizations to create a post-fire recovery plan that addresses the full recovery of burned areas and minimizes the risk of future fire damage and repetitive losses.

Policy PS-4.8: **Water Supply Systems.** Coordinate with Moulton Niguel Water District to ensure the availability and maintenance of adequate water supply systems and fire flow for structural fire suppression.

Policy PS-4.9: **Fire Hazards Agency Coordination.** Coordinate with federal, state, and regional fire protection agencies on fire suppression, rescue, training, education and to update emergency evacuation and hazard mitigation plans, as necessary.

Policy PS-4.10: **Public Education (Fire Safety).** Collaborate with the Orange County Fire Authority on public education and outreach programs on fire safety awareness and prevention to minimize risks and potential damages to life, property, and the environment. This includes an emphasis on protecting vulnerable and at-risk populations, such as seniors and those with limited mobility.

4.8.6 CUMULATIVE IMPACTS

Section 3.0, *Basis of Cumulative Analysis*, identifies projected regional growth having the potential to interact with the proposed Project to the extent that a significant cumulative effect may occur. The geographic setting for hazards and hazardous materials are typically localized and considers development within the City adjacent to neighboring jurisdictions.

Would the project, combined with other related cumulative projects, create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Impact Analysis:

CONSTRUCTION

Construction activities associated with subsequent development consistent with the proposed General Plan Update Land Use Element, including the demolition of the CHFB, may involve the routine transport, use, or disposal of hazardous materials. However, the construction contractor would be required to use standard construction controls and safety procedures that would avoid and minimize the potential for hazards associated with the transport and use of hazardous materials. Standard construction practices would be observed such that any materials released are appropriately contained and remediated as required by local, State, and federal law.

As with the Project, related cumulative projects would be required to implement standard construction controls and safety procedures that would avoid and minimize the potential for hazards associated with the transport and use of hazardous materials. Standard construction practices would be observed such that any materials released are appropriately contained and remediated as required by local, State, and federal law. Thus, the General Plan Update's incremental effects involving the creation of a significant hazard to the public or the environmental through the routine transport, use, or disposal of hazardous materials during construction activities would not be cumulatively considerable.

OPERATION

Subsequent projects developed consistent with the General Plan Update would potentially involve the use of hazardous materials. The amounts and types of hazardous materials vary by land use and associated operations. All subsequent projects would be required to comply with the provisions of federal, State, and local requirements related to hazardous materials as described in Impact HAZ-1. Adherence to existing regulations would ensure compliance with safety standards related to the use and storage of hazardous materials, and safety procedures mandated by applicable federal, State, and local laws and regulations would ensure that risks involving the routine transportation, use, storage, or disposal of hazardous materials or hazardous wastes would be less than significant.

As with the Project, related cumulative projects with the potential to involve the use of hazardous materials would be required to comply with the provisions of federal, State, and local requirements applicable to the jurisdiction in which the site is located related to hazardous materials. Related cumulative projects would be subject to the review on a project-by-project basis and approval of the

specific jurisdiction to ensure that the project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Thus, the General Plan Update's incremental effects involving the creation of a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials during operational activities would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan Update goals and policies cited above.

Would the project, combined with other related cumulative projects, 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?

Impact Analysis:

CONSTRUCTION

Subsequent development associated with buildout of the General Plan Update Land Use Element, including demolition of the CHFB site, could create a significant hazard to the public or the environment through upset and/or accident conditions involving the release of hazardous materials into the environment. Potentially hazardous materials used during construction include substances, such as paints, sealants, lubricants, solvents, adhesives, cleaners, and diesel fuel. There is potential for these materials to spill or to create hazardous conditions. The materials used, however, would not be in such quantities or stored in such a manner as to pose a significant safety hazard, as their storage and use would be in accordance with all applicable regulations. Existing local, State, and federal laws, such as those listed under Section 4.8.3, Regulatory Setting, are required to be enforced at construction sites, which would reduce potential impacts associated with the use and potential release of hazardous materials associated with construction activities to a less than significant level.

Similarly, construction activities associated with related cumulative projects would be required to comply with the existing regulatory environment for the storage and use of hazardous materials. Thus, the General Plan Update's incremental effects associated with the potential to 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 during construction activities would not be cumulatively considerable.

DEMOLITION

All demolition activities within the Planning Area that could result in the release of ACMs or LBPs, including the CHFB site, would be conducted according to federal and State regulations which govern the renovation and demolition of structures where ACMs and LPBs are present. Additionally, Mitigation Measure HAZ-1 would require subsequent development, including demolition of the CHFB site, that would involve the demolition of a structure with the potential for LBP or ACMs (built before 1978), prepare a

comprehensive survey to identify the locations and quantities of ACMs and LBPs in the structure. The ACM and LBP surveys would be conducted in accordance with applicable SCAQMD regulations. If ACMs or LBPs are identified during the surveys, the applicant would be required to retain a licensed or certified contactor to remove and dispose of all ACMs and LBP in accordance with California Code of Regulations Title 8, Sections 1529 and 1532.1, reducing potential impacts to less than significant.

Similar to the Project, related cumulative projects that would involve the demolition of a structure with the potential for LBPs or ACMs (built before 1978), would be required to be conducted in accordance with SCAQMD regulations and with California Code of Regulations Title 8, Sections 1529 and 1532.1. Thus, the General Plan Update's incremental effects associated with the potential to 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 during demolition activities would not be cumulatively considerable.

SOIL AND GROUNDWATER CONTAMINATION

As discussed, subsequent projects may involve the development of sites with ASTs, USTs or other storage and site operational conditions with the potential for soil and groundwater contamination. Construction and site-disturbance activities associated with subsequent projects, including on the CHFB site, could involve grading and excavation activities with the potential to expose construction workers and the public to previously unknown hazardous substances present in the soil or groundwater.

The public could also be exposed to hazardous materials if new development or redevelopment were to be located on a current or historical hazardous material site. Subsequent development with implementation of the General Plan Update would be reviewed at the project level to determine whether any development sites are listed on a hazardous materials site or have experienced historic or current operational activities involving hazardous materials with the potential for contamination. Mitigation Measure HAZ-2 requires the preparation of a Phase I ESA based on the screening criteria provided in the City's CEQA Manual. If the Phase I ESA identifies RECs in connection with the project site, including if the site is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.2, a Phase II Investigation would be required to determine the potential for release of hazardous materials. If contamination is present, measures would be identified in accordance with the appropriate agency's requirements (RWQCB, Orange County Environmental Health Department, DTSC, and/or SCAQMD) to prevent, minimize, and control the identified hazardous materials during construction and operation, reducing impacts to a less than significant level.

The CHFB site is not listed on a hazardous materials site. However, due to the documented historic storage, use, and presence of hazardous materials within the CHFB site, there is the potential for contaminated soil to be encountered during demolition or excavation activities. To prevent exposure to workers or the release of hazardous waste and materials to the environment a Phase I ESA would be required in compliance with Mitigation Measure HAZ-2. As discussed above, if the Phase I ESA identifies RECs in connection with the CHFB site, a Phase II Investigation would be required to determine the potential for release of hazardous materials. If contamination is present, measures would be identified in accordance with the appropriate agency's requirements (RWQCB, Orange County Environmental Health

Department, DTSC, and/or SCAQMD) to prevent, minimize, and control the identified hazardous materials during construction and operation, reducing impacts to less than significant.,

Depending upon the specific site of the related cumulative project, preparation of a Phase I ESA, Phase II ESA, and other site-specific studies may be needed to identify any hazardous environmental conditions that occur within the site. As with the Project, related cumulative development on sites identified as having hazardous environmental conditions would be required to undergo remediation and cleanup under the supervision of the regulatory agencies. The hazardous materials conditions would be site-specific and would not generally combine with site-specific projects within the Planning Area. The General Plan Update's incremental effects associated with the potential to 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 due to soil and groundwater contamination would not be cumulatively considerable.

OPERATIONS

Long-term operational activities associated with new development could result in upset and/or accident conditions involving the release of hazardous materials into the environment. The General Plan Update does not propose site-specific development; thus, specific hazardous materials that could be accidentally released cannot be predicted at this time. However, the transport, storage, handling, and disposal of hazardous materials by developers, contractors, business owners, and others are required to comply with federal, state, and local regulations. Facilities that use hazardous materials are required to obtain permits under the RCRA, which gives the EPA the authority to control the generation, transportation, treatment, storage, and disposal of hazardous waste. Additionally, federal and state hazardous materials regulations govern the transportation of hazardous materials. Locally, the Orange County Health Care Agency, Environmental Health Division is the CUPA for Orange County and is responsible for consolidating, coordinating, and making consistent administrative requirements, permits, inspections, and enforcement activities of state standards regarding the transportation, use, and disposal of hazardous materials in Orange County including the Planning Area. Permits issued by the CUPA would include preventative requirements and best practices for the use of hazardous materials related to the specific project and operations. Thus, Project impacts would be less than significant.

As with the Project, related cumulative development would be required to comply with federal, State, and local regulations related to the transport, storage, handling, and disposal of hazardous materials associated with project-specific operations. Facilities that use hazardous materials would be required to obtain permits under the RCRA and comply with all requirements established by the Orange County Health Care Agency, Environmental Health Division. As previously discussed, permits issued by the CUPA would include preventative requirements and best practices for the use of hazardous materials related to the specific project and operations. The General Plan Update's incremental effects associated with the potential to 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 during operational activities would not be cumulatively considerable.

Mitigation Measures: Refer to Mitigation Measures HAZ-1 and HAZ-2

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan Update goals and policies cited above.

Would the project, combined with other related cumulative projects, emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Impact Analysis:

CONSTRUCTION

Subsequent development sites with buildout of the General Plan Update Land Use Element may emit hazardous emissions or handle hazardous materials within one-quarter mile of an existing or proposed school during construction activities. As discussed above, subsequent development would be reviewed at the project level to determine whether any development sites are listed on a hazardous materials site or have experienced historic or current operational activities involving hazardous materials with the potential for contamination. Any development activities that may occur on documented hazardous materials sites or sites with the potential for contamination would be required to undergo site characterization to determine the extent of contamination, if any. If contamination is present, remediation, management and disposal activities would be required to occur under the supervision of the appropriate regulatory agencies, such as the RWQCB, Orange County Health Department, DTSC, and/or SCAQMD. Compliance with the applicable regulatory requirements, including but not limited to, the Hazardous Materials Transportation Act, the CCR, the California Health and Safety Code, the California Vehicle Code, the California Public Resources Code, and the City of Laguna Niguel Municipal Code, and Mitigation Measures HAZ-1 and HAZ-2, described above, would reduce potential impacts associated with subsequent construction activities involving potential hazardous emissions, hazardous materials, substances, or waste within one-quarter mile of a school to a less than significant level.

As with the Project, related cumulative projects within one-quarter mile of an existing or proposed school would be required to comply with existing regulations that address the use, storage, transport, and disposal of hazardous materials. Site-specific development would adhere to standard construction practices to ensure that any hazardous materials released are appropriately contained and remediated as required by local, State, and federal law. Thus, the General Plan Update's incremental effects associated with emitting hazardous emissions or handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school during construction activities would not be cumulatively considerable.

Chet Holifield Federal Building Demolition

The CHFB site is located approximately 0.18 miles east of Aliso Viejo High School. As previously discussed, hazardous materials are known or anticipated to occur within the CHFB site. Therefore, due to the site's proximity to Aliso Viejo High School, demolition and associated ground disturbing activities have the potential to emit or handle hazardous materials within one-quarter mile of an existing school. As discussed in Impact Statement HAZ-2, to prevent exposure to workers or the release of hazardous waste and

materials to the environment, the project applicant would be required to comply with Mitigation Measures HAZ-1 and HAZ-2. Mitigation Measure HAZ-1 requires a comprehensive survey for ACMs and LBPs. Removal and disposal of any ACMs and LBPs would be required to be conducted by a licensed or certified contactor in accordance with California Code of Regulations Title 8, Sections 1529 and 1532.1. Mitigation Measure HAZ-2, requires preparation of a Phase I ESA and if the Phase I ESA identifies RECs in connection with the CHFB site, a Phase II Investigation would be required to determine the potential for release of hazardous materials. If contamination is present, measures would be identified in accordance with the appropriate agency's requirements (RWQCB, Orange County Environmental Health Department, DTSC, and/or SCAQMD) to prevent, minimize, and control the identified hazardous materials during construction and operation. With implementation of Mitigation Measures HAZ-1 and HAZ-2, potential impacts associated with the hazardous emissions or hazardous materials, substances or waste resulting from demolition of the CHFB site within one-quarter mile of an existing school would be reduced to a less than significant level.

The CHFB is located within the northwestern portion of the City adjacent to Alicia Parkway. West of Alicia Parkway is the Aliso Niguel High School within the City of Aliso Viejo. The ability for construction activities within the CHFB site to combine with related cumulative development within one-quarter mile of Aliso Niguel High School is limited. Further, demolition of CHFB would include implementation of Mitigation Measures HAZ-2 and HAZ-3, which would reduce potential impacts associated with the hazardous emissions or hazardous materials, substances or waste resulting from demolition of the CHFB site within one-quarter mile of an existing school would be reduced to a less than significant level. Related cumulative development within a one-quarter mile of Aliso Niguel High School would also be required to evaluate the potential to expose the school to hazardous emissions or hazardous materials. If necessary, project-specific measures would be required to ensure impacts would be reduced. Thus, the General Plan Update's incremental effects associated with emitting hazardous emissions or handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school resulting from demolition activities at the CHFB site would not be cumulatively considerable.

OPERATION

As previously discussed, the transport, storage, handling, and disposal of hazardous materials by developers, contractors, business owners, and others are required to comply with federal, state, and local regulations. Facilities that use hazardous materials are required to obtain permits under the RCRA, which gives the EPA the authority to control the generation, transportation, treatment, storage, and disposal of hazardous waste. Additionally, federal and state hazardous materials regulations govern the transportation of hazardous materials. Permitting requirements for individual hazardous material handlers or emitters would require evaluation and notification where potential hazardous materials handling and emissions could occur in proximity to existing schools. As required by the CUPA, a Hazardous Materials Business Plan would detail the location and quantities of hazardous materials stored onsite, accompanied by the appropriate Materials Safety Data Sheets. Information would be made available to emergency responders, such as firefighters and medical personnel, who would, in part, use such information to contain the hazardous materials and avoid the creation of a significant hazard. Implementation of the safety procedures and regulations mandated by applicable federal, State, and local laws would ensure that potential risks resulting from hazardous emissions or hazardous materials,

substances or waste resulting from potential project operations accommodated by the General Plan Update within one-quarter mile of an existing school would be reduced to a less than significant level.

As with the Project, related cumulative development would be required to comply with federal, state, and local regulations related to the transport, storage, handling, and disposal of hazardous materials associated with project-specific operations in proximity to an existing or proposed school. Facilities that use hazardous materials would be required to obtain permits under the RCRA and comply with all requirements established by the Orange County Health Care Agency, Environmental Health Division. As previously discussed, permits issued by the CUPA would include preventative requirements and best practices for the use of hazardous materials related to the specific project and operations. The General Plan Update's incremental effects associated with emitting hazardous emissions or handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school during operational activities would not be cumulatively considerable.

Mitigation Measures: Refer to Mitigation Measures HAZ-1 and HAZ-2.

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan Update goals and policies cited above.

Would the project, combined with other related cumulative projects, be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Impact Analysis: Subsequent development associated with implementation of the General Plan Update would be evaluated at the project-level to determine whether any development sites are listed on a hazardous materials site compiled pursuant to Government Code Section 65962.5. Any development activities that may occur on documented hazardous materials sites would be required to disclose to the City or applicable jurisdiction whether the project is located on or near a listed site, consistent with Government Code Section 65962.5. Additionally, Mitigation Measure HAZ-2 would require applicable projects to prepare a Phase I ESA. If the Phase I ESA identified RECs in connection with the project site, including if the project site is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, a Phase II investigation would be required to determine the potential for release of hazardous materials and environmental contamination. If contamination is present, measures would be identified in accordance with the appropriate agency's requirements (RWQCB, Orange County Environmental Health Department, DTSC, and/or SCAQMD) to prevent, minimize, and control the identified hazardous materials during construction and operation. Thus, compliance with existing regulations, including site-specific requirements, would reduce potential impacts involving development of a site on a list of hazardous materials sites to a less than significant level.

Similar to the Project, related cumulative projects would be reviewed on a project-by-project basis to determine if the site is included on a list of hazardous materials sites compiled pursuant to Government Code Section 6592.5. If the project is located on a listed site, additional environmental review and site

characterization studies would be required to determine any potential RECs. As with the Project, if contamination is present, measures would be identified in accordance with the appropriate agency's requirements (RWQCB, Orange County Environmental Health Department, DTSC, and/or SCAQMD) to prevent, minimize, and control the identified hazardous materials during construction and operation. Therefore, the General Plan Update's incremental effects related to being located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment would not be cumulatively considerable.

Mitigation Measures: Refer to Mitigation Measure HAZ-2.

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan Update goals and policies cited above.

Would the project, combined with other related cumulative projects, impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Impact Analysis: The General Plan Update does not propose revisions to the City's adopted EOP or Orange County OAEOP. Neither the City's EOP nor the Orange County OAEOP specifically designate evacuation routes; rather, evacuation measures would be implemented based on the specific emergency and area affected. Subsequent projects with buildout of the General Plan Update Land Use Element are not anticipated to remove or impede evacuation routes, and the General Plan Update does not include land uses, policies, or other components that conflict with adopted emergency response or evacuation plans. The General Plan Update proposed Circulation Plan would maintain existing conditions on Camino Los Padres, which consists of the removal of the previously contemplated Camino Los Padres extension from its current terminus to Camino Capistrano beyond the City limits. The current terminus is located at the easternmost City boundary and is currently planned to extend east outside of the City through undeveloped land. The roadway does not occur under existing conditions and is therefore not included within an adopted emergency response plan or emergency evacuation plan. Removal of this planned extension would not impair emergency evacuation within the area. This area is currently served by existing roadways which would continue to provide access to evacuation routes within and outside of the Planning Area.

The General Plan Update proposed Circulation Plan would reduce the number of travel lanes on La Paz between Aliso Creek Road and Crown Valley Parkway from two lanes in each direction to one lane in each direction. This portion of the Planning Area (Community Profile Areas 5 and 6) is not within the primary growth opportunity areas identified by the General Plan Update Land Use Element. As indicated in Table 2-17, minimal residential growth could occur within these Community Profile Areas. Additionally, existing residential neighborhoods east of La Paz are currently served by major roadways which would continue to be used for emergency access and evacuation routes, including Aliso Creek Road, Crown Valley Parkway, and Moulton Parkway. Therefore, the reduction of lanes would not impair emergency evacuation within the area.

The General Plan Update proposed Circulation Plan would maintain existing travel lane conditions on Golden Lantern between Sweet Meadow Lane and Sardina Lane, which consists of the removal of the previously contemplated roadway widening. This segment of Golden Lantern would continue as a Primary Arterial, consistent with existing conditions and would not impact an adopted emergency response plan or emergency evacuation plan. As discussed above, this portion of the Planning Area (Community Profile Area 11) is not within the primary growth opportunity areas identified by the General Plan Update Land Use Element and although minimal non-residential growth could occur within the Community Profile Area, no new residential growth would occur. Therefore, removal of this planned widening would not impair emergency evacuation within the area. Any subsequent development projects with buildout of the General Plan Update Land Use Element would be subject to all applicable City regulations, reviews, and requirements pertaining to emergency response, emergency access, and maintaining emergency evacuation routes, as well as further CEQA analysis of project-specific impacts.

Any subsequent development projects that would implement the General Plan Update would be subject to all applicable local, State, and federal regulations, reviews, and requirements pertaining to emergency response, emergency access, and maintaining emergency evacuation routes, as well as further CEQA analysis of project-specific impacts.

The proposed Project could result in temporary closure or control of traffic lanes located immediately adjacent to a development site during construction activities. However, as discussed above, any temporary closure within the City would be required to comply with the Laguna Niguel Municipal Code which would ensure adequate emergency access is maintained during any construction activities.

As discussed, the Project does not propose changes to the citywide roadway network and configuration that would affect emergency access. The General Plan Circulation Plan includes proposed changes to existing roadways and intersections to accommodate the future growth outlined in the proposed General Plan Update Land Use Element. Some of these proposed changes are located at facilities in proximity to neighboring jurisdictions. Implementation of the proposed improvements would be designed and conducted to comply with standard engineering practices under the purview of the City's Public Works Department. Any improvements located within proximity to neighboring jurisdictions would be coordinated to ensure potential improvements or modifications within and outside of the City are coordinated. Since the improvements would be implemented to accommodate future growth with the General Plan Update, which considers cumulative traffic conditions, the Project would not result in inadequate emergency access.

As site-specific development is not currently proposed, it is unknown if implementation of the Project would involve the removal of existing driveways or the construction of new driveways or any associated improvements, such as curb, gutter, and sidewalks. Proposed development would be required to submit appropriate plans for plan review to ensure compliance with zoning, building, and fire codes prior to the issuance of a building permit. The proposed development would be required to comply with all applicable Building and Fire Code requirements and would submit construction plans to OCFA's Planning and Development Services for review and approval prior to the issuance of any building permit. Approval by the Orange County Fire Authority would ensure that construction and operation would not impair implementation of or physically interfere with the City's EOP or OAEOP.

As with the Project, related cumulative projects would be reviewed by the local agency in which they are located to evaluate the potential for the project to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Any temporary closure associated with adjacent development within a neighboring jurisdiction would be required to comply with the specific regulations of that agency to continue to provide emergency access within the area of construction. Any site or infrastructure improvements proposed by a related cumulative project would be subject to all applicable local, State, and federal regulations, reviews, and requirements pertaining to emergency response, emergency access, and maintaining emergency evacuation routes, as well as further CEQA analysis of project-specific impacts. Therefore, the General Plan Update's incremental effect associated with the potential to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan goals and policies cited above.

Would the project, combined with other related cumulative projects, expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Impact Analysis: Subsequent development consistent with the proposed General Plan Update Land Use Element would provide for increased development within both the Town Center and Hospitality Overlay site, located at Pacific Island Drive and Crown Valley Parkway, with the potential to expose people or structures to areas identified as having moderate and very high fire hazard severity, respectively. Additionally, the General Plan Update allows for new or higher density development within mapped FHSZs and WUI areas located within and adjacent to the Planning Area. Therefore, subsequent development resulting from buildout of the General Plan Update Land Use Element could involve development resulting in the placement of additional people and/or structures in areas that may be at risk of wildfire. Any subsequent projects resulting from implementation of the General Plan Update would be required to comply with the provisions of federal, State, and local requirements related to wildland fire hazards.

As discussed in Impact HAZ-6, subsequent development within the Planning Area would be required to comply with the provisions of federal, State, and local requirements related to wildland fire hazards, including State fire safety regulations associated with wildland-urban interfaces, fire-safe building standards, and defensible space requirements, as well as the Laguna Niguel Municipal Code, which incorporates the California Fire Code. Laguna Niguel Municipal Code Section 9-1-54.5, *Fuel Modification Regulations*, establishes fuel modification regulations that apply whenever a fuel modification plan has been required as a condition of development approval or through other requirements. Fuel modification plans, when required, are reviewed and approved by the OCFA and City of Laguna Niguel Community Development Director. A fuel modification maintenance program providing for continuous maintenance of fuel modification areas would also be required to be prepared and implemented. Laguna Niguel Municipal Code Section 9-1-289, *Fire Protection*, requires appropriate fire protection for any subdivision

proposed to be located in a high fire hazard area, including through firebreaks, fuel modification programs, access roads, sufficient water supply, landscaping and open spaces, and such other methods that the fire chief has determined will ensure the public health, safety and welfare of the future occupants of the subdivision and the adjacent area. Additionally, special attention would be given to development in hillside areas in the City per Municipal Code Title 9, Subarticle 8, *Hillside Protection*. In addition to the above regulatory requirements, subsequent development projects located in High FHSZs and Very High FHSZs would be required to comply with Mitigation Measure WF-1, as described in Section 4.17, *Wildfire*. WF-1 would require site-specific development projects in High FHSZs and Very High FHSZs to develop a fire prevention plan in accordance with the methodologies, standards, and significance thresholds in the California Fire Code (as locally amended), California Building Code (as locally amended) and the City's CEQA Manual and submitted for review and approval by the Orange County Fire Authority (OCFA) and Laguna Niguel Community Development Department in accordance with applicable state and local wildfire safety regulations. In addition to compliance with the identified regulatory requirements, compliance with Mitigation Measures WF-1 would reduce potential risk of exposure to wildland fires to less than significant.

Related cumulative projects within neighboring jurisdictions with land identified within a FHSZ, could have the potential to expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires. As previously discussed, new growth associated with buildout of the General Plan Update Land Use Element would primarily occur within specific areas of the City. These areas are largely located outside of FHSZ areas or within areas of the City not directly adjacent to other jurisdictions. However, there are areas, such as the Hospitality Overlay site, located at Pacific Island Drive and Crown Valley Parkway, that are located within a FHSZ and adjacent to neighboring jurisdictions.

The western portion of the City is located adjacent to areas within unincorporated Orange County and the City of Laguna Beach that are identified as Moderate and Very High FHSZ. However, lands within unincorporated Orange County include Aliso and Wood Parks and are designated Open Space Reserve, which does not provide for development. Lands within the City of Laguna Beach adjacent to Laguna Niguel are either developed with residential uses or designated as Open Space. The southeastern portion of the City is located adjacent to areas within the City of San Juan Capistrano that are identified as High FHSZ. These areas are currently developed with residential uses or are comprised of designated general open space. Due to the existing developed conditions and designated open space areas that occur within adjacent lands identified as FHSZ within the neighboring jurisdictions, it is not likely that related cumulative projects would combine with subsequent projects in the Planning Area with the potential to expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

Similar to the Project, related cumulative development located within or adjacent to areas at risk for wildfire would be required to comply with all requirements established by the agency in which the development is located. All projects would also be subject to all applicable CBC and Fire Code requirements, as well as further CEQA analysis of project-specific impacts for individual discretionary development projects. Project-specific implementation of applicable regulations, reviews, and requirements pertaining to protection from wildfires would reduce risks and exposure to wildfire risks within the region. With implementation of Mitigation Measure WF-1, the General Plan Update's

incremental effects associated with the potential to expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires would not be cumulatively considerable.

Mitigation Measures: Refer to Mitigation Measure WF-1.

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan Goals and Policies cited above.

4.8.7 SIGNIFICANT UNAVOIDABLE IMPACTS

Hazards and hazardous materials impacts associated with the implementation of the General Plan Update would be less than significant with the implementation of mitigation measures. No significant unavoidable hazards and hazardous materials impacts would occur as a result of the General Plan Update.

4.8.8 REFERENCES

California Department of Conservation, Geologic Energy Management Division (CalGEM). *Well Finder Mapping Application*. Available at: https://maps.conservation.ca.gov/doggr/wellfinder/. Accessed August 22, 2023.

California Department of Resources Recycling and Recovery (CalRecycle), *SWIS Facility/Site Search*. Available at: https://www2.calrecycle.ca.gov/SolidWaste/Site/Search. Accessed June 10, 2025.

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Potomac-Hudson Engineering, Inc., *Final Environmental Impact Statement for the Chet Holifield Federal Building Tenant Relocation Laguna Niguel, California*, March 2021.

4.9 HYDROLOGY AND WATER QUALITY

4.9.1 PURPOSE

This section provides a discussion of the regional hydrology, flooding, water quality, water purveyors, and water sources in the Planning Area and provides an analysis of potential impacts associated with implementation of the General Plan Update.

This section is based in part on the *City of Laguna Niguel General Plan Update, Proposed Conditions Infrastructure Report for Water, Sewer, Storm Drainage, and Water Quality* (Infrastructure Analysis), prepared by Fuscoe Engineering, Inc., dated July 7, 2025; refer to Appendix H, *Infrastructure Analysis*.

KEY TERMS

Groundwater: Groundwater is water that is underground and below the water table, as opposed to surface water, which flows across the ground surface. Water beneath the earth's surface fills the spaces in soil, gravel, or rock formations. Pockets of groundwater are often called "aquifers" and are the source of drinking water for a large percentage of the population in the United States. Groundwater is often extracted using wells which pump the water out of the ground and up to the surface. Groundwater is naturally replenished by surface water from precipitation, streams, and rivers when this recharge reaches the water table.

Surface water: Surface water is water collected on the ground or from a stream, river, lake, wetland, or ocean. Surface water is naturally replenished through precipitation but is naturally lost through evaporation and seepage into soil.

4.9.2 ENVIRONMENTAL SETTING

WATERSHEDS

Laguna Niguel resides within several watersheds including the Aliso Creek Watershed, the Dana Point Coastal Streams Watershed, and the San Juan Creek Watershed. These watersheds fall within the South Orange County Watershed Management Area (SOCWMA) and the Integrated Regional Water Management (IRWM) Group. The majority of the City is encompassed by the Aliso Creek Watershed to the north, the Dana Point Coastal Watershed to the south, with smaller portions of the City's eastern boundary falling into the San Juan Creek Watershed. Laguna Niguel drains to the following Orange County Flood Control District (OCFCD) facilities and receiving water bodies.

Aliso Creek Watershed

- Aliso Creek Channel
- Narco Channel
- Sulphur Creek Channel
- Laguna Niguel Park Lake (Sulphur Creek Reservoir)
- Niguel Storm Drain

Dana Point Coastal Streams Watershed

- Salt Creek Channel

San Juan Creek Watershed

- Oso Creek Channel
- Arroyo Trabuco Creek Channel, Lower

The water bodies listed above all drain to other storm drainage facilities that ultimately drain to the Pacific Ocean. See Figure 4.9-1, *Regional Watersheds*, for a depiction of the regional watersheds surrounding the City. See Figure 4.9-2, *Watersheds and Surface Water*, for the water features and surface water in Laguna Niguel.

GROUNDWATER

San Juan Groundwater Basin

The San Juan Groundwater Basin is situated in South Orange County within the San Juan Creek Watershed, spans 26 square miles and is bounded by the Pacific Ocean to the west and semi-permeable marine deposits. The San Juan Groundwater Basin underlies portions of the City of Laguna Niguel, Mission Viejo, San Juan Capistrano, Dana Point, and unincorporated areas of South Orange County. It has four sub-basins: Upper San Juan, Middle San Juan, Lower San Juan, and Lower Trabuco. The San Juan Groundwater Basin is recharged through various sources including San Juan Creek, Oso Creek, Arroyo Trabuco Creek Channel, precipitation, and Hot Spring Canyon flows.

According to the Sustainable Groundwater Management Act (SGMA) Basin Prioritization report, the San Juan Groundwater Basin is categorized as a very low-priority basin and is not in a condition of critical overdraft.[1] The San Juan Basin Authority (SJBA) was established in 1971 as a joint authority that oversees water resources development and water quality in the San Juan Basin. Its members include Santa Margarita Water District (SMWD) and South Coast Water District (SCWD). As the basin is classified as a "flow of an underground stream," pumping of groundwater is regulated by the State Water Resources Control Board (SWRCB). SMWD, SCWD, and other entities hold permits or other claims to divert water from the Basin. Due to naturally occurring high total dissolved solids (TDS) concentrations in the Lower San Juan Subbasin, municipal potable use of the groundwater requires advanced treatment, including reverse osmosis and removal of iron and manganese. Currently, the SMWD is the only member agency of the SJBA extracting groundwater from the San Juan Groundwater Basin.

SURFACE WATER AND FLOOD CONTROL FACILITIES

Storm Drain Facilities

The information in this section focuses on water quality. The existing City storm drain infrastructure is discussed further in Section 4.16, *Utilities and Service Systems*.

[1] Department of Water Resources, *SGMA Basin Prioritization Dashboard*, https://gis.water.ca.gov/app/bp-dashboard/final/, accessed June 26, 2025.

The Planning Area has a storm drain system composed of catch basins and storm drains which convey stormwater runoff through roadways and underground infrastructure. The majority of the pipelines are owned by the City and are made from reinforced concrete pipe (RCP). The City's Public Works Department and OCFCD work together to monitor and maintain their respective storm drainage infrastructure to ensure the system functions effectively. Most storm flows are conveyed in the City's roadways, to City-owned catch basins and storm drain systems. From there, the flows are discharged into OCFCD channels and are ultimately discharged into the Pacific Ocean.

Surface Water Quality

Surface water quality is affected by point source and non-point source pollutants. Point source pollutants are emitted at a specific point, such as a pipe, while non-point source pollutants are typically generated by surface runoff from diffuse sources, such as streets, paved areas, and landscaped areas. Point source pollutants are controlled with pollutant discharge regulations or Waste Discharge Requirements (WDRs). Non-point source pollutants are more difficult to monitor and control, although they are important contributors to surface water quality in urban areas.

Stormwater runoff pollutants vary based on land use, topography, the amount of impervious surface, and the amount and frequency of rainfall and irrigation practices. Runoff in developed areas typically contains oil, grease, and metals accumulated in streets, driveways, parking lots, and rooftops, as well as pesticides, herbicides, particulate matter, nutrients, animal waste, and other oxygen-demanding substances from landscaped areas. The highest pollutant concentrations usually occur at the beginning of the wet season during the "first flush."

The City is within the jurisdiction of the San Diego Regional Water Quality Control Board (RWQCB) and is subject to the regional Municipal Separate Storm Sewer Systems (MS4) Permit requirements. The Regional MS4 Permit covers 39 municipal, county government, and special district entities (referred to jointly as Co-permittees) located in San Diego County, southern Orange County, and southwestern Riverside County who own and operate large MS4s which discharge storm water runoff and non-storm water runoff to surface waters throughout the San Diego region.

Section 303(d) of the Clean Water Act (CWA) requires states to identify and list water bodies that do not meet, or are not expected to meet, water quality standards (i.e., "impaired" water bodies). The SWRCB's Integrated Report includes the 303(d) listings for various water bodies within the San Diego RWQCB region and throughout the State. The 303(d) category lists the potential impairments associated with the constituents of concern (pollutants) for a particular water body. A Total Maximum Daily Loads (TMDL) is an estimate of the daily load of pollutants that a water body may receive from point sources, non-point sources, and natural background conditions (including an appropriate margin of safety), without exceeding its water quality standard. Those facilities and activities that are discharging into the water body, collectively, must not exceed the 303(d)-listed impairment and TMDL. In general terms, MS4 and other dischargers within each watershed are collectively responsible for meeting the required reductions and other TMDL requirements by the assigned deadline.

The San Diego RWQCB region follows the U.S. Environmental Protection Agency's (EPA's) five-category system to assess whether water bodies meet water quality standards in the Integrated Report. Water

bodies listed in Category 5 do not meet one or more beneficial uses and require a TMDL. These Category 5 water bodies are placed on the 303(d) list of impaired waters.

Presented below in Table 4.9-1, *List of 303(d) Impairments and TMDLs*, are the 303(d) list and TMDLs for the applicable regional channels and water bodies that receive flows from the Planning Area.

Table 4.9-1
List of 303(d) Impairments and TMDLs

Water Body	Pollutant	Pollutant Category	TMDL Status[1]	USEPA TMDL Approval Date[2]
Aliso Creek	Benthic Community Effects	Other Cause	5A	N/A
	Nitrogen	Nutrients	5A	N/A
	Phosphorus	Nutrients	5A	N/A
	Selenium	Metals	5A	N/A
	Toxicity	Total Toxics	5A	N/A
	Indicator Bacteria	Pathogens	5B	6/22/2011
	Malathion	Pesticides	5A	N/A
Salt Creek	Benthic Community Effects	Other Cause	5A	N/A
	Toxicity	Total Toxics	5A	N/A
	Imidacloprid	Pesticides	5A	N/A
	Malathion	Pesticides	5A	N/A
Oso Creek	Nitrogen	Nutrients	5A	N/A
	Phosphorus	Nutrients	5A	N/A
	Selenium	Metals	5A	N/A
	Toxicity	Total Toxics	5A	N/A
Arroyo Trabuco Creek, Lower	Benthic Community Effects	Other Cause	5A	N/A
	Indicator Bacteria	Pathogens	5A	N/A
	Nitrogen	Nutrients	5A	N/A
	Phosphorus	Nutrients	5A	N/A
	Toxicity	Total Toxics	5A	N/A

TMDL = Total Maximum Daily Load
Source: California State Water Quality Control Board, 2024 California Integrated Report, https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/2024-integrated-report.html, accessed June 25, 2025.
Note:
1. TMDL requirement status definitions for listed pollutants are: 5A= TMDL still required; 5B= being addressed by U.S. EPA approved TMDL; 5C= being addressed by action other than a TMDL.
2. N/A indicates that no TMDL has been adopted for the listed pollutant.

FLOODPLAIN MAPPING

Flooding is a temporary increase in water flow that overtops the banks of a river, stream, or drainage channel to inundate adjacent areas not normally covered by water.

The City is largely developed with suburban residential communities, commercial areas, and has natural scenic landscapes. The 2023 City of Laguna Niguel Local Hazard Mitigation Plan (LHMP) identifies the greatest flood risk within the City to be due to urbanized flooding, which generally results from damaged infrastructure, under engineered infrastructure, and/or blockage of infrastructure.

FEMA Flood Zones

The Federal Emergency Management Agency (FEMA) has a database that maps flood potential across the United States. FEMA mapping provides important guidance for cities in planning for flooding events and regulating development within identified flood hazard areas. FEMA's National Flood Insurance Program (NFIP) is intended to encourage State and local governments to adopt responsible floodplain management programs and flood measures. As part of the program, the NFIP defines floodplain and floodway boundaries that are shown on Flood Insurance Rate Maps (FIRMs). Special Flood Hazard Areas (SFHA) identified by FEMA are referred to as the 100-year flood hazard areas. A 100-year flood hazard area is defined as an area that will be inundated by a flood event having a one-percent chance of being equaled or exceeded in any given year.

Areas that are subject to flooding are indicated by a series of alphabetical symbols, indicating anticipated exposure to flood events:

- **Zone A:** Subject to 100-year flooding with no base flood elevation determined. Identified as an area that has a one percent chance of being flooded in any given year.
- **Zone AE:** Subject to 100-year flooding with base flood elevations determined.
- **Zone AH:** Subject to 100-year flooding with flood depths between one- and three-feet being areas of ponding with base flood elevations determined.
- **500-year Flood Zone:** Subject to 500-year flooding. Identified as an area that has a 0.2 percent chance of being flooded in a given year.

As shown in Figure 4.9-3, *FEMA Flood Map*, the City includes several pockets of 100-year flood zones and a few areas within 500-year flood zones in the northern portion of Laguna Niguel. The rest of the City is outside of these flood hazard zones, with a minimal risk of flooding.

Tsunami

A tsunami is a series of waves in a water body caused by the displacement of a large volume of water, generally in an ocean or a large lake due to earthquakes, volcanic eruptions, and other underwater explosions. The Planning Area is approximately 0.6 miles from the Pacific Ocean and is not located within a mapped Tsunami Hazard Area.[2]

Dam Inundation

Earthquakes centered close to a dam are typically the most likely cause of dam failure. According to the California Department of Water Resources Division of Safety of Dams, a small portion of the City is located within a dam inundation area of the Sulphur Creek (No. 1012-7) dam, located along La Paz Road, within Laguna Niguel Regional Park. The Division of Safety of Dams (DSOD) categorizes the Sulphur Creek Dam as having a "High" downstream hazard potential, meaning dam failure would be expected to cause loss of at least one human life. According to the 2024 *Dams Within Jurisdiction of the State of California*,

[2] Department of Conservation, California Geological Survey, *Tsunami Hazard Area Map*, https://maps.conservation.ca.gov/cgs/informationwarehouse/ts_evacuation/, accessed May 20, 2025.

published by the DSOD, the Sulphur Creek Dam was given a condition assessment of "Satisfactory," meaning no existing or potential dam safety deficiencies are recognized and acceptable performance is expected under all loading conditions (static, hydrologic, seismic) in accordance with the minimum applicable State or federal regulatory criteria or tolerable risk guidelines.[3] In addition, the Laguna Niguel Gateway area in northeast portion of the City is within a dam inundation area of Upper Oso (No. 2013-0), located within Rancho Santa Margarita, and Lake Mission Viejo (No. 1794-0), located in Mission Viejo. The DSOD categorizes Upper Oso and Lake Mission Viejo as having an "Extremely High" downstream hazard potential, meaning dam failure would be expected to cause considerable loss of human life or would result in an inundation area with a population of 1,000 or more. Similar to the Sulphur Creek Dam, Upper Oso and Lake Mission Viejo were both given a condition assessment of "Satisfactory." Figure 4.9-4, *Dam Inundation Areas*, shows dam inundation areas within the City.

4.9.3 REGULATORY SETTING

FEDERAL

Clean Water Act

The CWA, initially passed in 1972, regulates the discharge of pollutants into watersheds throughout the nation. CWA Section 402(p) establishes a framework for regulating municipal and industrial stormwater discharges under the National Pollutant Discharge Elimination System (NPDES) Program. CWA Section 402(p) requires that stormwater associated with industrial activity that discharges either directly to surface waters or indirectly through municipal separate storm sewers must be regulated by an NPDES permit.

The CWA establishes the basic structure for regulating the increases of pollutants into the waters of the United States and gives the U.S. EPA the authority to implement pollution control programs. The CWA's goal is to regulate all discharges into the nation's waters and to restore, maintain, and preserve the integrity of those waters. The CWA sets water quality standards for all contaminants in surface waters and mandates permits for wastewater and stormwater discharges.

The CWA also requires states to establish site-specific 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 following CWA sections assist in ensuring water quality for waters of the United States:

- CWA Section 208 requires the use of BMPs to control the discharge of pollutants in stormwater during construction;
- CWA Section 303(d) requires the creation of a list of impaired water bodies by states, territories, and authorized tribes; evaluation of lawful activities that may impact impaired water bodies; and preparation of plans to improve the quality of these water bodies. CWA Section 303(d) also establishes TMDLs, which are the maximum amount of pollutants that a water body can receive and still safely meet water quality standard; and

[3] California Department of Water Resources, Division of Safety of Dams, *Dams within Jurisdiction of the State of California*, September 2024.

- CWA Section 404 authorizes the U.S. Army Corps of Engineers to require permits for the discharge of dredge or fill materials into waters in the United States, including wetlands.

In California, the EPA has designated the SWRCB and its nine RWQCBs with the authority to identify beneficial uses and adopt applicable water quality objectives.

The SWRCB is responsible for implementing the CWA and does so through issuing NPDES permits to cities and counties through RWQCBs. Federal regulations allow two permitting options for storm water discharges (individual permits and general permits). Pursuant to Section 402 of the CWA and the Porter-Cologne Water Quality Control Act, municipal stormwater discharge in the City of Laguna Niguel is subject to the Waste Discharge Requirements (WDRs) of the Regional Municipal Separate Storm Sewer System (MS4) Permit (Order No. R9-2013-0001, as amended).

Federal Emergency Management Agency

FEMA's primary mission is to reduce the loss of life and property and protect the Nation from all hazards, including flooding, among others. FEMA advises on building codes and flood plain management; teaches people how to get through a disaster; helps equip local and State emergency preparedness; coordinates the federal response to a disaster; makes disaster assistance available to states, communities, businesses and individuals; trains emergency managers; supports the nation's fire service; and administers the national flood and crime insurance programs.

Flooding is a general and temporary condition of partial or complete inundation of two or more acres of normally dry land area or of two or more properties. The term "100-year flood" is defined by FEMA as the flood elevation that has a one percent chance of being equaled or exceeded each year. A "500-year flood" is one which has a 0.2 percent chance of occurring each year. A 500-year flood event would be slightly deeper and cover a greater area than a 100-year flood event.

Flood zones are geographic areas that FEMA defines, based on studies of flood risk. The zone boundaries are shown on a FIRM. High Risk Zones or Special Flood Hazard Areas (SFHA or Zone A) are high-risk flood areas where special flood, mudflow, or flood-related erosion hazards exist, and flood insurance is mandatory. SFHAs are those areas subject to inundation by a 100-year flood. Low-to-Moderate Risk Zones or Non-Special Flood Hazard Areas (Zones B, C, X) are areas that are not in any immediate danger from flooding caused by overflowing rivers or hard rains. Purchase of flood insurance is not required in these zones.

FEMA is responsible for administering the NFIP, which enables property owners in participating communities to purchase insurance as protection against flood losses in exchange for state and community floodplain management regulations that reduce future flood damages. In communities that participate in the NFIP, mandatory flood insurance purchase requirements apply to all properties in Zone A, which are communities subject to a 100-year flood event. In addition to providing flood insurance and reducing flood damages through floodplain management regulations, the NFIP identifies and maps the nation's floodplains on FIRMs.

FEMA is mandated by the Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973 to evaluate flood hazards and provide FIRMs for local and regional planners to further promote safe

floodplain development. Flood risk data presented on FIRMs are based on historic, hydrologic, hydraulic, and meteorological data, as well as flood control works, open-space conditions, and development. To prepare a FIRM that illustrates the extent of flood hazards in flood-prone communities, FEMA conducts an engineering study referred to as Flood Insurance Study. Using information collected in these studies, FEMA engineers and cartographers delineate SFHAs on FIRMs.

Flood Control Act

The Flood Control Act of 1917 established survey and cost estimate requirements for flood hazards in the Sacramento Valley. All levees and structures constructed per the Flood Control Act were to be maintained locally but controlled federally. All rights of way necessary for the construction of flood control infrastructure were to be provided to the federal government at no cost.

Federal involvement in the construction of flood control infrastructure, primarily dams and levees, became more pronounced upon passage of the Flood Control Act of 1936.

Flood Disaster Protection Act

The Flood Disaster Protection Act (FDPA) of 1973 was a response to the shortcomings of the NFIP, which were experienced during the flood season of 1972. The FDPA prohibited federal assistance, including acquisition, construction, and financial assistance, within delineated floodplains in non-participating NFIP communities. Furthermore, all federal agencies and/or federally insured and federally regulated lenders must require flood insurance for all acquisitions or developments in designated SFHAs in communities that participate in the NFIP.

Improvements, construction, and developments within SFHAs are generally subject to the following standards:

- All new construction and substantial improvements of residential buildings must have the lowest floor (including basement) elevated to or above the base flood elevation (BFE).
- All new construction and substantial improvements of non-residential buildings must either have the lowest floor (including basement) elevated to or above the BFE or dry-floodproofed to the BFE.
- Buildings can be elevated to or above the BFE using fill, or they can be elevated on extended foundation walls or other enclosure walls, on piles, or on columns.
- Extended foundation or other enclosure walls must be designed and constructed to withstand hydrostatic pressure and be constructed with flood-resistant materials and contain openings that will permit the automatic entry and exit of floodwaters. Any enclosed area below the BFE can only be used for the parking of vehicles, building access, or storage.

National Flood Insurance Program (NFIP)

Per the National Flood Insurance Act of 1968, the NFIP has three fundamental purposes, which are to better indemnify individuals for flood losses through insurance; reduce future flood damages through state and community floodplain management regulations; and reduce federal expenditures for disaster assistance and flood control.

While the National Flood Insurance Act provided for subsidized flood insurance for existing structures, the provision of flood insurance by FEMA became contingent on the adoption of floodplain regulations at the local level.

National Pollutant Discharge Elimination System (NPDES)

NPDES permits are required for discharges to navigable waters of the United States, including any discharge to surface waters, including lakes, rivers, streams, bays, oceans, dry stream beds, wetlands, and storm sewers that are tributary to any surface water body. NPDES permits are issued under the CWA, Title IV, Permits and Licenses, Section 402 (33 USC 466 et seq.).

The RWQCB issues these permits in lieu of direct issuance by the EPA, subject to review and approval by the EPA Regional Administrator (EPA Region 9). The terms of these NPDES permits implement pertinent provisions of the CWA and its implementing regulations, including pre-treatment, sludge management, effluent limitations for specific industries, and anti-degradation. In general, the discharge of pollutants is to be eliminated or reduced as much as practicable, so as to achieve the CWA's goal of "fishable and swimmable" navigable (surface) waters. Technically, all NPDES permits issued by the RWQCB are also WDRs issued under the authority of the CWA.

NPDES permitting authority is administered by the SWRCB and its nine RWQCBs. The Planning Area is in a watershed administered by the San Diego RWQCB.

Individual projects in the Planning Area that disturb more than one acre would be required to obtain NPDES coverage under the California General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit). The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) describing BMPs the discharger would use to prevent and retain storm water runoff. The SWPPP 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 sediment monitoring plan if the site discharges directly to a waterbody listed on the 303(d) list for sediment.

Rivers and Harbors Appropriation Act of 1899

One of the country's first environmental laws, the Rivers and Harbors Act established a regulatory program to address activities that could affect navigation in waters of the United States.

Water Pollution Control Act of 1972

The Water Pollution Control Act established a program to regulate activities that result in the discharge of pollutants to waters of the United States.

STATE

California Fish and Game Code

The California Department of Fish and Wildlife (CDFW) protects streams, water bodies, and riparian corridors through the streambed alteration agreement process, under Section 1600 to 1616 of the California Fish and Game Code. The California Fish and Game Code establishes that "an entity may not substantially divert or obstruct the natural flow or substantially change the bed, channel or bank of any

river, stream or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river stream, or lake" (Fish and Game Code Section 1602(a)) without notifying the CDFW, incorporating necessary mitigation and obtaining a streambed alteration agreement. The CDFWs jurisdiction extends to the top of banks and often includes the outer edge of riparian vegetation canopy cover.

California Government Code

Relevant sections of the California Government Code are identified below.

Section 65302: Revised safety elements must include maps of any 200-year flood plains and levee protection zones within the Planning Area.

Section 65584.04: Any land having inadequate flood protection, as determined by FEMA or the California Department of Water Resources (DWR), must be excluded from land identified as suitable for urban development within the Planning Area.

Section 8589.4: California Government Code Section 8589.4, commonly referred to as the Potential Flooding-Dam Inundation Act, requires owners of dams to prepare maps showing potential inundation areas in the event of dam failure. A dam failure inundation zone is different from a flood hazard zone under the NFIP. NFIP flood zones are areas along streams or coasts where storm flooding is possible from a 100-year flood. In contrast, a dam failure inundation zone is the area downstream from a dam that could be flooded in the event of dam failure due to an earthquake or other catastrophe. Dam failure inundation maps are reviewed and approved by the California Office of Emergency Services. Sellers of real estate within inundation zones are required to disclose this information to prospective buyers.

California Water Code

Division 3, Dams and Reservoirs

Parts 1 and 2 of Division 3 of the California Water Code governs dam safety, permitting, inspections, and related responsibilities in California. It establishes the State's authority and procedures for ensuring dam and reservoir safety through regulation, inspection, and enforcement led by the Division of Safety of Dams (DSOD).

Division 7, Water Quality

The Porter-Cologne Water Quality Control Act of 1970 (Division 7 of the California Water Code) (Porter-Cologne Act) is California's primary statute governing water quality and water pollution issues with respect to both surface waters and groundwaters. The Porter-Cologne Act grants the SWRCB and the RWQCBs the power to protect water quality and is the primary vehicle for implementation of California's responsibilities under the Federal CWA. The Porter-Cologne Act grants the SWRCB and the RWQCBs authority and responsibility to adopt plans and policies, to regulate discharges to surface and groundwater, to regulate waste disposal sites, and to require cleanup of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substance, sewage, or oil or petroleum product.

Each RWQCB must formulate and adopt a Basin Plan for its region. The regional plans are to conform to the policies set forth in the Porter-Cologne Act and established by the SWRCB in its state water policy. The Porter-Cologne Act also provides that a RWQCB may include within its regional plan water discharge prohibitions applicable to particular conditions, areas, or types of waste. State Water Resources Control Board Storm Water Strategy

SWRCB's Storm Water Strategy is founded on the results of the Storm Water Strategic Initiative, which served to direct SWRCB's role in storm water resources management and evolve the Storm Water Program by: a) developing guiding principles to serve as the foundation of the storm water program; b) identifying issues that support or inhibit the program from aligning with the guiding principles; and c) proposing and prioritizing projects that SWRCB could implement to address those issues. The SWRCB staff created a strategy-based document called the Strategy to Optimize Management of Storm Water (STORMS). STORMS includes a program vision, missions, goals, objectives, projects, timelines, and consideration of the most effective integration of project outcomes into the SWRCB's Storm Water Program.

Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act (SGMA) established a framework for sustainable, local groundwater management. SGMA requires groundwater-dependent regions to halt overdraft and bring basins into balanced levels of pumping and recharge. With passage of the SGMA, DWR launched the Sustainable Groundwater Management Program to implement the law and provide ongoing support to local agencies around the State. The SGMA:

- Establishes a definition of "sustainable groundwater management;"
- Requires that a Groundwater Sustainability Plan be adopted for the most important groundwater basins in California;
- Establishes a timetable for adoption of Groundwater Sustainability Plans;
- Empowers local agencies to manage basins sustainably;
- Establishes basic requirements for Groundwater Sustainability Plans; and
- Provides for a limited State role.

In the basins designated by DWR as medium and high priority, local public agencies and Groundwater Sustainability Agencies (GSAs) are required to develop and implement groundwater sustainability plans (GSPs) or alternatives to GSPs (Alternative GSP). An Alternative GSP, per Water Code Section 10733.6(b), may be any of the following: an existing groundwater management plan or other law authorizing groundwater management; groundwater management pursuant to an adjudication; or an analysis of basin conditions that demonstrates that the basin has operated within its sustainable yield over a period of at least 10 years. Alternative GSPs are reviewed by DWR staff to confirm they will achieve the same outcome as a GSP, which is sustainable groundwater management for the basin.

LOCAL

Water Quality Control Plan (Basin Plan) for the San Diego Basin

The Basin Plan is designed to preserve and enhance water quality and protect the beneficial uses of all regional waters. Specifically, the Basin Plan: designates beneficial uses for surface and ground waters; sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the State's antidegradation policy; describes implementation programs to protect the beneficial uses of all waters in the region; and describes surveillance and monitoring activities to evaluate the effectiveness of the Basin Plan. The Basin Plan also establishes an implementation program describing the actions by the RWQCB and others that are necessary to achieve and maintain the designated beneficial uses and water quality objectives of the region's waters.

Municipal NPDES Permit Waste Discharge Requirements

The Municipal Stormwater Program regulates stormwater discharges from municipal separate storm sewer systems (MS4s) throughout California. Pursuant to Section 402 of the CWA and the Porter-Cologne Act, municipal stormwater discharges in the City are regulated under the San Diego RWQCB's Regional MS4 Permit, Order No. R9-2013-0001, as amended by Order Nos. R9-2015-0001 and R9-2015-0100, NPDES No. CAS0109266.

South Orange County Water Quality Improvement Plan (WQIP)

The Regional MS4 Permit requires the development and implementation of a WQIP for each Watershed Management Area (WMA) in the San Diego Region. A WQIP for the South Orange County WMA was developed by the County of Orange, Orange County Flood Control District and the Cities of Aliso Viejo, Dana Point, Laguna Beach, Laguna Hills, Laguna Niguel, Laguna Woods, Lake Forest, Mission Viejo, Rancho Santa Margarita, San Clemente, and San Juan Capistrano and accepted by the San Diego RWQCB in June 2018. The WQIP identifies:

- Highest Priority Water Quality Conditions (HPWQCs) and sets goals, strategies, and schedules for addressing them;
- Special Studies to help fill data gaps; and
- Monitoring and Assessment Program to assess the effectiveness of strategies at addressing HPWQC and water quality.

South Orange County Integrated Regional Water Management (IRWM) Plan

The South Orange County IRWM Plan is designed to help local agencies and governments manage their water, wastewater, and ecological resources. The IRWM Plan identifies and integrates regional projects to improve water supply, protect water quality, enhance the environment, and provide flood risk management.

City of Laguna Niguel Local Implementation Plan

The City of Laguna Niguel's Local Implementation Program (LIP) for the Jurisdictional Runoff Management Program (JRMP) describes the activities that the City is undertaking to meet the requirements of the

Regional MS4 Permit and to protect and improve the quality of the creeks, streams and coastal waters within the urban areas of the San Juan Hydrologic Unit, also referred to as the South Orange County WMA, to which the City contributes runoff.[4] The LIP outlines the strategies the City will implement to reduce the discharge of pollutants from its storm drain system in accordance with the Regional MS4 Permit.

City of Laguna Niguel Municipal Code

Laguna Niguel Municipal Code Title 6, Division 3, Article 5, *Prohibition of Non-Stormwater Discharges into Storm Sewers*, contains the City's Runoff Water Quality Control Ordinance. It is designed to effectively prohibit non-stormwater discharges into the storm sewers and to reduce the discharge of pollutants, and to achieve compliance with the federal CWA, State Porter-Cologne Act, and Regional MS4 Permit. Section 6-3-405, *Control of Runoff Discharges*, states that all new development and significant redevelopment projects in the City shall be undertaken in accordance with the LIP, a water quality management plan (WQMP), and any conditions and requirements established by the Community Development Department which are reasonably related to the reduction or elimination of pollutants in runoff from the project site. When required by the LIP, prior to issuance of a grading permit, building permit, and/or safety permit for any new development or significant redevelopment, the project applicant is required to prepare and obtain approval of a WQMP prepared in accordance with the LIP to mitigate the impacts of runoff from development projects.

Laguna Niguel Municipal Code Title 8, Division 1, Article 8. Subarticle 13, *Erosion Control*, contains the requirements for Erosion Control Plans as part of the rules and regulations to control excavation, grading and earthwork construction, including fills and embankments, site drainage and relevant water quality requirements, and establishes administrative requirements for issuance of permits and approvals of plans and inspection of grading construction in accordance with the requirements for grading and excavation.

Laguna Niguel Municipal Code Title 9, Division 1, Article 4, *Floodplain Management,* contains regulations to minimize public and private losses due to flood conditions in specific areas by restricting or prohibiting uses which are dangerous due to water or erosion hazards; require that uses vulnerable to floods be protected against flood damage; control the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters; Control filling, grading, dredging, and other development which may increase flood damage; and Prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards in other areas.

City of Laguna Niguel CEQA Manual

The City of Laguna Niguel CEQA Manual provides the City and project applicants with local guidelines, procedures, requirements, and thresholds of significance for the environmental review process within the City of Laguna Niguel consistent with the California Environmental Quality Act (Public Resources Code [PRC] Section 21000 et seq.), referred to as "CEQA" or "CEQA Statutes," and the State CEQA Guidelines (Title 14, California Code of Regulations (CCR), Division 6, Chapter 3, Section 15000 et seq.). The City's

[4] City of Laguna Niguel, January 2019. *City of Laguna Niguel Water Quality Local Implementation Plan*.

CEQA Manual applies to all public and private projects under the jurisdiction of the City of Laguna Niguel that constitute a "project" and therefore subject to CEQA review.

4.9.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

CEQA Guidelines Appendix G contains the Initial Study Environmental Checklist, which includes questions related to hydrology and water quality. The City relies on the questions included in Appendix G as the thresholds of significance for assessing impacts related to hydrology and water quality (City of Laguna Niguel CEQA Manual, Revised February 24, 2023). A significant impact will occur if implementation of the proposed Project will:

- Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality (refer to Impact Statement HWQ-1);
- Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin (refer to Impact Statement HWQ-2);
- 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 (refer to Impact Statement HWQ-3):
    - result in substantial erosion or siltation on- or off-site;
    - substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;
    - 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; or
    - impede or redirect flood flows.
- In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation (refer to Impact Statement HWQ-4); and/or
- Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan (refer to Impact Statement HWQ-5).

4.9.5 IMPACTS AND MITIGATION MEASURES

HWQ-1: Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Impact Analysis:

CONSTRUCTION

Grading, excavation, removal of vegetation cover, and loading activities associated with subsequent construction activities could temporarily increase runoff, erosion, and sedimentation, and the potential for pollutants to discharge from the site during construction activities. Construction activities also could

result in soil compaction and wind erosion impacts that could adversely affect soils and reduce the revegetation potential at construction sites and staging areas. The main pollutant of concern during construction is typically sediment and soil particles that discharge offsite due to wind, rain, and construction patterns.

The proposed Project is a planning-level document, and, as such, there are no specific projects identified, except for the assumption that the Chet Holifield Federal Building (CHFB) will be demolished as part of a future redevelopment effort. A separate analysis has been provided below for demolition of the CHFB site. Because of this, the site-specific details of potential subsequent development projects are currently unknown. However, each subsequent project must provide to the City as part of the development review process detailed project specific drainage plans that control storm water runoff and erosion, both during and after construction.

The Laguna Niguel Municipal Code Title 6, Division 3, Article 5, *Prohibition of Non-Stormwater Discharges into Storm Sewers*, contains the City's Runoff Water Quality Control Ordinance. It is designed to effectively prohibit non-stormwater discharges into the storm sewers and to reduce the discharge of pollutants, and to achieve compliance with the federal CWA, State Porter-Cologne Act, and Regional MS4 Permit. In compliance with NPDES Permit regulations, the State of California requires that any construction activity disturbing one acre or more of soil comply with the Construction General Permit.

The NPDES permit establishes a risk-based approach to stormwater control requirements for construction projects by identifying three project risk levels (i.e., RL 1, 2 or 3). Prior to commencement of construction activities, the Project Applicant would be required to prepare a SWPPP in accordance with the site-specific information, including grading limits, BMPs for each phase, schedule, and sediment risk analyses to determine the BMPs that would be required. In accordance with the Construction General Permit, the SWPPP must be made available for review upon request, shall describe construction BMPs that address pollutant source reduction, and provide measures/controls necessary to mitigate potential pollutant sources. These measures/controls include, but are not limited to, erosion controls, sediment controls, tracking controls, non-stormwater management, materials and waste management, and good housekeeping practices, including the following:

- Erosion control BMPs, such as hydraulic mulch, soil binders, and geotextiles and mats, protect the soil surface by covering and/or binding the soil particles. Temporary earth dikes or drainage swales may also be employed to divert runoff away from exposed areas and into more suitable locations. If implemented correctly, erosion controls can effectively reduce the sediment loads entrained in stormwater runoff from construction sites.

- Sediment controls are designed to intercept and filter out soil particles that have been detached and transported by the force of water. Storm drain inlets on the Project site or within the Project vicinity (i.e., along streets immediately adjacent to the Project boundary) should be adequately protected with an impoundment (i.e., gravel bags) around the inlet and equipped with a sediment filter (i.e., fiber roll). Bags should also be placed around areas of soil disturbing activities, such as grading or clearing.

- Stabilization of construction entrance/exit points reduces the tracking of sediments onto adjacent streets. Wind erosion controls should be employed in conjunction with tracking controls.
- Non-stormwater management BMPs prohibit the discharge of materials other than stormwater, as well as reduce the potential for pollutants from discharging at their source. Examples include avoiding paving and grinding operations during the rainy season (i.e., October 1 through April 30 each year), where feasible, and performing any vehicle equipment cleaning, fueling, and maintenance in designated areas that are adequately protected and contained.
- Waste management consists of implementing procedural and structural BMPs for collecting, handling, storing, and disposing of wastes generated by a construction project to prevent the release of waste materials into storm water discharges.

The phases of construction would define the maximum amount of soil disturbed, the appropriately sized sediment basins, and other control measures to accommodate all active soil disturbance areas and the appropriate monitoring and sampling plans. In the event exceedances of receiving water quality objectives are observed, measures must be taken and documented within the SWPPP to improve discharge water quality and runoff effluent. This may include, but not be limited to, increasing the size of existing BMPs, adding more BMPs to the drainage area, additional filtering, and/or a reduction in active grading areas.

Additionally, Laguna Niguel Municipal Code Title 8, Division 1, Article 8. Subarticle 13, *Erosion Control*, contains the requirements for Erosion Control Plans as part of the rules and regulations to control excavation, grading and earthwork construction, including fills and embankments, site drainage and relevant water quality requirements, and establishes administrative requirements for issuance of permits and approvals of plans and inspection of grading construction in accordance with the requirements for grading and excavation.

As subsequent development and infrastructure projects are considered by the City, each project would be evaluated for conformance with the California Building Standards Code (CBSC), Municipal Code, NPDES permit, and other relevant regulations. Through compliance with the Construction General Permit, including the preparation of a SWPPP, implementation of BMPs appropriate for each major phase of construction, and compliance with applicable City grading regulations, construction of subsequent development would not adversely impact water quality standards or degrade surface or groundwater quality during construction activities.

Further, each subsequent project would also be required to comply with applicable City water quality measures, including the City's Runoff Water Quality Control Ordinance and LIP. The LIP (LIP Section A-8.0, *Construction Component*) includes a detailed set of erosion and sediment controls and waste and materials management BMPs to prevent or minimize the impacts of urban runoff generated by construction activities within the City on receiving water bodies. Verification of compliance with the applicable City requirements would be required prior to project approval. As such, construction-related activities consistent with the City's LIP and Municipal Code requirements would not violate any water quality standards or otherwise substantially degrade surface or groundwater quality, and impacts would be less than significant.

Chet Holifield Federal Building Demolition

Activities associated with demolition of the CHFB site would disturb greater than one acre of soil and would be subject to compliance with the Construction General Permit. The Permit requires development and implementation of a SWPPP, which must include erosion-control and sediment-control BMPs that would meet or exceed measures required by the Construction General Permit to control stormwater quality degradation due to potential construction-related pollutants. The SWPPP would include project-specific BMPs, reducing potential impacts associated with soil erosion or the loss of topsoil during CHFB site demolition activities. Project construction activities would also be required to comply with applicable City water quality measures, including the City's Runoff Water Quality Control Ordinance and LIP. Compliance with the City's LIP and General Construction Permit requirements would reduce the short-term water quality impacts associated with demolition of the CHFB site to less than significant levels.

OPERATION

Subsequent development under the General Plan Update may result in long-term operational impacts to the quality of stormwater and urban runoff, subsequently impacting downstream water quality. Pollutants from surface runoff can contaminate surface water sources.

Qualifying new development and redevelopment projects would be required to be consistent with the Regional MS4 Permit and Laguna Niguel Code Section 6-3-405, *Control of Runoff Discharges*, which requires that all new development and significant redevelopment projects in the City will be undertaken in accordance with the LIP, a WQMP, and any conditions and requirements established by the Community Development Department which are reasonably related to the reduction or elimination of pollutants in runoff from the project site. When required by the LIP, prior to issuance of a grading permit, building permit, and/or safety permit for any new development or significant redevelopment, the project applicant is required to prepare and obtain approval of a WQMP prepared in accordance with the LIP to mitigate the impacts of runoff from development projects. Other existing regulatory requirements that manage water quality include requirements to obtain approval from the RWQCB for NPDES permits, other discharge permits, SWPPPs, and to implement BMPs. With the incorporation of site design, LID features and BMPs as required under the Regional MS4 Permit, the individual development and redevelopment projects within the General Plan Update will effectively retain, infiltrate, or treat the 85th percentile 24-hour stormwater runoff for pollutants such as bacteria, metals, nutrients, oil and grease, organics, pesticides, sediment, trash, and oxygen demanding substances prior to discharge off their property. Implementation of current water quality measures and compliance with existing regulations that address water quality on a project-by-project basis would provide for improved water quality conditions. Since most of the existing development within the areas identified for redevelopment occurred prior to the MS4 requirements, redevelopment of sites within the Planning Area would contribute to an overall improvement in water quality conditions.

City Hydrology Requirements

The City has specific requirements for projects to include a low impact development (LID) analysis consistent with adopted regulations. Applicants of qualifying development projects would be required to prepare a WQMP in accordance with the methodologies, standards, and significance thresholds in the

City of Laguna Niguel BMP Design Manual and the City's CEQA Manual as required by Mitigation Measure HWQ-1. The WQMP would be required to define project features and BMPs that would mitigate the project's impacts on receiving water quality and hydromodification. Any project-specific requirements identified in the approved WQMP would be incorporated in to the project's final grading and drainage plans. As part of the WQMP preparation, feasibility of applicable LID measures would be assessed, and a component of the LID analysis is the assessment of whether infiltration is feasible. As properties within the Planning Area undergo redevelopment, existing properties that do not have water quality BMPs would be replaced with projects incorporating LID BMPs, improving project operational water quality. Therefore, long-term surface water quality of runoff from the Planning Area would be expected to improve over existing conditions with implementation of Mitigation Measure HWQ-1 and as more LID BMPs are implemented.

The City manages local storm drain facilities and the OCFCD is responsible for regional flood control planning within the County. Provision of stormwater detention facilities, as needed, would reduce runoff rates and peak flows. Existing regulatory requirements that manage water quality include requirements to obtain approval from the RWQCB for NPDES permits, other discharge permits, SWPPPs, and to implement BMPs. These regulatory requirements are intended to ensure that water quality does not degrade to levels that would violate water quality standards. Through implementation of the Municipal Code requirements identified above and compliance with mandatory federal, State, and local regulations, subsequent development projects consistent with the General Plan Update Land Use Element would not violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. Further, as discussed above, subsequent projects would be required to include a LID analysis consistent with adopted regulations, including substantiating the feasibility or infeasibility to infiltrate flows, as infiltration in Laguna Niguel can often be infeasible either because the geologic structures do not infiltrate at acceptable rates, or infiltration could lead to geologic instability. If infiltration is not feasible, evidence must be presented documenting the infeasibility. The General Plan Update would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality, and impacts would be less than significant.

In addition, the General Plan Update Public Safety and Resource Management includes goals and policies that aim to enhance stormwater quality and infiltration as well as ensure development projects are reviewed to identify potential stormwater and drainage impacts and require development to include measures to confirm off-site runoff is not increased beyond pre-development levels. Public Safety Element Policy PS-3.5 ensures that development projects comply with State, regional and local flood control and stormwater runoff requirements and standards.

Mitigation Measures:

HWQ-1: Prior to issuance of a grading permit, applicants of qualifying development projects shall have a Water Quality Management Plan (WQMP) prepared by a qualified engineer. The WQMP shall be prepared in accordance with the methodologies, standards, and significance thresholds in the City of Laguna Niguel BMP Design Manual and the City's CEQA Manual and submitted for review and approval by the Laguna Niguel Community Development Department. The WQMP

shall define project features and BMPs that will mitigate the project's impacts on receiving water quality and hydromodification.

All project-specific requirements identified in the approved WQMP shall be incorporated into the project's final grading and drainage plans submitted for grading permit review and approval by the Laguna Niguel Community Development Department.

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

PUBLIC SAFETY ELEMENT

Policy PS-3.5: **Flood Control and Stormwater Management.** Ensure development projects comply with state, regional, and local flood control and stormwater runoff requirements and standards.

HWQ-2: Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Impact Analysis:

CONSTRUCTION

As discussed in detail in Section 4.16, *Utilities and Service Systems*, MNWD provides water service to the Planning Area. MNWD's water supply sources include imported potable water and locally sourced recycled water; MNWD does not rely on groundwater. Thus, construction activities associated with subsequent development projects under the General Plan Update, including demolition of the CHFB site, would not involve the use of groundwater.

Groundwater recharge can occur if a project site were located within an area utilized for groundwater recharge and if the conditions of the project site provide for groundwater recharge. The San Juan Groundwater Basin underlies a small portion of the eastern boundary of the Planning Area. The San Juan Groundwater Basin is recharged through various sources including San Juan Creek, Oso Creek, Arroyo Trabuco Creek Channel, precipitation, and Hot Spring Canyon flows.

Construction activities typically do not interfere substantially with groundwater recharge; rather, post-development conditions that involve development of a site from pervious to impervious conditions could interfere with groundwater recharge. However, as discussed above, the Planning Area does not provide for substantial groundwater recharge as the San Juan Groundwater Basin only underlies a small portion of the eastern boundary of the Planning Area. Areas that provide for recharge include creeks and channels which would not be altered by the General Plan Update.

Buildout consistent with the General Plan Update Land Use Element would primarily accommodate new residential and non-residential development generally within the Laguna Niguel Gateway Specific Plan (Gateway Specific Plan) (Community Profile Area 4, located in the northeast portion of the City), the Marketplace at Laguna Niguel and CHFB (Community Profile Area 1, located in the northwest portion of

the City), and the Town Center (Community Profile Area 14, located in the central portion of the City). These areas are generally developed with urban uses and do not support substantial groundwater recharge. The proposed General Plan Update Land Use Element also identifies two sites for a Hospitality Overlay with the potential to accommodate future high-quality hotel uses. One of the sites, located at the northwest corner of Golden Lantern and Camino Del Avion is currently developed and does not support substantial groundwater recharge. However, the proposed Hospitality Overlay includes a currently undeveloped and undisturbed site at the northwest corner of Crown Valley Parkway and Pacific Island Drive. Although this site is currently undeveloped, it is located within the southwest portion of the City and is not located above the San Juan Groundwater Basin. Therefore, construction activities associated with subsequent development projects, including demolition of the CHFB site, would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin and impacts would be less than significant.

OPERATION

Subsequent development with buildout of the General Plan Update Land Use Element could yield a net growth above existing conditions, resulting in an overall increase in demand for water supply. As stated, MNWD's water supply sources include imported potable water and locally sourced recycled water; MNWD does not rely on groundwater. As discussed in Section 4.16 of this EIR, MNWD concluded in its 2020 Urban Water Management Plan (UWMP) that it will be able to meet projected future water demands under normal, dry, and multiple dry water years through 2045. Further, the projected increase in water demand associated with buildout of the General Plan Update Land Use Element falls within the projected water supply identified in the 2020 UWMP. Thus, the projected increase in water demand associated with the Project would not substantially decrease groundwater supplies that would impede sustainable groundwater management of the basin

The General Plan Update has been developed to continue to preserve expansive areas of open space and to ensure that new development is located in and around existing urbanized areas, thus ensuring that new development is primarily an extension of the existing urban landscape and minimizes substantial development of pervious areas. The amount of new pavement and impervious surfaces, and the extent to which they affect infiltration, depends on the site-specific features and soil types of a given project site. Projects located in urban areas would have less of an impact than projects converting open lands and spaces. Additionally, as discussed above, recharge to the San Juan Groundwater Basin is from various sources including direct percolation of precipitation and percolation of stream flow. The proposed General Plan Update would direct future development to infill locations; therefore, the General Plan Update would not significantly impact natural rainwater infiltration and groundwater recharge beyond existing conditions.

As discussed above, buildout consistent with the General Plan Update Land Use Element would primarily accommodate new residential and non-residential development generally within the Gateway Specific Plan, the Marketplace at Laguna Niguel, CHFB, Town Center, and two Hospitality Overlay sites. With the exception of one of the Hospitality Overlay sites, these areas are generally developed with urban uses and

do not support groundwater recharge. Therefore, subsequent development or redevelopment of these areas would not substantially interfere with groundwater recharge.

One of the Hospitality Overlay sites, located at the northwest corner of Crown Valley Parkway and Pacific Island Drive, is currently undeveloped and undisturbed. Although subsequent development of the site consistent with the General Plan Update Land Use Element would involve transition of a portion of the site from pervious to impervious uses, the site is not located above the San Juan Groundwater Basin and therefore, does not provide for direct groundwater recharge. Further, the General Plan Update would maintain approximately 2,200 acres of designated Open Space and would not alter the primary sources of groundwater recharge including San Juan Creek, Oso Creek, Arroyo Trabuco Creek Channel, precipitation, and Hot Spring Canyon flows. Thus, the General Plan Update would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin and impacts would be less than significant.

Further, the General Plan Update includes policies to support water conservation, minimization of impervious surfaces, and coordination with local water districts when planning for adequate capacity to accommodate future growth. Policy PF-3.2 directs the City to collaborate with MNWD to ensure sufficient capacity and provision of potable water, recycled water, and wastewater services for new developments. Policy PF-3.4 ensures the City's water usage and wastewater treatment are compliant with regional and statewide regulations. Public Safety Element Policy PS-3.5 ensures that development projects comply with State, regional and local flood control and stormwater runoff requirements and standards.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

PUBLIC FACILITIES ELEMENT

Policy PF-3.2: **Development Review (Water and Wastewater).** Collaborate with Moulton Niguel Water District to ensure sufficient capacity and provision of potable water, recycled water, and wastewater services for new developments. Additionally, ensure that these projects plan and implement necessary infrastructure improvements to support future water supply and wastewater demands.

Policy PF-3.3: **Utility Coordination (Water and Wastewater).** Collaborate with applicable stakeholders in the placement and design of utility facilities for new developments to minimize their environmental, aesthetic, and safety impacts.

Policy PF-3.4: **Compliance with State Legislation.** Ensure City water usage and wastewater treatment compliance with regional and statewide regulations.

PUBLIC SAFETY ELEMENT

Policy PS-3.5: **Flood Control and Stormwater Management.** Ensure development projects comply with state, regional, and local flood control and stormwater runoff requirements and standards.

HWQ-3: Would the project 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:

- **result in substantial erosion or siltation on- or off-site;**
- **substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;**
- **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; or**
- **impede or redirect flood flows?**

Impact Analysis:

EROSION AND SILTATION

Construction

Subsequent development with buildout of the General Plan Update Land Use Element would potentially involve land clearing, mass grading, and other ground-disturbing activities that could temporarily increase soil erosion rates during and shortly after project construction. The greatest onsite erosion risk would occur during construction. Depending upon the location of a specific project site, construction activities, and soil conditions, construction-related erosion could result in the loss of a substantial amount of nonrenewable topsoil and could adversely affect water quality in nearby surface waters.

The proposed Project is a planning-level document, and, as such, there are no specific projects identified, except for the assumption that the CHFB site will be demolished as part of a future redevelopment effort. A separate analysis has been provided below for demolition of the CHFB site. Because of this, the site-specific details of potential subsequent development projects are currently unknown. However, each subsequent project must provide to the City, as part of the development review process, detailed project-specific drainage plans that control storm water runoff and erosion, both during and after construction.

The portions of the Planning Area designated for development are primarily urbanized with limited pervious areas. In particular, the majority of the potential growth opportunities are located within the Gateway Specific Plan, the Opportunity Areas, and the Hospitality Overlay sites. Subsequent development throughout the City, including within the Gateway Specific Plan, Opportunity Areas, and the Hospitality Overlay site, located at Golden Lantern and Camino Del Avion, would primarily occur through infill development and redevelopment of sites that are currently developed and do not contain significant amounts of pervious areas. However, the Hospitality Overlay site, located at Pacific Island Drive and Crown

Valley Parkway, is currently undisturbed and undeveloped; therefore, any development within the site would involve the removal on natural vegetated land and expose soils to increased erosion potential.

Grading, excavation, removal of vegetation cover, and loading activities associated with subsequent construction activities could temporarily increase erosion potential. The Laguna Niguel Municipal Code Title 6, Division 3, Article 5, *Prohibition of Non-Stormwater Discharges into Storm Sewers*, contains the City's Runoff Water Quality Control Ordinance. It is designed to effectively prohibit non-stormwater discharges into the storm sewers and to reduce the discharge of pollutants, and to achieve compliance with the federal CWA, State Porter-Cologne Act, and Regional MS4 Permit. In compliance with NPDES Permit regulations, the State of California requires that any construction activity disturbing one acre or more of soil comply with the Construction General Permit. The permit requires development and implementation of a SWPPP and monitoring plan, which must include erosion-control and sediment-control BMPs that would meet or exceed measures required by the Construction General Permit to control stormwater quality degradation due to potential construction-related pollutants.

Further, each subsequent project would also be required to comply with applicable City water quality measures, including the City's Runoff Water Quality Control Ordinance and LIP, and implement Mitigation Measure HWQ-1, requiring preparation of a WQMP. The LIP (LIP Section A-8.0, *Construction Component*) includes a detailed set of erosion and sediment controls and waste and materials management BMPs to prevent or minimize the impacts of urban runoff generated by construction activities within the City on receiving water bodies. Verification of compliance with the applicable City requirements would be required prior to project approval. As such, construction-related activities consistent with LIP and Laguna Niguel Municipal Code requirements would not result in substantial erosion or siltation on- or off-site and impacts would be less than significant.

Chet Holifield Federal Building Demolition

Activities associated with demolition of the CHFB site would disturb greater than one acre of soil and would be subject to compliance with the Construction General Permit. The Permit requires development and implementation of a SWPPP, which must include erosion-control and sediment-control BMPs that would meet or exceed measures required by the Construction General Permit to control stormwater quality degradation due to potential construction-related pollutants. The SWPPP would include project-specific BMPs, reducing potential impacts associated with erosion or siltation on- or off-site during CHFB site demolition activities to a less than significant level.

Operation

Subsequent development with buildout of the General Plan Update Land Use Element could result in new development and intensification of existing development within the Planning Area. In particular, the majority of the potential growth opportunities are located within specific areas of the City, including the Gateway Specific Plan, the Opportunity Areas (e.g., Marketplace at Laguna Niguel, CHFB site, and Town Center), and the Hospitality Overlay sites.

The potential for a project to result in substantial erosion or siltation on- or off-site associated with implementation of the Gateway Specific Plan have been analyzed within the Laguna Niguel Gateway Specific Plan Program EIR (Gateway Specific Plan EIR) and determined to be less than significant. The

General Plan Update would not provide for new or different land uses or development potential beyond what is currently allowed by the Gateway Specific Plan and analyzed in the Gateway Specific Plan EIR.

Subsequent development throughout the City, including within the Opportunity Areas and the Hospitality Overlay site located at Golden Lantern and Camino Del Avion, would primarily occur through infill development and redevelopment of sites that are currently developed and do not contain significant amounts of pervious area. Although development could result in alteration of on-site drainage patterns, due to the developed nature of these areas, it is not likely that new development or redevelopment of these areas would alter the post-construction drainage pattern off-site with the potential to result in substantial erosion or siltation on- or off-site. However, the Hospitality Overlay site, located at Pacific Island Drive and Crown Valley Parkway, is currently undisturbed and undeveloped; therefore, any development within the site would involve the removal on natural vegetated land and result in changes to the existing drainage pattern, which could result in the potential for erosion.

City Hydrology Requirements

The City's CEQA Manual requires that a project may not cause off-site erosion, either by storm flows or by nuisance flows. As stated above, subsequent development consistent with the General Plan Update, including subsequent development of the Hospitality Overlay site located at Pacific Island Drive and Crown Valley Parkway, would be subject to NPDES permit requirements that address the control of erosion and siltation. The City also requires that a project shall include a hydromodification analysis and comply with the County of Orange MS4 requirements. Development consistent with the General Plan Update Land Use Element would also be subject to the post-construction requirements of the MS4 NPDES permit. Laguna Niguel Municipal Code Section 6-3-405, *Control of Runoff Discharges*, requires that all new development and significant redevelopment projects in the City will be undertaken in accordance with the LIP, a WQMP, and any conditions and requirements established by the Community Development Department which are reasonably related to the reduction or elimination of pollutants in runoff from the project site. When required by the LIP, prior to issuance of a grading permit, building permit, and/or safety permit for any new development or significant redevelopment, the project applicant is required to prepare and obtain approval of a WQMP prepared in accordance with the LIP to mitigate the impacts of runoff from development projects. Qualifying new development and redevelopment projects in the City must be approved for the design and implementation of post-construction controls to mitigate stormwater pollution. Discharges that are not authorized by a NPDES permit must be permitted by other means by the San Diego RWQCB or the State Water Resources Control Board (e.g., filing a Report of Waste Discharge, Water Quality Certification). Through implementation of existing regulations, erosional/siltation impacts from changes to the existing drainage patterns and increasing impervious surfaces would be less than significant.

Further, the General Plan Update includes policies to provide residents, project applicants, and the City with the tools to comply with existing regulations that address erosion and siltation from the addition of impervious surfaces and alteration of existing drainage patterns. Public Safety Element Policy PS-3.5 ensures that development projects comply with State, regional and local flood control and stormwater runoff requirements and standards.

SURFACE RUNOFF

Construction

As discussed in Impact HWQ-1, grading, excavation, removal of vegetation cover, and loading activities associated with subsequent construction activities could temporarily increase runoff during construction activities.

The proposed Project is a planning-level document, and, as such, there are no specific projects identified, except for the assumption that the CHFB site will be demolished as part of a future redevelopment effort. A separate analysis has been provided below for demolition of the CHFB site. Because of this, the site-specific details of potential subsequent development projects are currently unknown. However, each subsequent project must provide to the City as part of the development review process detailed project specific drainage plans that addresses stormwater surface runoff, both during and after construction.

The portions of the Planning Area designated for development are primarily urbanized with limited pervious areas. In particular, the majority of the potential growth opportunities are located within the Gateway Specific Plan, the Opportunity Areas, and the Hospitality Overlay sites. Subsequent development throughout the City, including within the Gateway Specific Plan, Opportunity Areas, and the Hospitality Overlay site located at Golden Lantern and Camino Del Avion, would primarily occur through infill development and redevelopment of sites that are currently developed and do not contain significant amounts of pervious area. However, the Hospitality Overlay site, located at Pacific Island Drive and Crown Valley Parkway, is currently undisturbed and undeveloped; therefore, any development within the site would involve the removal on natural vegetated land and potentially result in increased surface runoff.

As subsequent development and infrastructure projects are considered by the City, each project would be evaluated for conformance with the CBSC, Municipal Code, NPDES permit, and other relevant regulations. Through compliance with the Construction General Permit, including the preparation of a SWPPP, implementation of BMPs appropriate for each major phase of construction, and compliance with applicable City grading regulations, construction of subsequent development would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite.

As documented in Impact HWQ-1, the construction BMPs are required to address pollutant source reduction and provide measures/controls necessary to mitigate potential pollutant sources. These measures/controls include, but are not limited to, erosion controls, sediment controls, tracking controls, non-stormwater management, materials and waste management, and good housekeeping practices, which also involve controlling surface runoff. Further, each subsequent project would also be required to comply with applicable City water quality measures, including the City's Runoff Water Quality Control Ordinance and LIP, as previously described. Verification of compliance with the applicable City requirements would be required prior to project approval. As such, construction-related activities consistent with buildout of the General Plan Land Use Element would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite.

Chet Holifield Federal Building Demolition

Activities associated with demolition of the CHFB site would disturb greater than one acre of soil and would be subject to compliance with the Construction General Permit. The Permit requires development and implementation of a SWPPP, to control stormwater quality and degradation due to potential construction-related pollutants, including surface runoff. However, the CHFB site is relatively flat and is highly impervious. Demolition activities would not substantially alter the existing drainage of the site resulting in a substantial increase in the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; impacts would be less than significant.

Operation

New development or increased development has the potential to result in changes to the existing drainage patterns and could exceed the capacity of stormwater drainage systems and/or cause flooding on or off of a project site. Flooding can occur from an increase in impervious surfaces, which increases the volume and speed of runoff. When the volume and speed of runoff is increased, drainage facilities can be unable to handle the flows and capacity could be exceeded.

Subsequent development with buildout of the General Plan Update Land Use Element could result in new development and intensification of existing development within the Planning Area. In particular, the majority of the potential growth opportunities are located within specific areas of the City, including the Gateway Specific Plan, the Opportunity Areas (e.g., Marketplace at Laguna Niguel, CHFB site, and Town Center), and the Hospitality Overlay sites.

The potential for a project to substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite associated with implementation of the Gateway Specific Plan have been analyzed within the Gateway Specific Plan EIR and determined to be less than significant with mitigation measures incorporated. The mitigation measures would require submittal of a hydrology study to document stormwater runoff would not exceed existing conditions or the storm drain system would have capacity to accommodate the storm flows. The General Plan Update would not provide for new or different land uses or development potential beyond what is currently allowed by the Gateway Specific Plan and analyzed in the Gateway Specific Plan EIR.

Subsequent development throughout the City, including within the Opportunity Areas and the Hospitality Overlay site located at Golden Lantern and Camino Del Avion, would primarily occur through infill development and redevelopment of sites that are currently developed and do not contain significant amounts of pervious area. Although development could result in alteration of on-site drainage patterns, due to the developed nature of these areas, it is not likely that new development or redevelopment of these areas would alter the post-construction drainage pattern off-site with the potential to substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite.

However, the Hospitality Overlay site, located at Pacific Island Drive and Crown Valley Parkway, is currently undisturbed and undeveloped; therefore, any development within the site would involve the removal on natural vegetated land and result in changes to the existing drainage pattern, which could substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.

City Hydrology Requirements

The City's CEQA Manual requires that a project may not increase the flow ("Q") of runoff in the developed condition compared to the pre-development condition. As previously described, OCFCD and the City operate and maintain a network of flood control facilities within the Planning Area. As specified in the City's Municipal Code, qualifying development projects would be required to incorporate site-specific LID BMPs into the drainage system, slowing on- and off-site flow rates and decreasing flooding. LID BMPs could also include methods of on-site retention of runoff, such as cisterns, rain barrels, and basins which allow for a metered release of flows, typically after the rain event has passed, when capacity becomes available in the downstream pipes and channels.

In addition, City's CEQA Manual requirements include that a project may not increase the velocity of runoff from a project site in the developed condition compared to the pre-development condition. Through the City's development review process, all subsequent development would be required to demonstrate that the amount and velocity of runoff in the proposed developed condition does not exceed the existing or pre-development condition. Through implementation of existing regulations discussed above, runoff would not exceed the capacity of drainage systems, provide substantial additional sources of polluted runoff, or cause flooding impacts from changes to the existing drainage patterns and increased impervious surfaces. Nevertheless, in order to ensure that such impacts would remain less than significant, Mitigation Measure HWQ-2 would be implemented. Mitigation Measure HWQ-2 requires a project applicant to submit a Hydrology Study prepared in accordance with the methodologies, standards, and significance thresholds in the County of Orange Hydrology Manual (as amended locally) and the City's CEQA Manual to be reviewed and approved by the City's Community Development Department. The Hydrology Study is required to demonstrate that post-development drainage patterns and stormwater runoff flows are designed so as not exceed to existing conditions and will not result in flooding on or- off-site and to determine if the project site is within a regulatory floodplain and evaluate the potential for the proposed development to impede or redirect flood flows Compliance with regional and local regulatory requirements and implementation of Mitigation Measure HWQ-2 would ensure the proposed General Plan Update would not substantially increase the amount of surface runoff in a manner which would result in flooding on- or offsite.

The General Plan Update contains goals and policies to provide adequate stormwater infrastructure for flood control and reduce run-off quantity. Public Safety Element PS-3.2 directs the City to coordinate with the OCFCD to ensure flood control facilities are properly maintained and functioning. Policy PS-3.3 directs that the City regularly assess and maintain the local storm drainage infrastructure to identify needed improvements and ensure that the system is functioning properly. Policy PS-3.5 ensures that development projects comply with State, regional and local flood control and stormwater runoff requirements and standards.

STORMWATER DRAINAGE SYSTEMS

Construction

As discussed in Impact HWQ-1, grading, excavation, removal of vegetation cover, and loading activities associated with subsequent construction activities could temporarily increase runoff to stormwater drainage systems during construction activities.

The proposed Project is a planning-level document, and, as such, there are no specific projects identified, except for the assumption that the CHFB site will be demolished as part of a future redevelopment effort. A separate analysis has been provided below for demolition of the CHFB site. Because of this, the site-specific details of potential subsequent development projects are currently unknown. However, each subsequent project must provide to the City as part of the development review process detailed project specific drainage plans that addresses stormwater surface runoff, both during and after construction.

The portions of the Planning Area designated for development are primarily urbanized with existing stormwater drainage infrastructure. In particular, the majority of the potential growth opportunities are located within the Gateway Specific Plan, the Opportunity Areas, and the Hospitality Overlay sites. Subsequent development throughout the City, including within the Gateway Specific Plan, Opportunity Areas, and the Hospitality Overlay site located at Golden Lantern and Camino Del Avion, would primarily occur through infill development and redevelopment of sites that are currently developed with stormwater drainage infrastructure and do not contain significant amounts of pervious area. However, the Hospitality Overlay site, located at Pacific Island Drive and Crown Valley Parkway, is currently undisturbed and undeveloped; therefore, any development within the site would involve the removal on natural vegetated land and potentially result in increased surface runoff.

As subsequent development and infrastructure projects are considered by the City, each project would be evaluated for conformance with the CBSC, Municipal Code, NPDES permit, and other relevant regulations. Through compliance with the Construction General Permit, including the preparation of a SWPPP, implementation of BMPs appropriate for each major phase of construction, and compliance with applicable City grading regulations, construction of subsequent development would not 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.

As documented in Impact HWQ-1, construction BMPs would be required to address pollutant source reductions and provide measures/controls necessary to mitigate potential pollutant sources, as well as the velocity and quantity of stormwater flows. These measures/controls include, but are not limited to, erosion controls, sediment controls, tracking controls, non-stormwater management, materials and waste management, and good housekeeping practices, which also involve controlling surface runoff. Further, each subsequent project would also be required to comply with applicable City water quality measures, including the City's Runoff Water Quality Control Ordinance, requirements for an Erosion Control Plan, and LIP, as previously described. Verification of compliance with the applicable City requirements would be required prior to project approval. As such, construction-related activities consistent with buildout of the General Plan Land Use Element would not 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.

Chet Holifield Federal Building Demolition

Activities associated with demolition of the CHFB site would disturb greater than one acre of soil and would be subject to compliance with the Construction General Permit. The Permit requires development and implementation of a SWPPP, to control stormwater quality and degradation due to potential construction-related pollutants, including surface runoff. However, the CHFB site is relatively flat and is

highly impervious. The site is currently served by storm water infrastructure. Demolition activities that are consistent with the SWPPP, would not 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; impacts would be less than significant.

Operation

New development or increased development has the potential to result in changes to the existing drainage patterns resulting in an exceedance of stormwater drainage systems capacity. As discussed above, when the volume and speed of runoff is increased, drainage facilities can be unable to handle the flows and capacity could be exceeded.

Subsequent development with buildout of the General Plan Update Land Use Element could result in new development and intensification of existing development within the Planning Area. In particular, the majority of the potential growth opportunities are located within specific areas of the City, including the Gateway Specific Plan, the Opportunity Areas (e.g., Marketplace at Laguna Niguel, CHFB site, and Town Center), and the Hospitality Overlay sites.

The potential for a project to substantially increase the rate or amount of surface runoff in a manner which would exceed stormwater drainage capacity associated with implementation of the Gateway Specific Plan have been analyzed within the Gateway Specific Plan EIR and determined to be less than significant with mitigation measures incorporated. The mitigation measures would require submittal of a hydrology study to document stormwater runoff would not exceed existing conditions or the storm drain system would have capacity to accommodate the storm flows. The General Plan Update would not provide for new or different land uses or development potential beyond what is currently allowed by the Gateway Specific Plan and analyzed in the Gateway Specific Plan EIR.

Subsequent development throughout the City, including within the Opportunity Areas, and the Hospitality Overlay site located at Golden Lantern and Camino Del Avion, would primarily occur through infill development and redevelopment of sites that are currently developed with storm drain infrastructure. Although development could result in alteration of on-site drainage patterns and increased stormwater runoff, due to the developed nature of these areas, it is not likely that new development or redevelopment of these areas would 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.

However, the Hospitality Overlay site, located at Pacific Island Drive and Crown Valley Parkway, is currently undisturbed and undeveloped; therefore, any development within the site would involve the removal on natural vegetated land and result in changes to the existing drainage pattern, which could 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.

City Hydrology Requirements

As discussed above, the City's CEQA Manual has specific requirements providing that a project may not increase the flow ("Q") of runoff in the developed condition compared to the pre-development condition.

Through the City's development review process, all subsequent development would be required to demonstrate that the amount and velocity of runoff in the proposed developed condition does not exceed the existing or pre-development condition. As previously described, OCFCD and the City operate and maintain a network of flood control facilities within the Planning Area. As specified in the City's Municipal Code, qualifying development projects would be required to incorporate site-specific LID BMPs into the drainage system, slowing on- and off-site flow rates and decreasing flooding. LID BMPs could also include methods of on-site retention of runoff, such as cisterns, rain barrels, and basins which allow for a metered release of flows, typically after the rain event has passed, when capacity becomes available in the downstream pipes and channels. Through implementation of existing regulations discussed above, runoff would not exceed the capacity of drainage systems, provide substantial additional sources of polluted runoff, or cause flooding impacts from changes to the existing drainage patterns and increased impervious surfaces. In addition to compliance with the City's hydrology requirements, project-specific development would be required to implement Mitigation Measure HWQ-1, which requires preparation of a WQMP and Mitigation Measure HWQ-2, which would require preparation of a site-specific Hydrology Study prepared in accordance with the methodologies, standards, and significance thresholds in the County of Orange Hydrology Manual (as amended locally) and the City's CEQA Manual for review and approval by the City's Community Development Department. The Hydrology Study is required to demonstrate that post-development drainage patterns and stormwater runoff flows are designed so as not exceed to existing conditions and will not result in flooding on or- off-site and to determine if the project site is within a regulatory floodplain and evaluate the potential for the proposed development to impede or redirect flood flows. Therefore, with implementation of Mitigation Measures HWQ-1 and HWQ-2, and compliance with existing regulations, the subsequent development associated with implementation of the General Plan Update would not substantially increase the rate or amount of surface water or create or contribute runoff water that would exceed the capacity of the existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff, and impacts would be less than significant.

Additionally, the General Plan Update contains policies related to the provision of stormwater infrastructure for flood control and to reduce run-off quantity. Policy PS-3.3 directs the City regularly assess and maintain the local storm drainage infrastructure to identify needed improvements and ensure that the system is functioning properly. Policy PS-3.5 ensures that development projects comply with State, regional and local flood control and stormwater runoff requirements and standards.

FLOOD FLOWS

As described above and shown in Figure 4.9-3, the City includes several pockets of 100-year flood zones and a few areas within 500-year flood zones in the northern portion of Laguna Niguel. The rest of the City is outside of these flood hazard zones, with a minimal risk of flooding.

The General Plan Update Land Use Element would primarily accommodate new development projects within specific areas of the City, including the Gateway Specific Plan, the Opportunity Areas, and the Hospitality Overlay sites. There are no designated flood zones within Opportunity Area 1 (The Marketplace at Laguna Niguel) or the Hospitality Overlay sites. Opportunity Area 2 (the CHFB site) is partially located within a 500-year flood zone, which extends into the surface parking lot and landscaped areas along the eastern and southwestern portions of the site. A small portion of Opportunity Area 3 (Town Center) is

located within a 100-year flood zone, which extends into an area developed with a surface parking lot and landscaped areas on the eastern corner of Crown Valley Parkway and Hillhurst Drive. There are 100- and 500-year flood zones within the Gateway Specific Plan. The 100-year flood zones generally correspond to Oso Creek Channel and Galivan Basin, but do extend into some developed areas, including the rail line and surface parking. Much of the area is within a designated 500-year flood zone, including developed areas.

Potential subsequent development within the Gateway Specific Plan is governed by the previously adopted Gateway Specific Plan. The Gateway Specific Plan EIR analyzed the potential for future development to impede or redirect flood flows. Any subsequent development within the Gateway Specific Plan would be required to comply with mitigation measures identified in the Gateway Specific Plan EIR to address potential flooding associated with development. The General Plan Update would not provide for new land uses or development potential beyond what is currently allowed by the Gateway Specific Plan and analyzed in the Gateway Specific Plan EIR.

Subsequent development within Town Center and the CHFB site consistent with the General Plan Land Use Element, would be required to comply with the City's floodplain regulations. As described above, Municipal Code Municipal Code Title 9, Division 1, Article 4, *Floodplain Management*, provides standard provisions for flood hazard reduction for flood-prone areas within Laguna Niguel. It includes floodplain management regulations to promote the public health, safety, and general welfare of the public, and to minimize the potential for private losses due to flood conditions. Subsequent development projects would be reviewed by the City to determine if they are located within special flood hazard areas and thus subject to additional provisions set forth in Title 9, Division 1, Article 4. Additionally, construction of storm drainage improvements would occur as part of an overall development or infrastructure project and would be considered in the environmental review associated with the specific development being proposed. Additionally, subsequent development would be required to comply with Mitigation Measure HWQ-1, which requires preparation of a Hydrology Study to demonstrate that post-development drainage patterns and stormwater runoff flows are designed so as not exceed to existing conditions and will not result in flooding on or- off-site and to determine if the project site is within a regulatory floodplain and evaluate the potential for the proposed development to impede or redirect flood flows. Implementation and compliance with existing regulations and compliance with Mitigation Measure HWQ-1 would reduce potential impacts associated with the potential to impede or redirect flood flows to less than significant. The General Plan Update includes a range of policies to further address flooding potential. Public Safety Element PS-3.1 ensures that City regulations related to flood control align with federal, State and County requirements. PS-3.2 directs the City to coordinate with the OCFCD to ensure flood control facilities are properly maintained and functioning. Policy PS-3.3 directs the City regularly assess and maintain the local storm drainage infrastructure to identify needed improvements and ensure that the system is functioning properly. Policy PS-3.4 ensures that all development projects in designated Special Flood Hazard Zones prone to flooding incorporate design features that minimize health, safety, and property risks both on-site and off-site due to flooding. Policy PS-3.5 ensures that development projects comply with State, regional and local flood control and stormwater runoff requirements and standards. Policy PS-3.6 directs the City to coordinate with FEMA to ensure that FIRMs are current and accurately depict flood hazards in the City.

Mitigation Measures: Refer to Mitigation Measure HWQ-1.

HWQ-2: Prior to issuance of a grading permit, applicants of qualifying development projects shall have a Hydrology Study prepared by a qualified engineer. The study shall be prepared in accordance with the methodologies, standards, and significance thresholds in the County of Orange Hydrology Manual (as amended locally) and the City's CEQA Manual and submitted for review and approval by the Laguna Niguel Community Development Department. This includes the study addressing the following:

- Post-development drainage patterns and stormwater runoff flows are designed so as not exceed to existing conditions and will not result in flooding on or- off-site.
- Whether the project site is within a regulatory floodplain and evaluate the potential for the proposed development to impede or redirect flood flows.

For projects located within Very High Fire Hazard Severity Zones, High Fire Hazard Severity Zones, or slopes prone to producing debris flows, the Hydrology Study shall analyze both the burned and bulked conditions to determine the appropriate size and location of detention/debris basins, as necessary, based on project site conditions.

All project-specific requirements identified in the approved Hydrology Study shall be incorporated into the project's final grading and drainage plans submitted for grading permit review and approval by the Laguna Niguel Community Development Department.

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

PUBLIC FACILITIES ELEMENT

Policy PF-3.3: **Utility Coordination (Water and Wastewater).** Collaborate with applicable stakeholders in the placement and design of utility facilities for new developments to minimize their environmental, aesthetic, and safety impacts.

PUBLIC SAFETY ELEMENT

Policy PS-3.1: **Flood Control Regulatory Compliance.** Ensure that City regulations related to flood control align with federal, state, and county requirements. This includes monitoring changes in laws and regulations related to local flood protection (e.g., National Flood Insurance Program) and updating the Laguna Niguel Municipal Code and/or the City's Emergency Operations Plan, as needed.

Policy PS-3.2: **Maintain and Monitor Flood Capacity.** Coordinate with the Orange County Flood Control District to ensure flood control facilities are properly maintained and functioning. This includes assessing the potential need for increased flood control capacity in response to changing environment and extreme weather, in order to protect the community from flood hazards.

Policy PS-3.3: **Storm Drainage Infrastructure.** Regularly assess and maintain the local storm drainage infrastructure to identify needed improvements and ensure the system is functioning properly.

Policy PS-3.4: **Development in Flood Zones.** Ensure all development projects in designated Special Flood Hazard Zones prone to flooding incorporate design features that minimize health, safety, and property risks both on-site and off-site due to flooding.

Policy PS-3.5: **Flood Control and Stormwater Management.** Ensure development projects comply with state, regional, and local flood control and stormwater runoff requirements and standards.

Policy PS-3.6: **Flood Zone Mapping.** Coordinate with the Federal Emergency Management Agency to ensure that Federal Insurance Rate Maps are current and accurately depict flood hazards in the City.

HWQ-4: Would the project, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Impact Analysis: Refer to Impacts HWQ-1 and HWQ-3 regarding risk of release of pollutants and flood hazards within the Planning Area.

A tsunami is a catastrophic ocean wave, usually caused by a submarine earthquake, an underwater or coastal landslide, or a volcanic eruption. The Planning Area is approximately 0.6 miles from the Pacific Ocean and is not located within a mapped Tsunami Hazard Area. As such, impacts associated with the risk of pollutants from tsunamis is less than significant.

Seiches can occur in bodies of water both near and far from an earthquake epicenter. Seiches as a result of ground shaking could occur in the region that may adversely impact property owners down-gradient from bodies of water in or near the Planning Area. A small portion of the City is located within a dam inundation area of the Sulphur Creek (No. 1012-7) dam, located along La Paz Road. The DSOD categorizes the Sulphur Creek Dam with a "High" downstream hazard potential, meaning dam failure would be expected to cause loss of at least one human life. The Sulphur Creek Dam was given a condition assessment of "Satisfactory," meaning no existing or potential dam safety deficiencies are recognized.

Figure 4.9-4, *Dam Inundation Areas*, shows dam inundation areas within the City. Dam inundation areas associated with Sulphur Creek Dam primarily occur in open space and parks areas, including Laguna Niguel Regional Park, La Paz Sports Park, and Aliso and Woods Canyons Wilderness Park; however, the inundation area also extends into relatively small portions of developed areas including Aliso Creek Road, La Paz Road, and existing commercial uses within Community Profile Area 1. The General Plan Update does not propose changes to land uses within these inundation areas.

The Laguna Niguel Gateway is within the dam inundation area of Upper Oso (No. 2013-0), located within Rancho Santa Margarita, and Lake Mission Viejo (No. 1794-0), located in Mission Viejo. The DSOD categorizes Upper Oso and Lake Mission Viejo as having an "Extremely High" downstream hazard potential, meaning dam failure would be expected to cause considerable loss of human life or would result

in an inundation area with a population of 1,000 or more. Similar to the Sulphur Creek Dam, Upper Oso and Lake Mission Viejo were both given a condition assessment of "Satisfactory."

Potential subsequent development within the Gateway Specific Plan is governed by the previously adopted Gateway Specific Plan. The General Plan Update would not provide for new land uses or development potential beyond what is currently allowed by the Gateway Specific Plan. While potential failure of the Sulphur Creek Dam, Upper Oso, and Lake Mission Viejo could result in inundation of areas within the City, the likelihood of dam failure at these dams is low as the dams are overseen by the DSOD, which regularly monitors and inspects the dams to ensure the facilities do not present unreasonable risks to the public, property, or the environment. The DSOD has not identified existing or potential dam safety deficiencies associated with the Sulphur Creek Dam, Upper Oso, or Lake Mission Viejo, and the proposed Project does not propose actions that could result in a higher likelihood of dam failure at these facilities. Regulations provided in Division 3 of the California Water Code and ongoing oversight performed by the DSOD minimize the potential for dam failure. Additionally, existing and potential development within the Gateway Specific Plan includes water quality measures that reduce the potential risk for pollutants in the event of inundation. Subsequent development would be required to implement all water quality requirements, as discussed in Impact HWQ-1. Therefore, impacts associated with the potential of pollutants being released due to project inundation associated with the General Plan Update would be less than significant.

Mitigation Measures: No mitigation measures are required.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

PUBLIC SAFETY ELEMENT

Policy PS-3.1: **Flood Control Regulatory Compliance.** Ensure that City regulations related to flood control align with federal, state, and county requirements. This includes monitoring changes in laws and regulations related to local flood protection (e.g., National Flood Insurance Program) and updating the Laguna Niguel Municipal Code and/or the City's Emergency Operations Plan, as needed.

Policy PS-3.2: **Maintain and Monitor Flood Capacity.** Coordinate with the Orange County Flood Control District to ensure flood control facilities are properly maintained and functioning. This includes assessing the potential need for increased flood control capacity in response to changing environment and extreme weather, in order to protect the community from flood hazards.

Policy PS-3.3: **Storm Drainage Infrastructure.** Regularly assess and maintain the local storm drainage infrastructure to identify needed improvements and ensure the system is functioning properly.

Policy PS-3.4: **Development in Flood Zones.** Ensure all development projects in designated Special Flood Hazard Zones prone to flooding incorporate design features that minimize health, safety, and property risks both on-site and off-site due to flooding.

Policy PS-3.5: **Flood Control and Stormwater Management.** Ensure development projects comply with state, regional, and local flood control and stormwater runoff requirements and standards.

Policy PS-3.6: **Flood Zone Mapping.** Coordinate with the Federal Emergency Management Agency to ensure that Federal Insurance Rate Maps are current and accurately depict flood hazards in the City.

Level of Significance: Less Than Significant Impact.

HWQ-5: Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Impact Analysis: As described above, the local water quality control plan (Basin Plan) is maintained by the San Diego RWQCB. The Basin Plan is designed to preserve and enhance water quality and protect the beneficial uses of all regional waters. Specifically, the Basin Plan designates beneficial uses for surface and ground waters; sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the State's antidegradation policy; describes implementation programs to protect the beneficial uses of all waters in the region; and describes surveillance and monitoring activities to evaluate the effectiveness of the Basin Plan. The Basin Plan also establishes an implementation program describing the actions by the San Diego RWQCB and others that are necessary to achieve and maintain the designated beneficial uses and water quality objectives of the region's waters.

Qualifying new development and redevelopment projects would be required to be consistent with the Regional MS4 Permit and Laguna Niguel Code Section 6-3-405, *Control of Runoff Discharges*, which requires that all new development and significant redevelopment projects in the City will be undertaken in accordance with the LIP, a WQMP, and any conditions and requirements established by the Community Development Department which are reasonably related to the reduction or elimination of pollutants in runoff from the project site. When permittees and projects comply with the provisions of applicable NPDES permits and water quality permitting, they are consistent with the Basin Plan.

A portion of the Planning Area is underlain by the San Juan Groundwater Basin. The SGMA requires local public agencies and groundwater sustainability agencies in high- and medium-priority basins to develop and implement groundwater sustainability plans or prepare an alternative to a groundwater sustainability plan. As previously discussed, the San Juan Groundwater Basin was designated as very low-priority basin in DWR's SGMA Basin Prioritization report and is not in a condition of critical overdraft. Further, the City's water supply is sourced from imported water and local recycled water and does not rely on groundwater. Subsequent development would connect to the City's water supply system and would not construct on-site wells for use of groundwater. Thus, adoption and implementation of the General Plan Update will not conflict or obstruct a sustainable groundwater management plan; impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

PUBLIC SAFETY ELEMENT

Policy PS-3.5: **Flood Control and Stormwater Management.** Ensure development projects comply with state, regional, and local flood control and stormwater runoff requirements and standards.

4.9.6 CUMULATIVE IMPACTS

Section 3.0, *Basis of Cumulative Analysis*, identifies projected regional growth having the potential to interact with the proposed Project to the extent that a significant cumulative effect may occur. The geographic setting for hydrology and water quality are those projects located within the same watershed, under the jurisdiction of the same RWQCB, and served by OCFCD facilities.

Would the project, combined with other related cumulative projects, violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Impact Analysis:

CONSTRUCTION

Subsequent development consistent with the General Plan Update Land Use Element may involve construction activities that could temporarily increase runoff, erosion, and sedimentation. As previously discussed, any new development within the Planning Area would be required to comply with local, State, and federal regulatory standards, such as the CWA, State Porter-Cologne Act, and Regional MS4 Permit. In compliance with NPDES permit regulations, the State of California requires that any construction activity disturbing one acre or more of soil comply with the Construction General Permit. The General Construction Permit requires development and implementation of a SWPPP and monitoring plan, which must include erosion-control and sediment-control BMPs that would meet or exceed measures required by the Construction General Permit to control stormwater quality degradation due to potential construction-related pollutants. Development within the Planning Area would be required to comply with the City's Runoff Water Quality Control Ordinance, which is designed to effectively prohibit non-stormwater discharges into the storm sewers and to reduce the discharge of pollutants.

As with the proposed Project, related cumulative projects would be required to comply with NPDES Permit regulations, including development and implementation of a SWPPP and monitoring plan that includes erosion-control and sediment-control BMPs on a project-by-project basis to ensure water quality standard or waste discharge requirements would not be violated. Related cumulative development would also be required to comply with any specific water quality and construction regulations adopted by the jurisdiction in which the site is located. Thus, the General Plan Update's incremental effects involving a violation of water quality standards or waste discharge requirements associated with construction activities, would not be cumulatively considerable.

OPERATION

As previously discussed, subsequent development projects, could increase impervious surfaces, resulting in increased stormwater runoff when compared to existing site conditions. Qualifying new development and redevelopment projects would be required to be consistent with the Regional MS4 Permit and applicable local regulations, such as Laguna Niguel Code Section 6-3-405, *Control of Runoff Discharges*, resulting in improved water quality conditions within the Planning Area. Additionally, applicants of qualifying development projects would be required to prepare a WQMP in accordance with the methodologies, standards, and significance thresholds in the City of Laguna Niguel BMP Design Manual and the City's CEQA Manual and implement BMPS to mitigate the project's impacts on receiving water quality and hydromodification, as required by Mitigation Measure HWQ-1.

Similar to the proposed Project, related cumulative development within the RWQCB would be required to be consistent with the Regional MS4 Permit and implement all water quality requirements adopted by the jurisdiction in which the site is located as part of the site development process. Thus, the General Plan Update's incremental effects involving a violation of water quality standards or waste discharge requirements associated with operation activities, would not be cumulatively considerable.

Mitigation Measures: Refer to Mitigation Measure HWQ-1.

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan goals and policies cited above.

Would the project, combined with other related cumulative projects, substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Impact Analysis: As previously discussed, MNWD provides water service to the Planning Area. MNWD does not rely on groundwater. Thus, construction activities associated with subsequent development projects under the General Plan Update, including demolition of the CHFB site, would not involve the use of groundwater. The proposed General Plan Update would direct future development to infill locations; therefore, the General Plan Update, including demolition of the CHFB site, would not significantly impact natural rainwater infiltration and groundwater recharge beyond existing conditions.

Related cumulative development also served by MNWD would not rely on groundwater. As the General Plan Update would not rely on groundwater and would not have an impact on groundwater recharge, the General Plan Update's incremental effect on the potential to substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin during construction would not be cumulatively considerable.

Level of Significance: Less Than Significant Impact.

Mitigation Measures: No mitigation measures are required.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan goals and policies cited above.

Would the project, combined with other related cumulative projects, 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:

- **Result in substantial erosion or siltation on- or off-site;**
- **Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;**
- **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; or**
- **Impede or redirect flood flows?**

Impact Analysis:

EROSION AND SILTATION

Construction

Subsequent development with buildout of the General Plan Update Land Use Element would potentially involve land clearing, mass grading, and other ground-disturbing activities that could temporarily increase soil erosion rates during and shortly after project construction. The greatest onsite erosion risk would occur during construction. Depending upon the location of a specific project site, construction activities, and soil conditions, construction-related erosion could result in the loss of a substantial amount of nonrenewable topsoil and could adversely affect water quality in nearby surface waters. The proposed Project is a planning-level document, and, as such, there are no specific projects identified, except for the assumption that the CHFB site will be demolished as part of a future redevelopment effort. Because of this, the site-specific details of potential subsequent development projects are currently unknown. However, each subsequent project must provide to the City, as part of the development review process, detailed project-specific drainage plans that control storm water runoff and erosion, both during and after construction. Each subsequent project, including the demolition of CHFB site, would also be required to comply with applicable City water quality measures, including the City's Runoff Water Quality Control Ordinance and LIP. Verification of compliance with the applicable City requirements would be required prior to project approval. As such, construction-related activities consistent with buildout of the General Plan Land Use Element would not result in substantial erosion or siltation on- or off-site and impacts would be less than significant.

Similar to the Project, related cumulative development may involve future construction activities that could temporarily increase runoff, erosion, and sedimentation. However, related cumulative development would be required to comply with local, State, and federal regulatory standards, such as the CWA, State Porter-Cologne Act, and Regional MS4 Permit, as well as any local requirements within the

jurisdiction in which the site is located. Therefore, the General Plan Update's incremental effects involving substantially altering 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 result in erosion and siltation on- or off-site associated with construction would not be cumulatively considerable.

Operation

Subsequent development with buildout of the General Plan Update Land Use Element could result in new development and intensification of existing development within the Planning Area. Subsequent development throughout the City, including within the Opportunity Areas, and the Hospitality Overlay site located at Golden Lantern and Camino Del Avion, would primarily occur through infill development and redevelopment of sites that are currently developed and do not contain significant amounts of pervious area. Although development could result in alteration of on-site drainage patterns, due to the developed nature of these areas, it is not likely that new development or redevelopment of these areas would alter the post-construction drainage pattern off-site with the potential to result in substantial erosion or siltation on- or off-site. However, the Hospitality Overlay site, located at Pacific Island Drive and Crown Valley Parkway, is currently undisturbed and undeveloped; therefore, any development within the site would involve the removal on natural vegetated land and result in changes to the existing drainage pattern, which could result in the potential for erosion. The City has specific requirements which state that a project may not cause off-site erosion, either by storm flows or by nuisance flows. Through implementation of existing regulations, erosional/siltation impacts from changes to the existing drainage patterns and increasing impervious surfaces would be less than significant.

Subsequent development within the Planning Area would be subject to the post-construction requirements of the MS4 NPDES permit. Development within the Planning Area would be required to comply with the Laguna Niguel Municipal Code, including Section 6-3-405, *Control of Runoff Discharges*, which requires that all new development and significant redevelopment projects in the City be undertaken in accordance with the LIP, a WQMP, and any conditions and requirements established by the Community Development Department which are reasonably related to the reduction or elimination of pollutants in runoff from the project site. When required by the LIP, prior to issuance of a grading permit, building permit, and/or safety permit for any new development or significant redevelopment, the project applicant is required to prepare and obtain approval of a WQMP prepared in accordance with the LIP to mitigate the impacts of runoff from development projects. Qualifying new development and redevelopment projects in the Planning Area must be approved for the design and implementation of post-construction controls to mitigate stormwater pollution. Discharges that are not authorized by a NPDES permit must be permitted by other means by the San Diego RWQCB or the State Water Resources Control Board (e.g., filing a Report of Waste Discharge, Water Quality Certification).

Similar to the Project, related cumulative projects would be required to comply with the MS4 NPDES permit and assess potential erosion and siltation impacts on a project-by-project basis. In addition to compliance with the Regional MS4 Permit, development would be required to comply with the regulations of the specific jurisdiction in which the site is developed that address erosion. Therefore, the General Plan Update's incremental effects involving substantially altering 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 result in erosion and siltation on- or offsite associated with operations would not be cumulatively considerable.

SURFACE RUNOFF

Construction

As discussed in Impact HWQ-1, grading, excavation, removal of vegetation cover, and loading activities associated with subsequent construction activities could temporarily increase runoff during construction activities. The portions of the Planning Area designated for development are primarily urbanized with limited pervious areas. Subsequent development throughout the City, including within the Gateway Specific Plan, Opportunity Areas, and the Hospitality Overlay site located at Golden Lantern and Camino Del Avion, would primarily occur through infill development and redevelopment of sites that are currently developed and do not contain significant amounts of pervious area. However, the Hospitality Overlay site, located at Pacific Island Drive and Crown Valley Parkway, is currently undisturbed and undeveloped; therefore, any development within the site would involve the removal on natural vegetated land and potentially result in increased surface runoff. As subsequent development and infrastructure projects are considered by the City, each project would be evaluated for conformance with the CBSC, Municipal Code, NPDES permit, and other relevant regulations. Through compliance with the Construction General Permit, including the preparation of a SWPPP, implementation of BMPs appropriate for each major phase of construction, and compliance with applicable City grading regulations, construction of subsequent development would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite. Each subsequent project would also be required to comply with applicable City water quality measures, including the City's Runoff Water Quality Control Ordinance and LIP, as previously described. Verification of compliance with the applicable City requirements would be required prior to project approval. As such, construction-related activities consistent with buildout of the General Plan Land Use Element would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite.

Similar to the proposed Project, related cumulative projects would be evaluated for conformance with the CBSC, NPDES permit, and other relevant regulations, including the specific regulations of the jurisdiction in which the site is located. Individual projects would be reviewed for compliance with the Construction General Permit, including the preparation of a SWPPP, implementation of BMPs appropriate for each major phase of construction, and compliance with applicable jurisdiction-specific grading regulations to ensure that the related cumulative project would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite. Thus, the General Plan Update's incremental effects involving substantially altering 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, result in a substantial increase in the rate or amount of surface runoff in a manner which would result in flooding on- or offsite associated with construction would not be cumulatively considerable.

Operation

Subsequent development with buildout of the General Plan Update Land Use Element could result in new development and intensification of existing development within the Planning Area. Subsequent development throughout the City, including within the Opportunity Areas, and the Hospitality Overlay site located at Golden Lantern and Camino Del Avion, would primarily occur through infill development and redevelopment of sites that are currently developed and do not contain significant amounts of pervious area. Although development could result in alteration of on-site drainage patterns, due to the developed nature of these areas, it is not likely that new development or redevelopment of these areas would alter the post-construction drainage pattern off-site with the potential to substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite. However, the Hospitality Overlay site, located at Pacific Island Drive and Crown Valley Parkway, is currently undisturbed and undeveloped; therefore, any development within the site would involve the removal on natural vegetated land and result in changes to the existing drainage pattern, which could substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. Through the City's development review process, all subsequent development would be required to demonstrate that the amount and velocity of runoff in the proposed developed condition does not exceed the existing or pre-development condition. Through implementation of existing regulations discussed above, runoff would not exceed the capacity of drainage systems, provide substantial additional sources of polluted runoff, or cause flooding impacts from changes to the existing drainage patterns and increased impervious surfaces. Mitigation Measure HWQ-2 requires a project applicant to submit a Hydrology Study to demonstrate that post-development drainage patterns and stormwater runoff flows are designed so as not exceed to existing conditions and will not result in flooding on or- off-site to be reviewed by the City's Community Development Department. Therefore, the proposed General Plan Update would not substantially increase the amount of surface runoff in a manner which would result in flooding on- or offsite.

Similar to the Project, related cumulative projects have the potential to increase impervious surfaces. However, federal, State, and local regulations would require individual projects to provide the on-site storm drain infrastructure and any off-site infrastructure improvements to ensure stormwater runoff is adequately captured and conveyed. Therefore, the General Plan Update's incremental effects involving substantially altering 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 result in a substantial increase in the rate or amount of surface runoff in a manner which would result in flooding on- or offsite associated with operations would not be cumulatively considerable.

STORMWATER DRAINAGE SYSTEMS

Construction

As discussed in Impact HWQ-1, grading, excavation, removal of vegetation cover, and loading activities associated with subsequent construction activities could temporarily increase runoff to stormwater drainage systems during construction activities. The proposed Project is a planning-level document, and, as such, there are no specific projects identified, except for the assumption that the CHFB site will be demolished as part of a future redevelopment effort. As subsequent development and infrastructure

projects are considered by the City, including the demolition of CHFB site, each project would be evaluated for conformance with the CBSC, Municipal Code, NPDES permit, and other relevant regulations. Through compliance with the Construction General Permit, including the preparation of a SWPPP, implementation of BMPs appropriate for each major phase of construction, and compliance with applicable City grading regulations, construction of subsequent development would not 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. Verification of compliance with the applicable City requirements would be required prior to project approval. Implementation of Mitigation Measure HWQ-2 requires preparation of a Hydrology Study to demonstrate that post-development drainage patterns and stormwater runoff flows are designed so as not exceed to existing conditions and will not result in flooding on or- off-site and to determine if the project site is within a regulatory floodplain and evaluate the potential for the proposed development to impede or redirect flood flows. As such, construction-related activities consistent with buildout of the General Plan Land Use Element would not 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.

Similar to the Project, related cumulative development may involve future construction activities that could create or contribute runoff water that would exceed the capacity of the existing or planned stormwater drainage systems. However, related cumulative development would be required to comply with local, State, and federal regulatory standards, such as the CWA, State Porter-Cologne Act, and Regional MS4 Permit, in addition to any local requirements applicable to the site, thereby ensuring that development projects comply with State, regional and local flood control and stormwater runoff requirements and standards Therefore, the General Plan Update's incremental effects involving substantially altering 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 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 associated with construction, would not be cumulatively considerable.

Operation

New development or increased development has the potential to result in changes to the existing drainage patterns resulting in an exceedance of stormwater drainage systems capacity. Subsequent development with buildout of the General Plan Update Land Use Element could result in new development and intensification of existing development within the Planning Area. Through the City's development review process, all subsequent development would be required to demonstrate that the amount and velocity of runoff in the proposed developed condition does not exceed the existing or pre-development condition. As specified in the City's Municipal Code, qualifying development projects would be required to incorporate site-specific LID BMPs into the drainage system, slowing on- and off-site flow rates and decreasing flooding. In addition to compliance with the City's hydrology requirements, project-specific development would be required to implement Mitigation Measure HWQ-1, which requires preparation of a WQMP and Mitigation Measure HWQ-2, which would require preparation of a site-specific Hydrology Study to demonstrate that post-development drainage patterns and stormwater runoff flows are designed so as not exceed to existing conditions and will not result in flooding on or- off-site to

be reviewed by the City's Community Development Department. Therefore, with implementation of Mitigation Measures HWQ-1 and HWQ-2, the proposed General Plan Update would not substantially increase the rate or amount of surface water or create or contribute runoff water that would exceed the capacity of the existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff, and impacts would be less than significant.

Related cumulative development may involve future development that could create or contribute runoff water that would exceed the capacity of the existing or planned stormwater drainage systems. Through the development review process for the jurisdiction in which the site is located, the related cumulative project would be required to demonstrate that the amount and velocity of runoff in the proposed developed condition does not exceed the existing or pre-development condition. Therefore, the General Plan Update's incremental effects involving substantially altering 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 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 associated with operations, would not be cumulatively considerable.

FLOOD FLOWS

As described above and shown in Figure 4.9-3, the City includes several pockets of 100-year flood zones and a few areas within 500-year flood zones in the northern portion of Laguna Niguel. The rest of the City is outside of these flood hazard zones, with a minimal risk of flooding. The General Plan Update does not propose or authorize any specific development project except for the assumption that the CHFB site will be demolished as part of a future redevelopment effort. The CHFB site is not located in a flood hazard zone. Subsequent development projects would be reviewed by the City to determine if they are located within special flood hazard areas and thus subject to additional provisions set forth in Title 9, Division 1, Article 4. Additionally, construction of storm drainage improvements would occur as part of an overall development or infrastructure project and would be considered in the environmental review associated with the specific development being proposed. Additionally, subsequent development would be required to comply with Mitigation Measure HWQ-2, which requires preparation of a Hydrology Study that would document whether a site is located within a regulatory floodplain and if the proposed development would impede or redirect flood flows. Implementation and compliance with existing regulations and compliance with Mitigation Measure HWQ-2 would reduce potential impacts associated with the potential to impede or redirect flood flows to less than significant.

Similar to the Project, related cumulative projects would be required to assess the potential for the project to impede or redirect flood flows on a project-by-project basis. Compliance with the regulatory requirements of the RWQCB and any local regulations related to stormwater and flooding in which the project site is located would be implemented to address potential flooding. Construction of storm drainage improvements would be required as part of an overall development or infrastructure project. Therefore, the General Plan Update's incremental effects involving substantially altering 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 impede or redirect flood flows would not be cumulatively considerable.

Mitigation Measures: Refer to Mitigation Measure HWQ-1 and HWQ-2.

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan goals and policies cited above.

Would the project, combined with other related cumulative projects, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Impact Analysis: The Planning Area includes several pockets of 100-year flood zones and a few areas within 500-year flood zones in the northern portion of Laguna Niguel. The rest of the City is outside of these flood hazard zones, with a minimal risk of flooding.

The Planning Area is approximately 0.6 miles from the Pacific Ocean and is not located within a mapped Tsunami Hazard Area. Portions of the Planning Area are located within mapped dam inundation areas of the Sulphur Creek Dam, Upper Oso, and Lake Mission Viejo. The DSOD has not identified existing or potential dam safety deficiencies associated with the Sulphur Creek Dam, Upper Oso, or Lake Mission Viejo, and the proposed Project does not propose actions that could result in a higher likelihood of dam failure at these facilities. Subsequent development would be required to implement all water quality requirements, as discussed in Impact HWQ-1. Therefore, impacts associated with the potential of pollutants being released due to project inundation associated with the General Plan Update would be less than significant.

Flood impacts are site specific and generally do not combine to result in cumulative impacts. Similar to the Project, related cumulative projects would be reviewed on a project-by-project basis to determine if the specific site is located within a flood hazard, tsunami, or seiche zones, and address the potential for the release of pollutants due to project inundation. Individual related cumulative projects would be required to comply with required water quality measures through compliance with the NPDES permit and jurisdiction-specific requirements. Therefore, the General Plan Update's incremental effects involving sites in flood hazard, tsunami, or seiche zones, to risk release of pollutants due to project inundation would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan goals and policies cited above.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Impact Analysis: As described above, the local water quality control plan (Basin Plan) is maintained by the San Diego RWQCB. The Basin Plan is designed to preserve and enhance water quality and protect the beneficial uses of all regional waters. The Basin Plan also establishes an implementation program

describing the actions by the San Diego RWQCB and others that are necessary to achieve and maintain the designated beneficial uses and water quality objectives of the region's waters.

Qualifying new development and redevelopment projects would be required to be consistent with the Regional MS4 Permit and Laguna Niguel Code Section 6-3-405, *Control of Runoff Discharges*. When permittees and projects comply with the provisions of applicable NPDES permits and water quality permitting, they are consistent with the Basin Plan. A portion of the Planning Area is underlain by the San Juan Groundwater Basin. As previously discussed, the San Juan Groundwater Basin was designated as very low-priority basin in DWR's SGMA Basin Prioritization report and is not in a condition of critical overdraft. Further, the City's water supply is sourced from imported water and local recycled water and does not rely on groundwater. Subsequent development would connect to the City's water supply system and would not construct on-site wells for use of groundwater. Thus, adoption and implementation of the General Plan Update will not conflict or obstruct a sustainable groundwater management plan; impacts would be less than significant.

As with the Project, related cumulative development would be required to be consistent with the Regional MS4 Permit. When permittees and projects comply with the provisions of applicable NPDES permits and water quality permitting, they are consistent with the Basin Plan. Therefore, the General Plan Update's incremental effects involving potential conflict with or obstructing implementation of a water quality control plan or sustainable groundwater management plan would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan goals and policies cited above.

4.9.7 SIGNIFICANT UNAVOIDABLE IMPACTS

Hydrology and water quality impacts associated with the implementation of the General Plan Update would be less than significant. No significant unavoidable hydrology and water quality impacts would occur as a result of the General Plan Update.

4.9.8 REFERENCES

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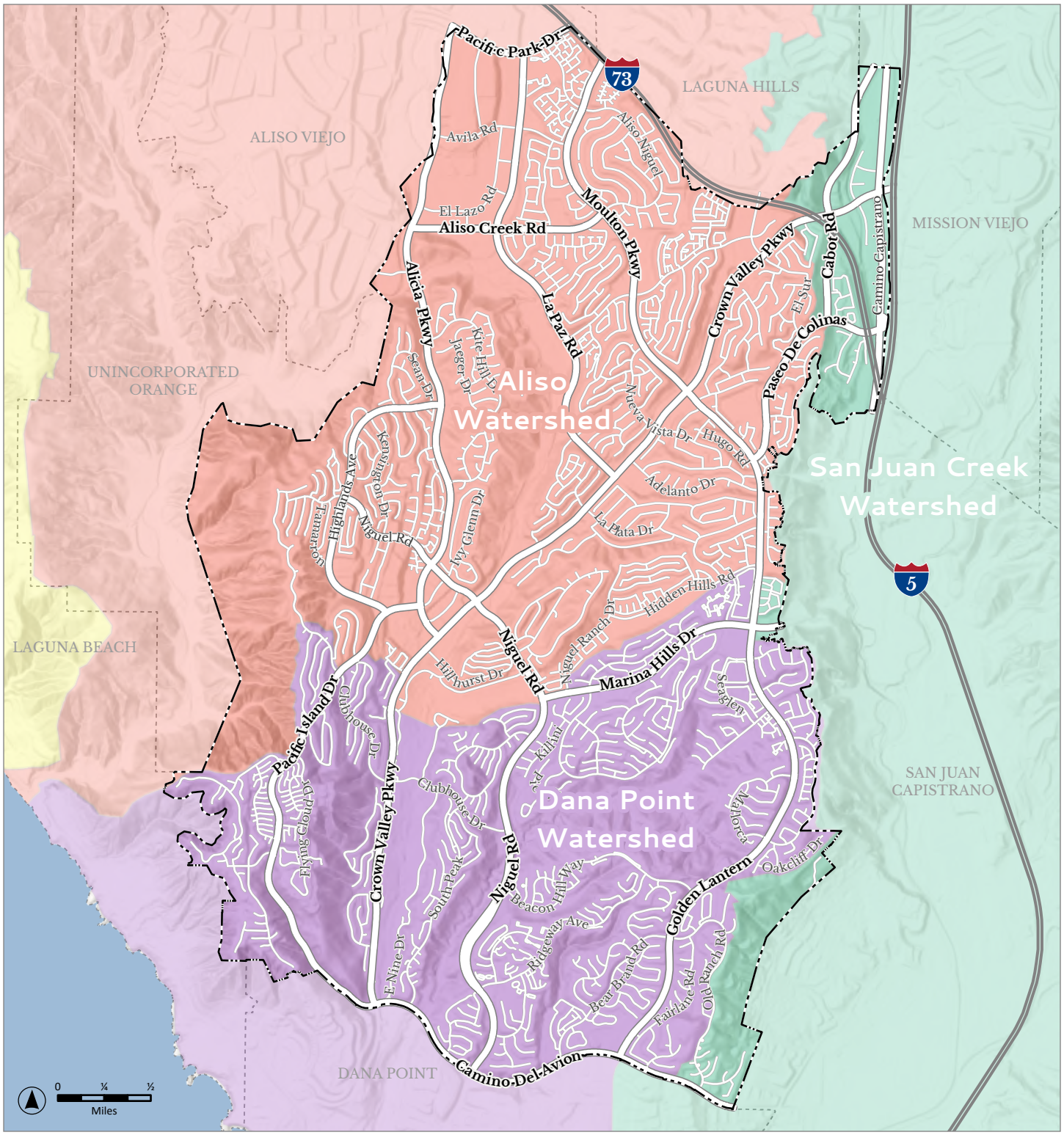

Data sources: Orange County GIS.

Prepared for the City of Laguna Niguel by De Novo Planning Group
May 21, 2024.

LEGEND

Laguna Niguel City Boundary

Other Jurisdictions

Regional Watersheds

- Aliso
- Dana Point
- Laguna Coast
- San Juan Creek

Figure 4.9-1.

Regional Watersheds

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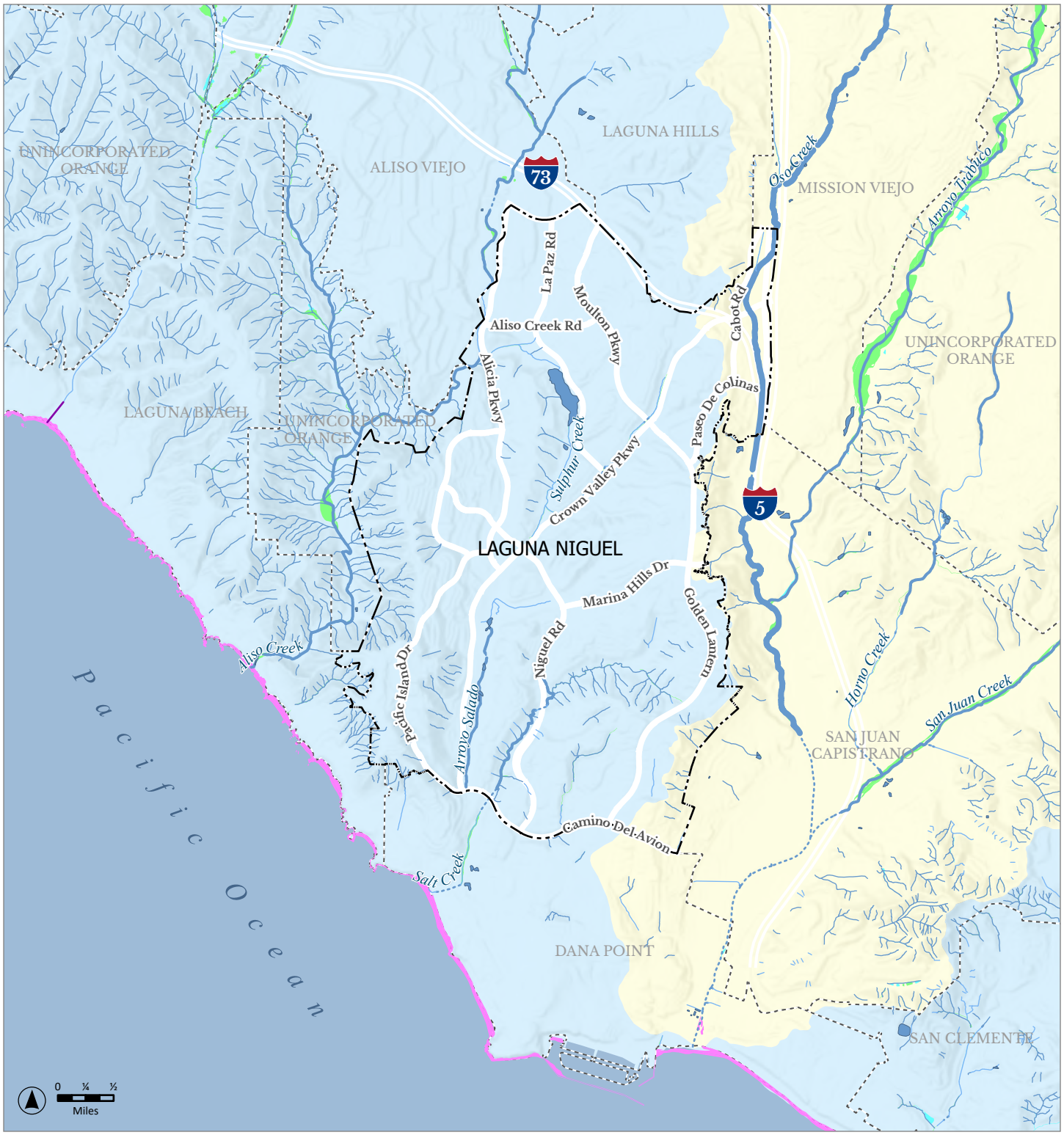

Data sources: USGS Watershed Boundary Dataset and National Wetlands Inventory; City of Laguna Niguel; Orange County GIS.

Prepared for the City of Laguna Niguel by De Novo Planning Group
May 21, 2025

LEGEND

- Laguna Niguel City Boundary

Watersheds (HU-10)

- Aliso Creek-Frontal Gulf of Santa Catalina
- San Juan Creek

Water Features

- Perennial Stream
- Intermittent Stream
- Ephemeral Stream

- Connector/Artificial Path
- Canal/Ditch
- Underground Pipeline
- Lake/Pond/Reservoir

Wetlands

- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland

Figure 4.9-2.

Watersheds and Surface Water

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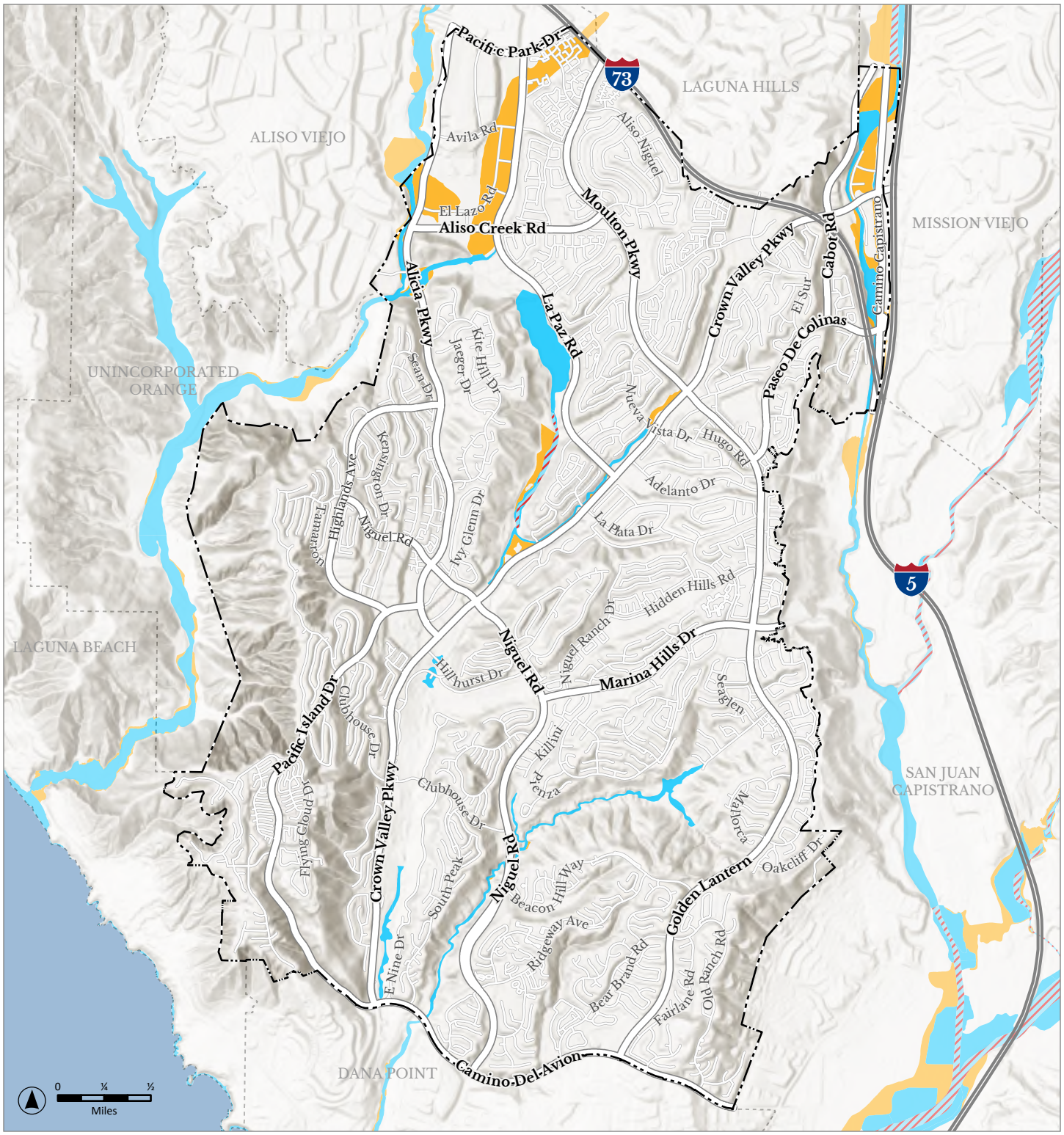

Data sources: FEMA NFHL_06059C 03/12/2021, ; City of Laguna Niguel; Orange County GIS.

Prepared for the City of Laguna Niguel by De Novo Planning Group
May 21, 2025

LEGEND

- Laguna Niguel City Boundary
- Other Jurisdictions
- 100-year Flood Zone
- 500-year Flood Zone
- Regulatory Floodway
- *unshaded* Area of Minimal Flood Hazard

Figure 4.9-3.

FEMA Flood Map

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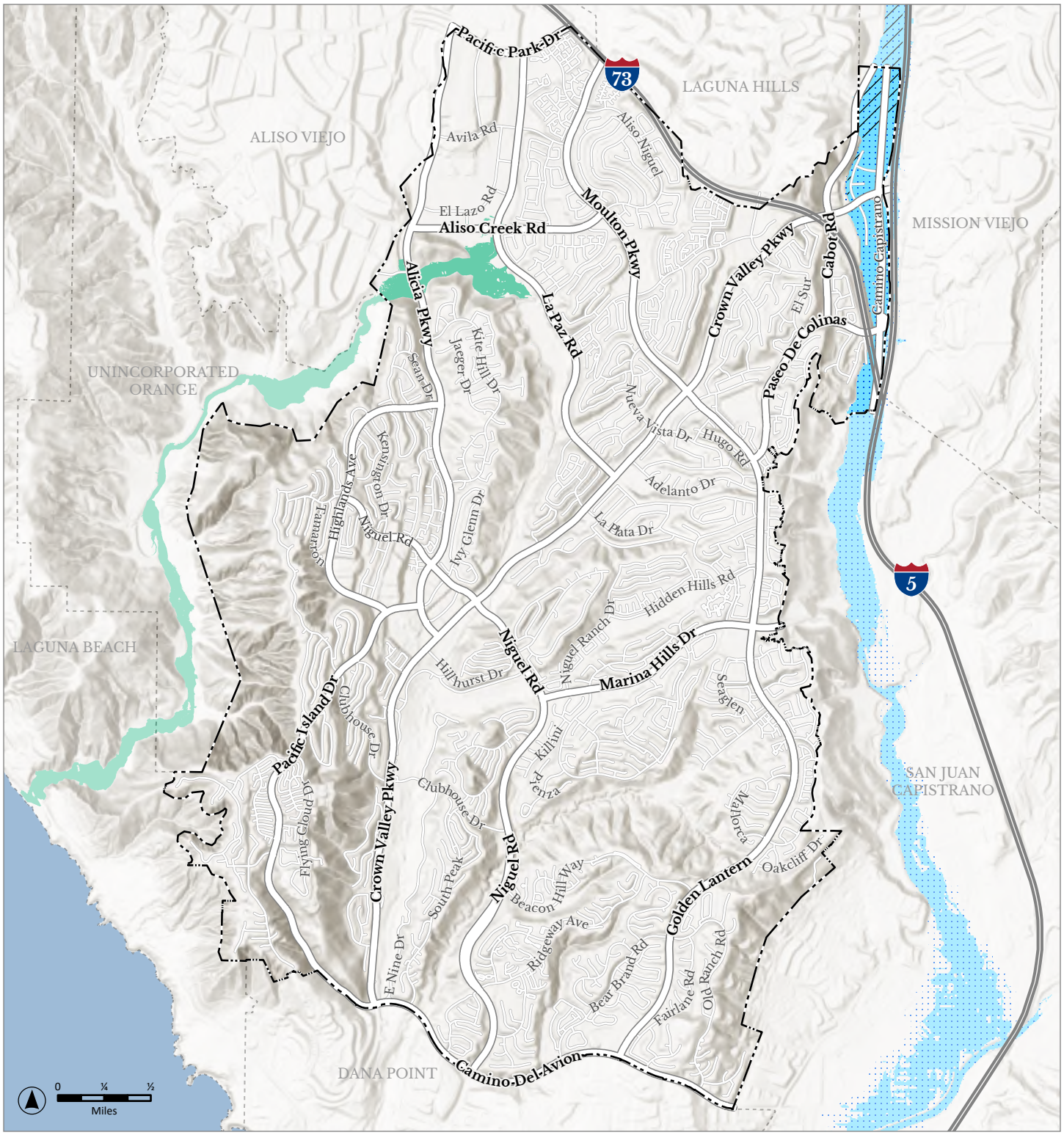

Data sources: DWR Dam Breach Inundation Map 4-1-2023; City of Laguna Niguel; Orange County GIS.

Prepared for the City of Laguna Niguel by De Novo Planning Group
May 21, 2025

LEGEND

- Laguna Niguel City Boundary
- Other Jurisdictions

Inundation Areas

- El Toro Reservoir
- Lake Mission Viejo
- Sulphur Creek
- Upper Oso

Figure 4.9-4.

Dam Inundation Areas

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4.10 LAND USE AND PLANNING

4.10.1 PURPOSE

This section identifies existing land use conditions within the Planning Area and provides an analysis of potential impacts associated with implementation of the General Plan Update.

4.10.2 ENVIRONMENTAL SETTING

A city's limits include the area within the city's corporate boundary, over which the city exercises land use authority and provides public services. A city's Sphere of Influence (SOI) is the probable physical boundary and service area of a local agency, as adopted by a Local Agency Formation Commission (LAFCO). A SOI may include both incorporated and unincorporated areas within which a city or special district will have primary responsibility for the provision of public facilities and services. Laguna Niguel's SOI is coterminous with its City limits. For the purposes of the Laguna Niguel General Plan Update, the Planning Area is defined as the area within the City's corporate boundary. Figure 2-2, *General Plan Planning Area*, in Section 2.0, *Project Description*, shows the Laguna Niguel Planning Area boundary.

LAND USE PATTERNS

When discussing land use, it is important to distinguish between planned land uses and existing land uses. The current General Plan land use designations identify the long-term planned use of land, but do not necessarily present a complete picture of existing (on-the-ground) land uses.

The land use pattern within Laguna Niguel is the result of several master planned communities and specific plans that were approved by the County of Orange over several decades, prior to the City's incorporation in 1989. These Planned Communities (PC) are the Laguna Niguel PC, Country Village PC, Colinas de Capistrano PC, Beacon Hill PC, Bear Brand Hill PC, Bear Brand PC, Narland Business Center PC, and Marina Hills PC. These PC were implemented through Feature Plans, Area Plans, and Site Plans which established specific land uses, development standards, circulation routes, and infrastructure systems.

Figure 4.10-1, *Existing Land Uses*, shows a map of existing on-the-ground land uses in Laguna Niguel. As evident from the map, the City is dominated by parks, open space, and recreation land uses, followed by single-family residential land uses. Most of the residential neighborhoods are concentrated in well-defined areas linked together by parks, greenbelts, and landscape-lined streets. Commercial uses are primarily located along the major corridors, such as Crown Valley Parkway, Golden Lantern, Alicia Parkway, and La Paz Road, as well as within the Gateway Specific Plan area near the I-5 Freeway.

4.10.3 REGULATORY SETTING

STATE

California General Plan Law

Government Code Section 65300 requires that each county and city adopt a General Plan "for the physical development of the county or city, and any land outside its boundaries which bears relation to its planning." The general plan shall address each of the elements specified in Government Code Section 65302 to the extent that the subject of the element exists in the planning area. The State General Plan Guidelines, established by the Governor's Office of Land Use and Climate Innovation to assist local agencies in the preparation of their general plans, further describe the requirements for mandated elements to assist communities in meeting statutory requirements.

California Housing Element Law

The Housing Element is one of the State of California mandated General Plan Elements (California Government Code Sections 65580 to 65589.8). State law requires that the Housing Element consists of, "an identification and analysis of existing and projected housing needs and a statement of goals, policies, quantified objectives, financial resources, and scheduled programs for the preservation, improvement, and development of housing" (Government Code Section 65580).

State law requires that each city and county identify and analyze existing and projected housing needs within its jurisdiction and prepare goals, policies, and programs to further the development, improvement, and preservation of housing for all economic segments of the community, commensurate with local housing needs.

Subdivision Map Act

A subdivision is any division of land for the purpose of sale, lease, or finance. The State of California Subdivision Map Act (Government Code Section 66410) regulates subdivisions throughout the State. The goals of the Subdivision Map Act are as follows:

- To encourage orderly community development by providing for the regulation and control of the design and improvement of a subdivision with proper consideration of its relationship to adjoining areas.
- To ensure that areas within the subdivision that are dedicated for public purposes will be properly improved by the subdivider so that they will not become an undue burden on the community.
- To protect the public and individual transferees from fraud and exploitation.

The Subdivision Map Act allows cities flexibility in the processing of subdivisions. Laguna Niguel controls this process through its Subdivision Code (Laguna Niguel Municipal Code Title 9, Division 1, Article 3). Regulations ensure that minimum requirements are adopted to provide for orderly growth and development, the provision of necessary public and private facilities, and public health, safety, and general welfare.

REGIONAL

Southern California Association of Governments

Regional planning agencies, such as the Southern California Association of Governments (SCAG), recognize that planning issues extend beyond the boundaries of individual cities. Efforts to address regional planning issues, such as affordable housing, transportation, and air pollution, have resulted in the adoption of regional plans that affect the Planning Area.

SCAG has evolved as the largest council of governments in the United States, functioning as the Metropolitan Planning Organization (MPO) for six counties (Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial) and 191 cities. The region encompasses an area of more than 38,000 square miles. As the designated MPO, the federal government mandates SCAG research and develop plans for transportation, growth management, hazardous waste management, and air quality. As a result, SCAG prepares comprehensive regional plans to address concerns.

SCAG is responsible for the maintenance of a continuous, comprehensive, and coordinated planning process resulting in a Regional Transportation Plan (RTP) and a Regional Transportation Improvement Program. SCAG is responsible for development of demographic projections and is also responsible for development of the integrated land use, housing, employment, transportation programs, measures, and strategies for the Air Quality Management Plan.

Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)

The passage of California Senate Bill (SB) 375 in 2008 requires that an MPO, such as SCAG, prepare and adopt a Sustainable Communities Strategy (SCS) that sets forth a forecasted regional development pattern which, when integrated with the transportation network, measures, and policies, will reduce greenhouse gas (GHG) emissions from automobiles and light duty trucks (Government Code Section 65080(b)(2)(B)). The SCS outlines certain land use growth strategies that provide for more integrated land use and transportation planning and maximize transportation investments. The SCS is intended to provide a regional land use policy framework that local governments may consider and build upon.

Every four years, SCAG updates the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), as required by federal and State regulations. On April 4, 2024, SCAG's Regional Council adopted the 2024-2050 RTP/SCS.[1] The 2024-2050 RTP/SCS is a long-term plan for the southern California region that details investment in the transportation system and development in communities. SCAG worked closely with local jurisdictions to develop the 2024-2050 RTP/SCS, which incorporates current demographics and anticipated future population, household, and employment growth patterns based, in part, upon local growth forecasts, projects and programs, and includes complementary regional policies and initiatives. The 2024-2050 RTP/SCS outlines a forecasted development pattern that demonstrates how the region can sustainably accommodate needed housing. In addition, the 2024-2050 RTP/SCS is

[1] Southern California Association of Governments, *Connect SoCal: 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy*, adopted April 4, 2024.

supported by a combination of transportation and land use strategies that outline how the region can achieve California's GHG-emission-reduction goals and federal Clean Air Act requirements.

Growth Forecasts

SCAG's 2024-2050 RTP/SCS regional growth forecast projects growth in population, households, and employment at the regional, county, jurisdictional, and sub-jurisdictional levels to 2050. The regional and county-level growth forecasts reflect recent and past trends and expert-derived demographic and economic assumptions. The socio-economic estimates and projections are used by federal and State mandated long-range planning efforts such as the RTP, Air Quality Management Plan, Regional Transportation Improvement Program, and the Regional Housing Needs Assessment (RHNA). SCAG's adopted regional growth forecasts are used to assess a project's consistency with adopted plans that have addressed growth management from a local and regional standpoint; refer to Section 5.3, *Growth-Inducing Impacts*.

Intergovernmental Review

SCAG's Intergovernmental Review Program is responsible for providing informational resources to regionally significant plans, projects, and programs, per the California Environmental Quality Act (CEQA) Guidelines, to facilitate the consistency of these projects with SCAG's adopted regional plan. The criteria for projects of regional significance are outlined in CEQA Guidelines Sections 15125 and 15206. The proposed Project is considered regionally significant.

Local Agency Formation Commission of Orange County

In 1963, the State Legislature created a Local Agency Formation Commission (LAFCO) for each county, with the authority to regulate local agency boundary changes. Subsequently, the State has expanded LAFCO authority. The goals of LAFCO include preserving agricultural and open space land resources and providing for efficient delivery of services. Orange County LAFCO has authority over land use decisions in the County of Orange affecting local agency boundaries. Its authority extends to the incorporated cities, including annexation of county lands into a city, and special districts within the County. The western portion of the City of Laguna Niguel is adjacent to an unincorporated area of Orange County; refer to Figure 2-2.

In addition, LAFCO conducts Municipal Service Reviews (MSRs) for services within its jurisdiction. An MSR typically includes a review of existing municipal services provided by a local agency and their infrastructure needs and deficiencies. It also evaluates financing constraints and opportunities, management efficiencies, opportunities for rate restructuring and shared facilities, local accountability and governance, and other issues.

City of Laguna Niguel General Plan

The City of Laguna Niguel's first General Plan was adopted in 1992. Except for the Housing and Land Use Elements, most of the elements are original per the 1992 adoption. The 1992 General Plan contains the following State-mandated and optional elements:

- Land Use
- Open Space and Parks
- Circulation
- Public Facilities
- Noise
- Seismic/Public Safety
- Housing
- Growth Management
- Community Service Standards

The General Plan is a planning document consisting of goals and policies to guide city growth and development for the immediate future. The City's existing General Plan Land Use Map (Figure 2-3) identifies land use designations within the Planning Area. These land use designations identify the types and nature of development allowed throughout the City. There are nine broad categories of land use designations listed and described below. Some parcels have more than one designation (where essentially two designations are combined and both applicable to a parcel), as shown on Figure 2-3.

1. **Residential Detached:** Intended to provide for the development of one detached single-family dwelling unit per individual lot/parcel.
2. **Residential Attached:** Intended to provide for the development of attached single-family residential dwelling units, as well as multi-family attached townhomes, apartments, and condominium projects on a single or multiple legal lots/parcels.
3. **Neighborhood Commercial:** Intended to provide for a variety of neighborhood-serving commercial uses. A typical neighborhood commercial center (generally between one and 10 acres) consists of several small retailers, restaurants, and/or personal service uses that provide daily convenience goods and services.
4. **Community Commercial:** Intended to provide for a diverse range of commercial uses serving the entire community. Community commercial centers are larger planned shopping complexes which provide a broader range of goods and services and serve a greater trade area than neighborhood centers.
5. **Professional Office:** Intended to provide for professional offices, corporate headquarters, research and development, and administrative offices. Other uses that are determined to be compatible with the primary use, such as limited supporting retail operations may also be allowed.
6. **Public/Institutional:** Intended to provide for a wide range of public, quasi-public, and special purpose facilities that provide various governmental or social services to the community.
7. **Parks and Recreation:** Intended to provide for active recreational uses and activities within open space areas. Such uses include ballfields and other playing fields; active parks; sports courts and playgrounds; and community and neighborhood recreational facilities. Passive recreational activities may also be included as an ancillary part of the recreation complex. In selected situations, cultural facilities such as theaters, museums, or other similar specialized uses with a recreational value may fit with this designation.
8. **Open Space:** Intended to preserve areas for passive recreation, visual enhancement, or resource conservation. These areas may include natural resources, undeveloped canyons and hillsides, landscaped slopes or buffers, and trails. Active sports or other organized recreational activities

are generally discouraged in these areas. This designation includes those areas of the community that are primarily open and unimproved, except for recreational, or other public use features, such as trails, view areas, benches, and picnic tables.

9. **Industrial/Business Park:** Intended to provide for a variety of compatible light manufacturing, wholesaling and office uses supportive of a contemporary business center environment.

Community Profile and Sub-profile Areas

For comprehensive planning purposes, the existing General Plan divides Laguna Niguel into 14 Community Profile Areas and 103 Sub-profile Areas. The 14 Community Profile Areas were delineated based on factors such as land use types, neighborhoods, major streets, natural features, homeowners' association boundaries, and Traffic Analysis Zones (TAZ). The current Community Profile Map for the City is presented in Figure 2-4. The Land Use Chapter of the existing General Plan includes summaries of existing and projected development buildout for each Sub-profile Area. Development applications that exceed the land use limits within their respective Sub-profile Area require a General Plan Amendment.

2021-2029 Housing Element

The City's 2021-2029 Housing Element was certified by the Department of Housing and Community Development (HCD) on February 22, 2024. The 2021-2029 Housing Element identifies policies and programs guided by the following goals:

- **Goal 1:** Provide a diversity of housing opportunities that satisfy the physical, social, and economic needs of existing and future residents of Laguna Niguel; and
- **Goal 2:** Maintain equal housing opportunities for all residents in Laguna Niguel.

City of Laguna Niguel Zoning Ordinance

The City's Zoning Ordinance (Zoning Code) is codified in Title 9, *Planning and Zoning*, of the Laguna Niguel Municipal Code. The Zoning Code is intended to guide the development of the City in an orderly manner, implement the policies of the General Plan, protect and enhance the quality of the natural and built environment, promote the public health, safety and general welfare by regulating the use of land and buildings and the location and basic form of structures, and provide the physical, environmental, economic, and social advantages that result from the orderly planned use of land resources.

Municipal Code Section 9-1-114, *Discretionary Permit Procedures*, provides specific procedures for the review of individual types of discretionary permits, such as site development permits, use permits, and others.

Per Section 9-1-114.1, *Site Development Permits*, a site development permit is required for all projects which involve the construction of or alteration to any structure or as otherwise required in the zoning code, except for construction of or alterations to single family homes or associated accessory structures, unless a site development permit is required by another applicable discretionary permit or by a specific provision of the Zoning Code; individual signs; temporary uses; or where the director determines that another type of permit, (such as a use permit, minor adjustment, etc.) serves the same purpose. The required findings for approval of a Site Development Permit are as follows:

1. *Consistency with general plan*. The project is consistent with the General Plan.
2. *Consistency with zoning code*. The project is consistent with the provisions of the Zoning Code.
3. *Compliance with CEQA*. Processing and approval of the permit application are in compliance with the requirements of CEQA.
4. *Consistency with design standards*. The project is consistent with the goal and objectives of the community design standards as set forth in Section 9-1-91.2 of the Municipal Code.
5. *Surrounding uses*. Approval of the application will not create conditions materially detrimental to the public health, safety, and general welfare or injurious to or incompatible with other properties or land uses in the vicinity.

Section 9-1-114.2, *Use Permits and Minor Use Permits*, includes findings required for approval of a use permit and minor use permit, which are required for certain land uses identified in the Zoning Code. Approval of a project requiring a use permit or minor use permit requires the reviewing body to find that:

1. *Consistency with general plan*. The use is consistent with the General Plan.
2. *Consistency with zoning code*. The use is consistent with the provisions of the Zoning Code.
3. *Compliance with CEQA*. Processing and approval of the permit application are in compliance with the requirements of CEQA.
4. *Consistency with design standards*. If development is provided for under the use permit, the project is consistent with the goal and objectives of the community design guidelines as set forth in Subarticle 9 of the Zoning Code.
5. *Surrounding Uses*. Approval of the application will not create conditions materially detrimental to the public health, safety, and general welfare or injurious to or incompatible with other properties or land uses in the vicinity.

Section 9-1-116, *Coastal Development Permits*, sets forth procedures for discretionary review within the City's coastal zone, pursuant to the City's certified Local Coastal Program (LCP). Approval of a coastal development permit requires the reviewing body to find that:

1. *Compliance with local coastal program*. The finding shall be made that the development project proposed by the application conforms with the certified local coastal program.
2. *Variances to comply with land use plan*. In addition to the findings required for a variance by section 9-1-114.3, the following finding shall also be made: "Approval of the application will result in no modification to the requirements of the certified land use plan."

Laguna Niguel Gateway Specific Plan

The Laguna Niguel Gateway Area (Gateway Area) consists of approximately 300 acres located in the northeast corner of the City near the I-5 Freeway and includes the Laguna Niguel/Mission Viejo Metrolink transit station. This area is governed by the Laguna Niguel Gateway Specific Plan (Gateway Specific Plan),

originally adopted in 1999. At the time of the Gateway Specific Plan's original adoption, the area allowed a combination of commercial, business park, light industrial, and public institutional uses. In November 2011, to spur redevelopment, the Gateway Specific Plan was updated to additionally allow transit-oriented multi-family residential and mixed use development.

The Gateway Specific Plan defines the overall vision, goals, policies, land use regulations, development standards, and design guidelines for the Gateway Area. The Gateway Specific Plan contains regulations, development standards, and design guidelines related to land use and urban form, mobility, infrastructure, streetscape, and architectural design.

Local Coastal Programs/Specific Plans

Laguna Niguel's Local Coastal Program (LCP) is comprised of two Orange County adopted Local Coastal Programs, the South Laguna Specific Plan, and the Aliso Creek Specific Plan. Presently, Laguna Niguel's corporate boundaries include portions of these two specific plan areas. Additionally, the Aliso Creek Specific Plan incorporates by reference policies from the Country Village Planned Community and the Laguna Niguel Planned Community for the portions of these two planned communities that are located within the coastal zone.

After incorporation, the City requested that the California Coastal Commission certify those applicable portions of the previously certified South Laguna and Aliso Creek Specific Plans/Local Coastal Programs, as a single City LCP. No changes to the policies, land use designations, implementation actions or maps of the previously certified LCPs occurred. On November 14, 1990, the California Coastal Commission certified the Laguna Niguel Local Coastal Program.

City of Laguna Niguel CEQA Manual

The City of Laguna Niguel CEQA Manual provides the City and project applicants with local guidelines, procedures, requirements, and thresholds of significance for the environmental review process within the City of Laguna Niguel consistent with the California Environmental Quality Act (Public Resources Code [PRC] Section 21000 et seq.), referred to as "CEQA" or "CEQA Statutes," and the State CEQA Guidelines (Title 14, California Code of Regulations (CCR), Division 6, Chapter 3, Section 15000 et seq.). The City's CEQA Manual applies to all public and private projects under the jurisdiction of the City of Laguna Niguel that constitute a "project" and therefore subject to CEQA review.

4.10.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

CEQA Guidelines Appendix G contains the Initial Study Environmental Checklist, which includes questions related to land use and planning. The City relies on the questions included in Appendix G as the thresholds of significance for assessing impacts related to land use and planning (City of Laguna Niguel CEQA Manual, Revised February 24, 2023). A significant impact will occur if implementation of the proposed Project will:

- Physically divide an established community (refer to Impact Statement LU-1); and
- Conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect (refer to Impact Statement LU-2).

4.10.5 IMPACTS AND MITIGATION MEASURES

LU-1: Would the project physically divide an established community?

Impact Analysis: The Project is a comprehensive update to the City of Laguna Niguel's existing General Plan. The proposed General Plan Update establishes Laguna Niguel's vision for future growth and development. Proposed Land Use Element Goal LU-1 of the General Plan Update aims to "*[e]stablish a balanced land use pattern that integrates residential, commercial, and employment uses with open space and public services to support a vibrant, sustainable community that offers a high quality of life*."

The proposed Land Use Map (Figure 2-5) identifies land use designations for each parcel in the Planning Area. While the General Plan Update proposes revisions to the existing Land Use Map, the revisions are intended to preserve, protect, and enhance existing residential neighborhoods and open space and recreational areas. The proposed General Plan Update Land Use Element continues to separate Laguna Niguel into 14 Community Profile Areas to facilitate a manageable approach to community planning and land use implementation. The delineation of the 14 Community Profile Areas was based upon factors such as land use types, planning area boundaries, major streets, natural features, homeowners' association boundaries, and the Orange County Transportation Authority (OCTA) TAZ regional transportation modeling system. Additionally, the General Plan Update Land Use Element identifies three Opportunity Areas for targeted growth and a Hospitality Overlay that could accommodate future high-quality hotels. However, no specific developments are proposed. As noted, the delineation of the Community Profile Areas for planning purposes is a continuation from the existing General Plan and the inclusion of Opportunity Areas the Hospitality Overlay would not physically divide an established community. Overall, the proposed Project would provide new development and redevelopment opportunities to support the community's vision for development consistent with the General Plan Update and California Housing Element Law, including accommodating the City's 2021-2029 RHNA allocation.

The proposed modifications to the circulation plan would involve improvements to existing intersections and a roadway segment. The proposed improvements are intended to accommodate future growth associated with buildout of the General Plan Update Land Use Element and would not include the construction of new roadways or barriers with the potential to physically divide an established community. The modifications to the circulation plan also include three amendments to the Master Plan of Arterial Highways (MPAH). Two amendments (La Paz Road and Golden Lantern) would reduce the number of travel lanes from those shown on the MPAH and would not physically divide an established community. The third amendment to the MPAH includes the removal of the extension of Camino Los Padres from its current terminus to Camino Capistrano. The removal of this roadway segment would also not physically divide a community nor isolate a portion of the community. Further, the General Plan Update does not propose significant infrastructure or improvements to existing infrastructure systems or development of new uses that would have the potential to physically divide an established community.

As stated, no specific development projects are proposed as part of the General Plan Update; however, it is assumed the Chet Holifield Federal Building (CHFB) would be demolished as part of future redevelopment effort. The CHFB site is predominately separated from other development by existing roadways that surround the site. Due to the siting of the CHFB and large expanses of parking areas, as

well as the characteristics of the building and its former use, it is not integrated into the surrounding community, nor does it operate in conjunction with the neighboring uses. Thus, demolition of the CHFB would not physically divide an established community.

Subsequent development with buildout of the General Plan Update Land Use Element would be subject to the City's development standards, site plan and/or design review process to ensure site-specific development would not contain features that physically divide an established community. Specifically, the Zoning Ordinance, Gateway Specific Plan, and LCP, as applicable, would regulate development within the City to ensure consistency with the General Plan and compatibility with surrounding uses. As such, the proposed General Plan Update would have a less than significant impact associated with the physical division of an established community.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

LAND USE ELEMENT

Policy LU-4.1 **Preserve Single-Family Neighborhoods.** Focus growth to underutilized parcels within Opportunity Areas, reducing development pressure on established single-family residential neighborhoods.

Policy LU-4.2 **New Development Sensitivity.** Ensure new development projects are sensitively designed to complement surrounding low-density residential neighborhoods, including architectural character, appropriate building massing and scale, and minimizing any operational impacts on the surrounding area.

LU-2: Would the project conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Impact Analysis:

STATE PLANS

The proposed General Plan Update was prepared in conformance with State laws and regulations associated with the preparation of general plans, including requirements for environmental protection. Discussion of the proposed General Plan's consistency with State regulations, plans, and policies associated with specific environmental issues (e.g., air quality, transportation, water quality, etc.) is provided in the relevant chapters of this EIR. The State would continue to have authority over any State-owned lands in the vicinity of the City, and the proposed General Plan Update would not conflict with continued application of State land use plans, policies, and regulations adopted to avoid or mitigate environmental effects.

REGIONAL PLANS

SCAG reviews environmental documents for regionally significant projects for their consistency with the adopted RTP/SCS. SCAG refers to CEQA Guidelines Section 15206, *Projects of Statewide, Regional or Areawide Significance*, in determining whether a project meets the criteria to be deemed regionally significant. The following criterion is relevant to the Project:

> *Criterion 1: A proposed local general plan, element, or amendment thereof for which an EIR was prepared.*

The proposed Project involves components specified in Criterion 1, as the General Plan Update is a comprehensive update of the City of Laguna Niguel's existing General Plan. Therefore, the Project is considered regionally significant.

SCAG's 2024-2050 RTP/SCS provides a framework for regional land use and transportation policy within the SCAG region through the horizon year of 2050. SCAG's 2024-2050 RTP/SCS goals, policies, and strategies were adopted to help focus future investments on the best-performing projects and strategies to preserve, maintain, and optimize the performance of the existing transportation system. The goals of the 2024-2050 RTP/SCS fall into four core categories:

- Mobility – Build and maintain an integrated multimodal transportation network;
- Communities – Develop, connect, and sustain communities that are livable and thriving;
- Environment – Create a healthy region for the people of today and tomorrow; and
- Economy – Support a sustainable, efficient, and productive regional economic environment that provides opportunities for all residents.

An analysis of the proposed Project's consistency with the relevant SCAG 2024-2050 RTP/SCS goals adopted for the purpose of avoiding or mitigating an environmental effect is provided in Section 4.7, *Greenhouse Gas Emissions*, Table 4.7-3, *Project Consistency with the 2024-2050 RTP/SCS*. As demonstrated in Table 4.7-3, the Project would be consistent with SCAG's regional planning efforts and a less than significant impact would occur in this regard.

LOCAL PLANS

As set forth by State law, the General Plan serves as the primary planning document for the City and subordinate documents and plans would be updated to be consistent with the General Plan. The proposed General Plan is intended to be an expression of the community's vision for the City and constitutes the policy and regulatory framework by which future development projects will be reviewed and public improvements will be implemented.

The proposed General Plan Update focuses on a balanced land use pattern that integrates residential, commercial, and employment uses with open space and public services. The General Plan Update proposed Land Use Plan and policies are guided by the following principles: thriving community; strong and resilient economy; environmental stewardship; connecting people and places; and innovation for a better future. The proposed General Plan Update carries forward and enhances the intent of policies from the existing General Plan intended for environmental protection, and would not remove or conflict with City plans, policies, or regulations adopted for environmental protection.

The General Plan Update in and of itself would not conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. The City's General Plan establishes the land use plan and policies for development and growth in the City, and the Municipal Code provides regulations for the purpose of avoiding or mitigating an environmental effect. While no specific development projects are proposed as part of the Laguna Niguel General Plan Update, except for the assumption that the CHFB would be demolished as part of a future redevelopment effort, the General Plan would accommodate future growth in Laguna Niguel, including but not limited to new businesses, expansion of existing businesses, and new residential uses. The potential environmental impacts associated with the demolition of the CHFB site and buildout of the General Plan Update Land Use Element have been analyzed throughout this EIR.

More specifically, the General Plan EIR evaluates the maximum development that could occur within the Planning Area, which includes complete buildout of the Maximum Development Intensities (MDIs) including the Hospitality Overlays, and complete implementation of the Opportunity Area Overlays. To ensure that development within these targeted growth areas aligns with the broader community vision, the base land use designation requirements govern each area, but additional development potential defined and facilitated by the overlay designation may be accessible if specific criteria are met, as outlined in Section 2.0, *Project Description*. Separate legislative action would be required to realize the development potential of the three Opportunity Area Overlays. Such actions, specific to the Opportunity Area Overlays, would be required to meet the criteria outlined in the proposed General Plan Update Land Use Element. As such, both the base land use designations and future application of the Opportunity Area Overlays would be consistent with the General Plan Update.

The proposed General Plan Update Circulation Plan is designed to accommodate the future growth outlined in the General Plan Update Land Use Element while maintaining an efficient roadway network at acceptable levels of service. Table 2-16, *Planned Transportation Improvements*, in Section 2.0, *Project Description*, identifies the proposed changes to existing roadways and intersections to maintain internal consistency with Mobility Element Policy M-1.6 Level of Service and the proposed Land Use Element. Policy M-1.6 states "Ensure the roadway network supports existing and planned developments while maintaining acceptable vehicle Levels of Service across roadways and intersections. For qualifying development projects, ensure the preparation of a Traffic Impact Study, including Level of Service analyses, in accordance with the City's Transportation Assessment Guidelines. Projects determined to adversely affect the transportation system may require adjacent infrastructure improvements and/or fair-share payment contributions for system-wide improvements." The Laguna Niguel General Plan Update Traffic Study (January 7, 2025) was prepared by Linscott, Law & Greenspan, Engineers to assess level of service (LOS) at key study intersections and roadway segments for proposed General Plan Update buildout conditions. The analysis determined that the study intersections and roadway segments would operate at acceptable service levels with the planned transportation improvements (Table 2-16), consistent with Policy M-1.6.

Subsequent site-specific development and infrastructure projects would be reviewed for consistency with the proposed General Plan Update policies and other applicable plans, policies, standards, and regulations, including those land use plans, policies, and regulations adopted to mitigate environmental effects by the City, as well as those adopted by agencies with jurisdiction over components of future

development projects to ensure the specific projects would not conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Thus, impacts would be less than significant.

Level of Significance: Less Than Significant Impact.

Mitigation Measures: No mitigation measures are required.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

LAND USE ELEMENT

Policy LU-1.10: Sustainable Development Practices. Implement policies that encourage the efficient use of land and infrastructure to reduce environmental impacts and support long-term community sustainability.

Policy LU-1.12: Residential and Non-Residential Capacities. Ensure the levels of residential and non-residential building development remain within the established baseline General Plan buildout limits (Maximum Development Intensities – MDIs) for the Sub-profile Areas.

4.10.6 CUMULATIVE IMPACTS

Section 3.0, *Basis of Cumulative Analysis*, identifies projected regional growth having the potential to interact with the proposed Project to the extent that a significant cumulative effect may occur. The geographic setting for land use and planning considers the SCAG region.

Would the project, combined with other related cumulative projects, physically divide an established community?

Impact Analysis: As discussed above, the land uses allowed under the proposed General Plan Update provide opportunities for growth and redevelopment within targeted growth areas but would not create physical division within the community. The proposed General Plan Update does not propose any new roadways, infrastructure, or other features that would physically divide an existing community within the Planning Area or combine with related cumulative projects. Subsequent development projects in Laguna Niguel and related cumulative projects within the SCAG region would be assessed for land use impacts, including the potential to physically divide an established community, on a project-by-project basis. As the General Plan Update would not physically divide an established community, the General Plan Update's incremental effects associated with the potential to physically divide an established community would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan goals and policies, cited above.

Would the project, combined with other related cumulative projects, 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?

Impact Analysis: The proposed General Plan Update was prepared in conformance with State laws and regulations associated with the preparation of general plans, including requirements for environmental protection. As demonstrated above, the proposed Project would not cause a significant environmental impact due to a conflict with a land use plan, policy, or regulation adopted for the purposes of avoiding or mitigating an environmental effect. The proposed General Plan Update includes policies intended for environmental protection, and would not conflict with local plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect. The General Plan Update is specific to guiding growth and development within the City of Laguna Niguel.

Similar to future development associated with the proposed Project, related cumulative projects in the SCAG region would be evaluated for consistency with each project site's applicable land use designation and zoning and other applicable plans for the purpose of avoiding or mitigating an environmental effect. As analyzed above, the proposed Project would not 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. Thus, the proposed Project's incremental effects associated with the potential to 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 would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan goals and policies cited above.

4.10.7 SIGNIFICANT UNAVOIDABLE IMPACTS

Land use and planning impacts associated with the implementation of the General Plan Update would be less than significant. No significant unavoidable land use and planning impacts would occur as a result of the General Plan Update.

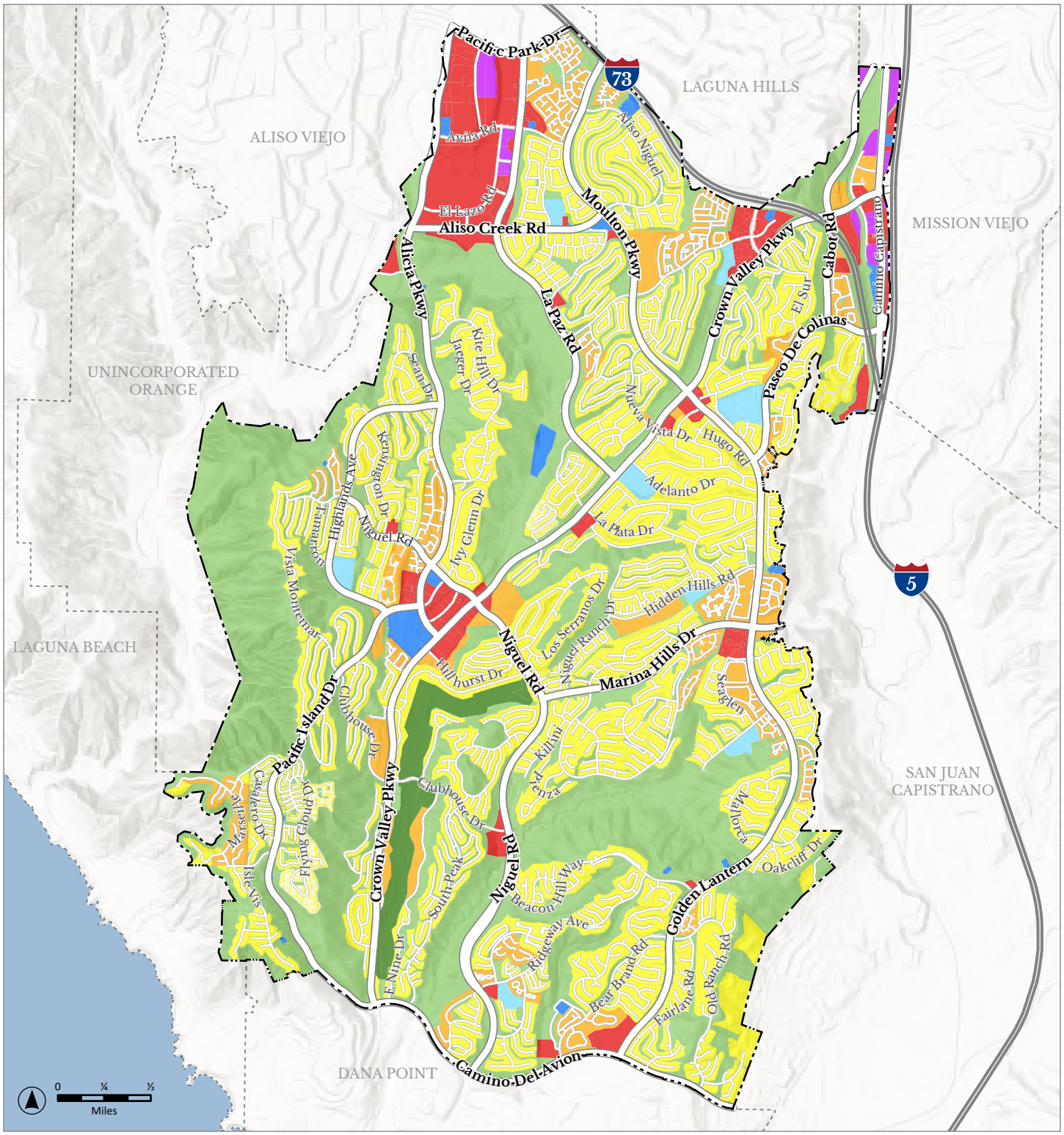
4.10.8 REFERENCES

City of Laguna Niguel, *Housing Element 2021-2029*, adopted December 5, 2023 (revised February 2024).

California Department of Finance (DOF), *E-5 Population and Housing Estimates for Cities, Counties, and the State, January 2020-2024 with 2020 Census Benchmark*, May 2024.

Linscott, Law & Greenspan, Engineers. *Laguna Niguel General Plan Update Traffic Study.* January 7, 2025.

Southern California Association of Governments, *Connect SoCal: 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy*, adopted April 4, 2024.



Data sources: Orange County GIS; ParcelQuest; Google Maps and Imagery.

Prepared for the City of Laguna Niguel by De Novo Planning Group
February 14, 2025.

LEGEND

- Laguna Niguel City Boundary
- Other Jurisdictions
- Residential Single Family
- Residential Multiple Family
- Residential Common Area
- Commercial
- Industrial
- Park/Open Space/Recreation
- Golf Course
- Public Facility
- School

Figure 4.10-1.

Existing Land Uses

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4.11 NOISE

4.11.1 PURPOSE

This section identifies existing noise conditions within the Planning Area and provides an analysis of potential impacts associated with implementation of the General Plan Update.

This section is primarily based upon the *City of Laguna Niguel General Plan Update Noise Impact Study*, prepared by MD Acoustics, LLC and dated August 18, 2025, and noise modeling prepared by De Novo Planning Group; refer to Appendix E, *Noise*.

4.11.2 ENVIRONMENTAL SETTING

FUNDAMENTALS OF NOISE

Sound, Noise and Acoustics

Sound is a disturbance created by a moving or vibrating source and is capable of being detected by the hearing organs. Sound may be thought of as mechanical energy of a moving object transmitted by pressure waves through a medium to a human ear. For traffic or stationary noise, the medium of concern is air. *Noise* is defined as sound that is loud, unpleasant, unexpected, or unwanted.

Frequency and Hertz

A continuous sound is described by its *frequency* (pitch) and its *amplitude* (loudness). Frequency relates to the number of pressure oscillations per second. Low-frequency sounds are low in pitch (bass sounding) and high-frequency sounds are high in pitch (squeak). These oscillations per second (cycles) are commonly referred to as Hertz (Hz). The human ear can hear from the bass pitch starting at 20 Hz to the high pitch of 20,000 Hz.

Sound Pressure Levels and Decibels

The *amplitude* of a sound determines its loudness. The loudness of sound increases or decreases as the amplitude increases or decreases. Sound pressure amplitude is measured in units of micro-Newton per square meter ($\mu N/m^2$), also called micro-Pascal (µPa). One µPa is approximately one hundred billionths (0.00000000001) of normal atmospheric pressure. Sound pressure level (SPL or L_p) is used to describe in logarithmic units the ratio of actual sound pressures to a reference pressure squared. These units are called decibels (dB).

Addition of Decibels

Because decibels are measured on a logarithmic scale, sound pressure levels cannot be added or subtracted by simple plus or minus addition. When two sounds of equal SPL are combined, they will produce an SPL 3 dB greater than the single SPL. In other words, sound energy that is doubled produces a three dB increase. If two sounds differ by approximately ten dB, the higher sound level is the predominant sound. When combining sound levels, estimates shown in Table 4.11-1, *Decibel Addition*, may be utilized.

Table 4.11-1
Decibel Addition

When Two Decibel Values Differ by:	Add This Amount to Higher Value	Example
0 or 1 dB	3 dB	70+69=73 dB
2 or 3 dB	2 dB	74+71=76 dB
4 to 9 dB	1 dB	66+60=67 dB
10 dB or more	0 dB	65+55=65 dB

Source: California Department of Transportation (Caltrans), *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, September 2013.

Human Response to Changes in Noise Levels

In general, the healthy human ear is most sensitive to sounds between 1,000 Hz and 5,000 Hz, and it perceives a sound within that range as being more intense than a sound with a higher or lower frequency with the same magnitude. For purposes of this analysis, as well as with most environmental documents, A-scale weighting is typically used and is reported in terms of the A-weighted decibel (dBA). The A-scale was designed to account for the frequency-dependent sensitivity of the human ear. Typical A-weighted noise levels are shown in Table 4.11-2, *Typical Noise Levels*.

Table 4.11-2
Typical Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor
	110	Rock Band
Jet flyover at 1,000 feet		
	100	
Gas lawnmower at 3 feet		
	90	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	80	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawnmower, 100 feet	70	Vacuum cleaner at 3 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	60	
		Large Business Office
Quiet urban daytime	50	Dishwasher in next room
Quiet urban nighttime	40	Theater, large conference room (background)
Quiet suburban nighttime		
	30	Library
Quiet rural nighttime		Bedroom at night, concert hall (background)
	20	
		Broadcasting studio
	10	
Lowest Threshold of Human Hearing	0	Lowest Threshold of Human Hearing

Source: California Department of Transportation (Caltrans), *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, September 2013.

In general, the human ear can barely perceive a change in the noise level of three dB. As shown in Table 4.11-3, *Perceived Changes in Noise Levels*, a change in 5 dB is readily perceptible, and a change in ten dB is perceived as being twice or half as loud. A doubling of sound energy results in a three dB increase in sound, which means that a doubling of sound energy (e.g., doubling the volume of traffic on a highway) would result in a barely perceptible change in sound level.

Table 4.11-3
Perceived Changes in Noise Levels

Changes in Intensity Level, dBA	Changes in Apparent Loudness
1	Not perceptible
3	Just perceptible
5	Clearly noticeable
10	Twice (or half) as loud
Source: California Department of Transportation (Caltrans), *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, September 2013.	

Noise Descriptors

Noise in our daily environment fluctuates over time. Some noise levels occur in regular patterns, others are random. Some noise levels are constant while others are sporadic. Noise descriptors were created to describe the different time-varying noise levels.

A-Weighted Sound Level: The sound pressure level in decibels as measured on a sound level meter using the A-weighted filter network. The A-weighting filter de-emphasizes the very low and very high-frequency components of the sound in a manner similar to the response of the human ear. A numerical method of rating human judgment of loudness.

Ambient Noise Level: The composite of noise from all sources, near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location.

Community Noise Equivalent Level (CNEL): The average equivalent A-weighted sound level during a 24-hour day, obtained after the addition of five dB to sound levels in the evening from 7:00 p.m. to 10:00 p.m. and after the addition of ten dBs to sound levels in the night between 10:00 p.m. and 7:00 a.m.

Decibel (dB): A unit for measuring the amplitude of a sound, equal to 20 times the logarithm to the base ten of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micro-pascals.

dBA: A-weighted sound level (see definition above).

Equivalent Sound Level (LEQ): The sound level corresponding to a steady noise level over a given sample period with the same amount of acoustic energy as the actual time-varying noise level. The energy average noise level during the sample period.

Habitable Room: Any room meeting the requirements of the California Building Code or other applicable regulations which is intended to be used for sleeping, living, cooking, or dining purposes, excluding such

enclosed spaces as closets, pantries, bath or toilet rooms, service rooms, connecting corridors, laundries, unfinished attics, foyers, storage spaces, cellars, utility rooms, and similar spaces.

L(n): The A-weighted sound level exceeded during a certain percentage of the sample time. For example, L10 in the sound level exceeded ten percent of the sample time. Similarly, L50, L90, and L99, etc.

Noise: *A*ny unwanted sound or sound which is undesirable because it interferes with speech and hearing, is intense enough to damage hearing, or is otherwise annoying. The State of California Noise Control Act defines noise as "...excessive undesirable sound...".

Percent Noise Levels: See L(n).

Sound Level (Noise Level): The weighted sound pressure level obtained by use of a sound level meter having a standard frequency filter for attenuating part of the sound spectrum.

Sound Level Meter: An instrument, including a microphone, an amplifier, an output meter, and frequency weighting networks for the measurement and determination of noise and sound levels.

Tonal Sounds

A pure tone sound is a sound produced at or near a single frequency. Laboratory tests have shown that humans are more perceptible to changes in sound levels of a pure tone. For a noise source to contain a “pure tone,” there must be a significantly higher A-weighted sound energy in a given frequency band than in the neighboring bands, thereby causing the noise source to “stand out” against other noise sources. A pure tone occurs if the sound pressure level in the one-third octave band with the tone exceeds the average of the sound pressure levels of the two contagious one-third octave bands by five dB for center frequencies of 500 Hertz (Hz) and above; by eight dB for center frequencies between 160 and 400 Hz; and by 15 dB for center frequencies of 125 Hz or less.

Sound Propagation

As sound propagates from a source it spreads geometrically. Sound from a small, localized source (i.e., a point source) radiates uniformly outward as it travels away from the source in a spherical pattern. The sound level attenuates at a rate of six dB per doubling of distance. The movement of vehicles down a roadway makes the source of the sound appear to propagate from a line (i.e., line source) rather than a point source. This line source results in the noise propagating from a roadway in a cylindrical spreading versus a spherical spreading that results from a point source. The sound level attenuates for a line source at a rate of three dB per doubling of distance.

Research has demonstrated that atmospheric conditions can have a significant effect on noise levels when noise receivers are located 200 feet or more from a noise source. Wind, temperature, air humidity, and turbulence can further impact have far sound can travel.

Ground Absorption

As noise propagates from the source, it is affected by the ground and atmosphere. Noise models use hard site (reflective surfaces) and soft site (absorptive surfaces) to help calculate predicted noise levels. Hard site conditions assume no excessive ground absorption between the noise source and the receiver. Soft

site conditions such as grass, soft dirt, or landscaping attenuate noise at a rate of 1.5 dB per doubling of distance. When added to the geometric spreading, the excess ground attenuation results in an overall noise attenuation of 4.5 dB per doubling of distance for a line source and 7.5 dB per doubling of distance for a point source.

Sound Attenuation

Noise-related land use issues are typically composed of three basic elements: (1) the noise source, (2) a transmission path, and (3) a receiver.

The appropriate acoustical treatment for a given project should consider the nature of the noise source and the sensitivity of the receiver. When the potential for a noise-related problem is present, either avoidance of the noise-related problem or noise control techniques should be selected to provide an acceptable noise environment for the receiver while remaining consistent with local aesthetic standards and practical structural and economic limits. Fundamental noise control options are described below.

Noise Barriers

Effective noise barriers can reduce noise levels by ten to 15 dBA, cutting the loudness of noise from stationary or mobile sources in half. To achieve that reduction, the barrier must be high enough and long enough to block the line-of-sight of the noise source. A noise barrier can still achieve up to a five dBA noise level reduction when it is tall enough to barely allow a line-of-sight of the noise source. A noise barrier is most effective when placed close to the noise source or receiver. When the noise barrier is an earthen berm instead of a wall, the noise attenuation can be increased by another three dBA.

Setbacks

Noise exposure may be reduced by increasing the setback distance between the noise source and the noise sensitive receiving use. Setback areas can take the form of open space, frontage roads, recreational areas, etc. The available noise attenuation from this technique is limited by the characteristics of the noise source but generally ranges between four to six dBA per doubling of distance from the noise source.

Site Design

Buildings can be placed on a property to shield other structures or areas affected by noise and to prevent an increase in noise levels caused by reflections. The use of one building to shield another can significantly reduce overall noise control costs, particularly if the shielding structure is insensitive to noise. An example would be placing a detached garage nearest the noise source to shield the house or backyard. Site design should guard against creating reflecting surfaces that may increase onsite noise levels. For example, two buildings placed at an angle facing a noise source may cause noise levels within that angle to increase by up to three dBA. The open end of U-shaped buildings should point away from noise sources for the same reason. Landscaping walls or noise barriers located within a development may inadvertently reflect noise to a noise-sensitive area unless carefully located.

Building Facades

When interior noise levels are of concern in a noisy environment, noise reduction may be obtained through the acoustical design of building facades. Standard construction practices provide a noise

reduction of ten to 15 dBA for building facades with open windows, and a noise reduction of approximately 25 dBA when windows are closed; refer to Table 4.11-4, *Noise Reduction Afforded by Common Building Construction*. An exterior-to-interior noise reduction of 25 dBA can be obtained by requiring that building design include adequate ventilation systems, which would allow windows facing a noise source to remain closed, even during periods of excessively warm weather.

Where greater noise reduction is required, acoustical treatment of the building facade may be necessary. Reducing relative window area is the most effective control technique, followed by providing acoustical glazing (e.g., thicker glass or increased air space between panes) within frames with low air infiltration rates, using fixed (i.e., non-movable) acoustical glazing, or eliminating windows. Noise transmitted through walls can be reduced by increasing wall mass (e.g., using stucco or brick in lieu of wood siding), or isolating wall members by using double or staggered stud walls, while noise transmitted through doorways can be lessened by reducing door area, using solid-core doors, or sealing door perimeters with suitable gaskets. Noise-reducing roof treatments include using plywood sheathing under roofing materials.

Table 4.11-4
Noise Reduction Afforded by Common Building Construction

Construction Type	Typical Occupancy	General Description	Range of Noise Reduction (dB)[1]
1	Residential, Commercial, Schools	Wood frame, stucco, or wood sheathing exterior. Interior drywall or plaster. Sliding glass windows, with windows partially open.	15-20
2	Same as 1 above	Same as 1 above, but with windows closed.	25-30
3	Commercial, Schools	Same as 2 above, but with fixed 0.25-inch plate glass windows.	30-35
4	Commercial, Industrial	Steel or concrete frame, curtain wall, or masonry exterior wall. Fixed 0.25-inch plate glass windows.	35-40

Source: California Department of Transportation (Caltrans), *California Airport Land Use Planning Handbook*, January 2002.

Landscaping

While the use of trees and other vegetation is often thought to provide significant noise attenuation, approximately 100 feet of dense foliage (i.e., with no visual path extending through the foliage), is required to achieve a five dBA attenuation of traffic noise. Thus, the use of vegetation as a noise barrier is not considered a practical method of noise control unless large tracts of dense foliage are part of the existing landscape.

Vegetation can be used, however, to acoustically "soften" intervening ground between a noise source and a receiver, increasing the ground absorption of sound and thereby, increasing the attenuation of sound with distance. Planting trees and shrubs also offers aesthetic and psychological value, and it may reduce

adverse public reaction to a noise source by removing the source from view, even though noise levels would be largely unaffected.

GROUND-BORNE VIBRATION FUNDAMENTALS

Ground-borne vibrations consist of rapidly fluctuating motions within the ground that have an average motion of zero. The effects of ground-borne vibrations typically only cause a nuisance to people, but at extreme vibration levels, damage to buildings may occur. Although ground-borne vibration can be felt outdoors, it is typically only an annoyance to people indoors where the associated effects of the shaking of a building can be notable. Ground-borne noise is an effect of ground-borne vibration and mainly exists indoors since it is produced from noise radiated from the motion of the walls and floors of a room and may also consist of the rattling of windows or dishes on shelves. Several different methods are used to quantify vibration amplitude. Typical human reaction and effect on buildings due to ground-borne vibration is shown in Table 4.11-5, *Typical Human Reaction and Effect on Buildings Due to Ground-Borne Vibration*.

PPV. Known as the peak particle velocity (PPV) which is the maximum instantaneous peak in vibration velocity, typically given in inches per second.

RMS. Known as root mean squared (RMS) can be used to denote vibration amplitude.

VdB. A commonly used abbreviation to describe the vibration level (VdB) for a vibration source.

Table 4.11-5
Typical Human Reaction and Effect on Buildings Due to Ground-Borne Vibration

Vibration Level Peak Particle Velocity (PPV)	Human Reaction	Effect on Buildings
0.006–0.019 in/sec	Threshold of perception, possibility of intrusion	Vibrations unlikely to cause damage of any type
0.08 in/sec	Vibrations readily perceptible	Recommended upper level of vibration to which ruins and ancient monuments should be subjected
0.10 in/sec	Level at which continuous vibration begins to annoy people	Virtually no risk of "architectural" (i.e., not structural) damage to normal buildings
0.20 in/sec	Vibrations annoying to people in buildings	Threshold at which there is a risk to "architectural" damage to normal dwelling – houses with plastered walls and ceilings
0.4–0.6 in/sec	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage

in/sec = inches per second
Source: California Department of Transportation (Caltrans), *Transportation and Construction Vibration Guidance Manual*, April 2020.

Vibration Perception

Typically, developed areas are continuously affected by vibration velocities of 0.00002 ppv or lower. These continuous vibrations are not noticeable to humans, whose threshold of perception is around (Caltrans 2020). Outdoor sources that may produce perceptible vibrations are usually caused by construction equipment, steel-wheeled trains, and traffic on rough roads, while smooth roads rarely produce perceptible ground-borne noise or vibration.

The California Department of Transportation (Caltrans) has published one of the seminal works for the analysis of ground-borne noise and vibration relating to transportation- and construction-induced vibration, and although the Project is not subject to these regulations, it serves as a useful tool to evaluate vibration impacts.

Vibration Propagation

There are three main types of vibration propagation: surface, compression, and shear waves. Surface waves, or Rayleigh waves, travel along the ground's surface. These waves carry most of their energy along an expanding circular wave front, similar to ripples produced by throwing a rock into a pool of water. P-waves, or compression waves, are body waves that carry their energy along an expanding spherical wave front. The particle motion in these waves is longitudinal (i.e., in a "push-pull" fashion). P-waves are analogous to airborne sound waves. S-waves, or shear waves, are also body waves that carry energy along an expanding spherical wave front. However, unlike P-waves, the particle motion is transverse, or side-to-side and perpendicular to the direction of propagation. As vibration waves propagate from a source, the vibration energy decreases in a logarithmic nature. The drop-off rate can vary greatly depending on the soil but has been shown to be effective enough for screening purposes, in order to identify potential vibration impacts that may need to be studied through actual field tests.

EXISTING NOISE ENVIRONMENT

General Land Use Noise

Existing land uses within the Planning Area include single- and multi-family residential development, commercial, industrial, open space, and public facility land uses. Noise sources associated with existing land uses include residential maintenance, parking lot noise, heating, and cooling system (HVAC) noise, property maintenance noise, trash truck noise, loading and unloading noise, and recreational noise.

Noise Measurements

Five long-term 24-hour noise measurements and eight short-term 15-minute noise measurements were conducted throughout the Planning Area to document the existing noise environment. Figure 4.11-1, *Noise Measurement Locations*, shows the locations of these measurements.

Short-Term Noise Measurements

Eight short-term noise measurements (15-minute) were taken on February 18 and February 19, 2025, in order to document the daytime Leq level at different locations throughout the Planning Area. Measured noise levels ranged between 47.2 and 68.0 dBA Leq. Vehicle noise along Crown Valley Parkway, Golden

Lantern, and Niguel Road were the primary sources of ambient noise. Short-term noise measurement results are presented in Table 4.11-6, *Short-Term Noise Measurement Summary*.

Table 4.11-6
Short-Term Noise Measurement Summary

Noise Measurement Location	Approximate Location	Start Time	A-Weighted Sound Level (dBA)							
			Leq	Lmax	Lmin	L(2)	L(8)	L(25)	L(50)	L(90)
ST1	27611 La Paz Rd	12:40 PM	67.6	80.3	53.1	75	71.9	68.4	64.2	56.6
ST2	24682 Monita Circle	12:12 PM	66.6	80.5	49	74.9	70.2	67	63	56.4
ST3	25891 Crown Valley Pkwy	11:15 PM	74.2	90.4	63	79.5	77.9	75	71.4	66.7
ST4	28922 Golden Lantern	10:45 PM	61.2	74.8	49.2	66.9	64.2	61.9	59.7	54
ST5	28282 Sorrento	9:55 PM	67.6	78.9	57.7	74.9	71.6	67.8	64.9	61
ST6	25193 Chapparosa Park Rd	9:32 PM	47.2	61.8	37.3	53.2	50.5	47.3	45.2	41.3
ST7	25189 Beacon Hill Way	9:00 PM	68	78.5	41.4	76.1	73.3	68.4	62.9	52
ST8	32525 Niguel Rd	8:29 PM	65.8	81.7	54.5	72	69.4	66.8	64	58.5

dBA = A-weighted decibels; Leq = equivalent noise level; Lmax = maximum noise level; Lmin = minimum noise level; Ln = noise level exceeded n percent of the measurement period.

Source: MD Acoustics, LLC, *City of Laguna Niguel General Plan Update Noise Impact Study*, August 18, 2025.

Notes: 15-minute duration.

Long-Term Noise Measurements

Five long-term noise measurements (24 consecutive hours) were taken on February 18 through February 19, 2025, in order to document the CNEL at different locations throughout the Planning Area. As shown in Table 4.11-7, *Long-Term Noise Measurement Summary*, the measured noise was 72.7 dBA CNEL at 70 feet from the centerline of Pacific Park Drive and 150 feet from the centerline of Alicia Parkway, 75.6 dBA CNEL at 64 feet from the centerline of Alicia Parkway, 62.3 dBA CNEL at 130 feet from the centerline of Crown Valley Parkway, 68.1 dBA CNEL at 35 feet from the centerline of Pacific Island Drive, and 71.6 dBA CNEL at 70 feet from the centerline of Golden Lantern and 105 feet from the centerline of Camino Del Avion. The primary noise source was vehicle traffic. Table 4.11-7 also outlines the daytime (7:00 a.m. to 7:00 p.m.), evening (7:00 p.m. to 10:00 p.m.), and nighttime (10:00 p.m. to 7:00 a.m.) Leq levels at each location. These represent the average level over each time period (day/evening/night).

Table 4.11-7
Long-Term Noise Measurement Summary

Noise Measurement Location	Approximate Location	Description	A-Weighted Sound Level (dBA)			
			Daytime Leq	Evening Leq	Nighttime Leq	CNEL
LT1	2 Brandy Lane	Alicia Pkwy and Pacific Park Dr traffic noise	70.6	69.5	64.0	72.7
LT2	27745 Alicia Pkwy	Alicia Pkwy (south of Avila Rd) traffic noise	73.9	71.3	67.0	75.6
LT3	23732 Hillhurst Dr	Crown Valley Pkwy traffic noise	62.8	56.4	52.0	62.3
LT4	31412 Paseo De La Playa	Pacific Island Dr traffic noise	68.1	64.2	57.6	68.1
LT5	32411 Golden Lantern	Golden Lantern and Camino Del Avion traffic noise	71.8	65.4	61.8	71.6

dBA = A-weighted decibels; Leq = equivalent noise level; Lmax = maximum noise level; Lmin = minimum noise level; Ln = noise level exceeded n percent of the measurement period.
Source: MD Acoustics, LLC, *City of Laguna Niguel General Plan Update Noise Impact Study*, August 18, 2025.
Note: 24-hour duration.

Existing Noise Modeling

The primary sources of noise in the Planning Area are transportation-related noises. Major roadways create ambient noise levels that affect the overall quality of life in the community. Modeled existing noise levels provided in Table 4.11-8, *Existing Exterior Noise Levels Along Roadways (CNEL)*, and on Figure 4.11-2, *Existing Roadway Noise Level Contours (CNEL)*, confirm that there are areas immediately adjacent major roadways in the Planning Area that are exposed to noise levels above 65 dBA CNEL.

It should be noted that the modeled noise contours do not take into account factors such as existing buildings, walls, etc., that may reduce or, in some cases, amplify or reduce noise sources. The model also assumes hard site, when in reality, some areas of the City have soft site ground, such as grass or dirt, which would result in reduced noise levels. Therefore, the noise measurements are likely to be conservative. Measured noise levels provided in Table 4.11-6 and Table 4.11-7 do take into account existing structures, as well as other existing noise sources.

Those areas in the City that currently experience sound levels greater than 65 dBA CNEL are typically near major vehicular transportation corridors. Traffic noise levels typically depend on three factors: (1) the volume of traffic, (2) the average speed of traffic, and (3) the vehicle mix (i.e., the percentage of trucks versus automobiles in the traffic flow). Vehicle noise includes noises produced by the engine, exhaust, tires, and wind generated by taller vehicles. Other factors that affect the perception of traffic noise include the distance from the highway, terrain, heavy vegetation, and natural and structural obstacles. While tire

noise from automobiles is generally located at ground level, some truck noise sources may emanate from 12 feet or more above the ground

Table 4.11-8
Existing Exterior Noise Levels Along Roadways (CNEL)

Roadway	Segment Limits	CNEL, dBA at 50 feet	Distance to Contour (feet)			
			70 dBA	65 dBA	60 dBA	55 dBA
Pacific Park Drive	Alicia Parkway to La Paz Road	72.8	95	299	946	2,992
Alicia Parkway	Pacific Park Drive to Avila Road	73.7	116	368	1,165	3,684
La Paz Road	Pacific Park Drive to Avila Road	69.6	45	143	451	1,426
Moulton Parkway	North of Avila Road	72	79	250	790	2,498
Alicia Parkway	Avila Road to Aliso Creek Road	73.4	109	345	1,090	3,446
La Paz Road	Avila Road to Aliso Creek Road	70	50	158	499	1,577
Moulton Parkway	Avila Road to Aliso Creek Road	72.4	87	276	874	2,763
Aliso Creek Road	Alicia Parkway to La Paz Road	72.5	89	283	894	2,827
Aliso Creek Road	La Paz Road to Moulton Parkway	67.4	27	87	275	869
Alicia Parkway	Aliso Creek Road to Highlands Avenue	75.3	170	539	1,703	5,386
La Paz Road	Aliso Creek Road to Rancho Niguel Road	68.5	35	112	353	1,116
Moulton Parkway	Aliso Creek Road to Rancho Niguel Road	74.3	136	429	1,356	4,288
Rancho Niguel Road	Moulton Parkway to Greenfield Drive	66.4	22	69	218	690
Crown Valley Parkway	Greenfield Drive to Cabot Road	74.6	144	455	1,438	4,546
Crown Valley Parkway	Cabot Road to Forbes Road	78.1	324	1,024	3,240	10,244
Moulton Parkway	Rancho Niguel Road to Crown Valley Parkway	72.5	88	279	883	2,793
Crown Valley Parkway	Moulton Parkway/Golden Lantern to Greenfield Drive	75.4	173	547	1,728	5,465
Paseo de Colinas	Golden Lantern to Cabot Road	70.3	54	171	540	1,709
Paseo de Colinas	Cabot Road and Camino Capistrano	68.9	39	124	392	1,240
Alicia Parkway	Highlands Avenue to Niguel Road	75.5	177	559	1,766	5,586
Crown Valley Parkway	La Paz Road to Moulton Parkway/Golden Lantern	73.1	102	321	1,016	3,213
Golden Lantern	Crown Valley Parkway to Paseo de Colinas	71.9	78	246	778	2,460

Table 4.11-8 (continued)
Existing Exterior Noise Levels Along Roadways (CNEL)

Roadway	Segment Limits	CNEL, dBA at 50 feet	Distance to Contour (feet)			
			70 dBA	65 dBA	60 dBA	55 dBA
Crown Valley Parkway	Niguel Road to La Paz Road	73	101	319	1,009	3,189
Golden Lantern	Paseo de Colinas to Marina Hills Drive/Camino Los Padres	74	126	398	1,258	3,978
Crown Valley Parkway	Alicia Parkway to Club House Drive	73.4	109	343	1,086	3,434
Niguel Road	Crown Valley Parkway to Marina Hills Drive	69.4	43	137	434	1,371
Pacific Island Drive	Club House Drive to Starview Lane	64	12	39	125	395
Niguel Road	Marina Hills Drive to Club House Drive	70.1	52	163	516	1,632
Golden Lantern	Chapparosa Park Road to Beacon Hill Way	71.9	78	247	781	2,471
Crown Valley Parkway	Club House Drive to Pacific Island Drive/Camino Del Avion	74.1	128	406	1,284	4,016
Niguel Road	Ridgeway Avenue to Camino Del Avion	70.1	51	161	510	1,614
Golden Lantern	Beacon Hill Way to Camino Del Avion	72.5	89	280	886	2,803
Camino Del Avion	Crown Valley Parkway to Niguel Road	68	31	99	315	995
Camino Del Avion	Niguel Road to Golden Lantern	69.7	46	147	463	1,465

Source: MD Acoustics, LLC, *City of Laguna Niguel General Plan Update Noise Impact Study*, August 18, 2025.

Notes: Exterior noise levels calculated at 5 feet above ground. Noise levels calculated from centerline of subject roadway. Contour distances do not take into account potential noise reduction from existing barriers such as buildings, walls, or berms as a worst-case scenario for planning screening purposes. Overall levels are likely lower at sensitive receptors.

Airport and Aircraft Noise

There are no airports located within the Planning Area, and the Planning Area is not located within any airport noise contours. The closest airport to the Planning Area is John Wayne Airport, located over 10 miles northwest of the Planning Area. The noise contours associated with airports do not encroach into the Planning Area.

Vibration Sources

The main sources of vibration in the Planning Area are related to vehicles, construction, and railway. Typical roadway traffic, including heavy trucks, rarely generates vibration amplitudes high enough to cause structural or cosmetic damage. However, there have been cases in which heavy trucks traveling over potholes or other discontinuities in the pavement have caused vibration high enough to result in

complaints from nearby residents. These types of issues typically can be resolved by smoothing the roadway surface.

Construction activities that produce vibration perceived by adjacent land uses include the use of vibratory equipment, large bulldozers, and pile drivers. The primary source of vibration during construction is usually from a bulldozer. A large bulldozer has a peak particle velocity of 0.089 inches per second at 25 feet.

One rail line runs through the northeast corner of the City (Community Profile Area 4), alongside Interstate 5 (I-5). This rail line is used by BNSF, AMTRAK, and Metrolink. Metrolink operates the Laguna Niguel/Mission Viejo Station located along Forbes Road between the I-5 and State Route 73 (SR-73). This rail line is located within the Laguna Niguel Gateway Specific Plan (Gateway Specific Plan) and is generally developed with residential, commercial, and industrial/business park uses. According to the Federal Railroad Administration Crossing Inventory Forms, there are 49 daytime and 17 nighttime trains that pass through the City each day at a maximum of 90 MPH. Existing buildings are about 80 feet from the centerline of the railway. Therefore, the expected maximum vibration at these buildings is 0.020 inches per second.

4.11.3 REGULATORY SETTING

FEDERAL

Noise Control Act of 1972

The Federal Office of Noise Abatement and Control originally was tasked with implementing the Noise Control Act. However, it was eventually eliminated leaving other federal agencies and committees to develop noise policies and programs. Some examples of these agencies are as follows:

- The Department of Transportation (DOT) assumed a significant role in noise control through its various agencies.
- The Federal Aviation Agency (FAA) is responsible to regulate noise from aircraft and airports.
- The Federal Highway Administration (FHWA) is responsible to regulate noise from the interstate highway system.
- The Occupational Safety and Health Administration (OSHA) is responsible for the prohibition of excessive noise exposure to workers.

The federal government advocates that local jurisdictions use their land use regulatory authority to arrange new development in such a way that “noise sensitive” uses are either prohibited from being constructed adjacent to a highway or that the developments are planned and constructed in such a manner that potential noise impacts are minimized.

Since the federal government has preempted the setting of standards for noise levels that can be emitted by a transportation source, the City is restricted to regulating the noise generated by the transportation system through nuisance abatement codes and land use planning.

The intent of a General Plan Noise Element is to set goals to limit and reduce the effects of noise intrusion and to set acceptable noise levels for varying types of land uses. To this end, the City has the authority to set land use noise standards and place restrictions on private activities that generate excessive or intrusive noise. However, it should be recognized that the City does not have the authority to regulate all sources of noise within the City, and various other agencies may supersede City authority.

Federal Highway Administration

FHWA state routes and freeways that run through the City are subject to federal funding and, as such, are under the purview of the FHWA. The FHWA developed noise standards that are typically used for federally funded roadway projects or projects that require either federal or Caltrans review. These noise standards are based on Leq and L10 values and are included in Table 4.11-9, *FHWA Design Noise Levels*.

Table 4.11-9
FHWA Design Noise Levels

Activity Category	Description of Category	Design Noise Levels[1]	
		Leq (dBA)	L10 (dBA)
A	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose. Examples include natural parks or wildlife habitats.	57 (exterior)	60 (exterior)
B	Picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals.	67 (exterior)	70 (exterior)
C	Developed lands, properties, or activities not included in Categories A or B, above.	72 (exterior)	75 (exterior)
D	Undeveloped lands.	--	--
E	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums.	52 (interior)	55 (interior)

Source: FHWA Noise Standard (23 Code of Federal Regulations 772).
Notes:
1. Either Leq or L10 (but not both) design noise levels may be used on a project.

U.S. Department of Housing and Urban Development

The Department of Housing and Urban Development (HUD) issues formal requirements related specifically to standards for exterior noise levels along with policies for approving HUD-supported or assisted housing projects in high noise areas. In general, these requirements established three zones. These include:

- 65 dBA Ldn or less - an acceptable zone where all projects could be approved,
- Exceeding 65 dBA Ldn but not exceeding 75 dBA Ldn - a normally unacceptable zone where mitigation measures would be required, and each project would have to be individually evaluated for approval or denial. These measures must provide 5 dBA of attenuation above the attenuation

provided by standard construction required in a 65 to 70 dBA Ldn area and 10 dBA of attenuation in a 70 to 75 dBA Ldn area, and

- Exceeding 75 dBA Ldn - an unacceptable zone in which projects would not, as a rule, be approved.

The Federal Interagency Committee on Noise

The Federal Interagency Committee on Noise (FICON) developed guidance for the assessment of project-generated increases in noise levels that consider the ambient noise level. The FICON recommendations are based on studies of the percentage of persons highly annoyed by aircraft noise. These recommendations are often used for different types of environmental noise such as traffic noise. A readily perceptible five dBA or greater project-related noise level increase is considered a significant impact when the noise criteria for a given land use is exceeded. In areas where the existing noise levels range from 60 to 65 dBA, a three dBA barely perceptible noise level increase is considered significant. When the existing noise levels already exceed 65 dBA, any increase in community noise louder than 1.5 dBA or greater is considered a significant impact, since it likely contributes to an existing noise exposure exceedance.

STATE

California Department of Health Services

The California Department of Health Services (DHS) Office of Noise Control studied the correlation of noise levels and their effects on various land uses. As a result, the DHS established four categories for judging the severity of noise intrusion on specified land uses. These categories are presented in the State Land Use Compatibility for Community Noise Exposure table. As part of the General Plan Update, the City has adopted a slightly modified version of this table to use as a planning tool. This table is discussed further and presented below.

California Building Code

The 2022 California Building Code (Cal. Code Regs., Title 24, Part 2) Section 1206.4, Chapter 12 (Interior Environment), establishes an interior noise criterion of 45 dBA CNEL in any habitable room. Per the California Building Code, Chapter 2 (Definitions), a habitable space is a space in a building for living, sleeping, eating, or cooking. Bathrooms, toilet rooms, closets, halls, storage or utility spaces and similar areas are not considered habitable spaces. This section applies to dwelling and sleeping units.

California Green Building Standards Code (2022), Chapter 5 (Non-residential Mandatory Measures) Section 5.507.4 (Acoustical Control), applies to all proposed buildings that people may occupy but are not residential dwelling units, with the exception of factories, stadiums, storage, enclosed parking structures, and utility buildings.

Buildings must comply with California Green Building Standards Code Section 5.507.4.1 or Section 5.507.4.2. Section 5.507.4.1 requires wall and roof-ceiling assemblies exposed to the noise source making up the building, or addition envelope or altered envelope, shall meet a composite Sound Transmission Class (STC) rating of at least 50 or a composite Outdoor to Indoor Transmission Class (OITC) rating of no less than 40, with exterior windows of a minimum STC of 40 or OITC of 30 when within the 65 CNEL noise contour of an airport, freeway, expressway, railroad, industrial source, or fixed-guideway source. If contours are not available, buildings exposed to 65 dB Leq(h) must meet a composite STC rating of at least

45 or OITC of 35 with exterior windows of at least STC 40 or OITC 30. Section 5.507.4.2 requires that the interior noise attributable to exterior sources must not exceed 50 dBA Leq(h) during any hour of operation. Section 5.507.4.3 requires that assemblies separating tenant spaces from tenant spaces or public places must have an STC of at least 40.

LOCAL

City of Laguna Niguel Municipal Code

The Noise Ordinance of the Municipal Code is designed to protect people from non-transportation noise sources such as construction activity; commercial, industrial, and agricultural operations; machinery and pumps; and air conditioners. Enforcement of the ordinance ensures that adjacent properties are not exposed to excessive noise from stationary sources. Enforcing the ordinance includes requiring proposed development projects to show compliance with the ordinance, including operating in accordance with noise levels and hours of operations limits placed on the project site. The City also requires construction activity to comply with established work schedule limits. The ordinance is reviewed periodically for adequacy and amended as needed to address community needs and development patterns.

Laguna Niguel Municipal Code Title 6, Division 6, *Noise Control*, contains the City's Noise Ordinance. Relevant sections of the Noise Ordinance are as follows:

Section 6-6-1, *Declaration of Policy*, declares that certain sound levels are detrimental to the public health, welfare, and safety, and contrary to public interest, and thus prohibits unnecessary, excessive, and annoying noises.

Section 6-6-5*, Exterior Noise Standards*, defines noise characteristics to consider when determining whether or not exterior noise is in violation of the ordinance. Section 6-6-6, *Interior Noise Standards*, defines noise characteristics to consider when determining whether or not interior noise is in violation of the ordinance. Sections 6-6-5 and 6-6-6 establish exterior and interior noise standards that apply to all residential property within a designated noise zone; refer to Table 4.11-10, *Noise Standards.*

Table 4.11-10
Noise Standards

Noise Zone[1]	Exterior Noise Level	Interior Noise Level	Time Period
1	55 dB(A)	55 dB(A)	7:00 a.m. - 10:00 p.m.
	50 dB(A)	45 dB(A)	10:00 p.m. - 7:00 a.m.

Source: City of Laguna Niguel, *Laguna Niguel Municipal Code*, 2025.
Notes:
1. Per Municipal Code Section 6-6-4, *Designated Noise Zone*, the entire territory of the City is designated as Noise Zone 1.

Section 6-6-7, *Exemptions from Article*, provides exemptions to the Noise Ordinance for certain activities (outdoor/public gatherings, emergency work, school activity, etc.). Noise from agricultural operations and construction is only exempt within the acceptable working hours of 7:00 a.m. and 8:00 p.m. on weekdays,

including Saturday. This section also lists unusual and unique conditions in which construction noise may be permitted outside acceptable hours.

Section 6-6-8, *Creation of Noise Near Schools, Hospitals and Churches*, provides special provisions relating to noise levels at schools, hospitals, and churches.

Sections 6-6-8.1, *Motor Vehicle Racing*, and 6-6-9, *Air Conditioning and Refrigeration Equipment*, outline policies related to motor vehicle racing, air conditioning, and refrigeration.

Section 6-6-10, *Noise Level Measurement Location*, outlines standards regarding noise level measurements done on affected properties.

Sections 6-6-11 through 6-6-15 outline enforcement policies, variance procedures, and the requirements regarding the creation of a noise variance board and submitting appeals to them.

City of Laguna Niguel CEQA Manual

The City of Laguna Niguel CEQA Manual provides the City and project applicants with local guidelines, procedures, requirements, and thresholds of significance for the environmental review process within the City of Laguna Niguel consistent with the California Environmental Quality Act (Public Resources Code [PRC] Section 21000 et seq.), referred to as "CEQA" or "CEQA Statutes," and the State CEQA Guidelines (Title 14, California Code of Regulations (CCR), Division 6, Chapter 3, Section 15000 et seq.). The City's CEQA Manual applies to all public and private projects under the jurisdiction of the City of Laguna Niguel that constitute a "project" and therefore subject to CEQA review.

4.11.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

CEQA Guidelines Appendix G contains the Initial Study Environmental Checklist, which includes questions related to noise. The City relies on the questions included in Appendix G as the thresholds of significance for assessing impacts related to noise (City of Laguna Niguel CEQA Manual, Revised February 24, 2023). A significant impact will occur if implementation of the proposed Project will result in:

- Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies (refer to Impact Statement NOI-1);
- Generation of excessive groundborne vibration or groundborne noise levels (refer to Impact Statement NOI-2); and/or
- For a project located within the vicinity of a private airstrip land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise (refer to Section 7.0, *Effects Found Not To Be Significant*).

Noise sensitive land uses are defined in the proposed Noise Element as residential areas, school sites, childcare areas, library, parks, and a senior center site.

The City of Laguna Niguel's CEQA Manual (2023) defines the following thresholds of significance with regards to noise and vibration:

Construction Noise

Typically, construction noise does not cause substantial noise at distances beyond 500 feet from construction activities or when construction is limited to allowed days and times. Therefore, the following noise screening criteria may be used for a new project construction:

- Would construction activities occur within 500 feet of a noise sensitive use?
- Would construction occur between the hours of 8:00 p.m. and 7:00 a.m. Monday through Saturday, or anytime on Sunday or federal holidays?

A "yes" response to either of the preceding questions indicates further study is required.

Based on the above criteria, projects that do not qualify for an exemption from a construction noise assessment shall prepare a detailed analysis of construction noise impacts on noise-sensitive uses according to the methodology and criteria contained in the Federal Transit Administration (FTA) *Transit Noise and Vibration Impact Assessment Manual* dated September 2018 (FTA Manual) or most current version. Specifically, the construction noise assessment shall be prepared in accordance with "Option B: Detailed Analysis" included in the FTA Manual. The thresholds of significance applied to construction projects within the City are the FTA standards found in Table 7-3 of the FTA Manual titled, *Table 7-3 Detailed Analysis Construction Noise Criteria*. For a development project adjacent to residential receptors, an 8 hour construction period was evaluated against the daytime construction noise threshold of 80 dBA Leq 8 hour consistent with the FTA's criterion. Nighttime construction activities are generally prohibited by the Laguna Niguel Municipal Code, however if an exemption is provided, the construction noise thresholds found in Table 7-3 of the FTA Manual would also apply to nighttime construction. The nighttime threshold of significance for construction noise at residential properties is 70 dBA Leq 8 hour.

Operational Noise

Project operational impacts are generally due to the project including single or multiple noise sources within the project site (stationary sources) or causing increases in vehicular traffic on city streets (mobile sources), or both. Therefore, the following operational noise screening criteria may be used for a new project:

- Would the proposed project introduce a stationary noise source audible beyond the property line of the project site?
- Would the project include 75 or more dwelling units, 100,000 square feet or greater of nonresidential development, or have the potential to generate 1,000 or more average daily vehicle trips?

A "no" response to both preceding questions indicates no further study is required. A "yes" response to either of the preceding questions indicates further study of operational noise impacts is required.

If the above screening process for a project indicates that further study of operational noise effects is required, the following significance thresholds apply.

Mobile Sources

A project would have a significant noise impact on nearby noise-sensitive land uses if:

- The project causes ambient exterior noise levels at nearby noise-sensitive uses to increase above the City's exterior noise standards in Table 4.11-11, *City of Laguna Niguel Land Use Noise Standards (CNEL, dBA)*, (i.e., 65 dB CNEL for residential land uses); or
- Baseline noise levels at nearest noise-sensitive land uses without the project are below 55 dBA CNEL and the project results in noise level increases of 10 dBA CNEL or more in ambient noise levels; or
- Baseline noise levels at nearest noise-sensitive land uses without the project are in the range of 55-60 dBA CNEL and the project results in ambient noise levels that are 5 dBA CNEL or more above baseline noise levels; or
- Baseline noise levels at nearest noise-sensitive land uses without the project are above 60 dBA CNEL and the project results in a noise level increase of 3 dBA CNEL or more above baseline noise levels.

Table 4.11-11
City of Laguna Niguel Land Use Noise Standards (CNEL, dBA)

Land Use	Interior Standard	Exterior Standard
Residential – Detached Residential – Attached	45	65
Neighborhood Commercial Community Commercial	--	70
Professional Office	50	70
Community Commercial/Professional Office	--	70
Industrial/ Business Park	55[1]	70
Professional Office/Industrial/Business Park Industrial/Business Park/ Professional Office/Community Commercial	--	75
Public/Institutional Public Institutional/Professional Office	50	70
Schools	50[2]	65[2]
Parks and Recreation	--	70

Source: City of Laguna Niguel, *City of Laguna Niguel CEQA Manual*, June 2021 (revised February 2023).
Notes:
1. Where quiet is a basis for use.
2. In interior or exterior classroom areas during school operating hours.

Stationary Sources

Laguna Niguel Municipal Code Division 6 establishes noise standards applicable to stationary sources. Section 6-6-5 establishes exterior noise standards, which constitute the thresholds of significance for stationary sources (i.e., 55 dBA Leq between 7 AM to 10 PM and 50 dBA Leq between 10 PM to 7 AM); refer to Table 4.11-10.

A significant impact would occur if noise levels on any other residential property exceed:

- The noise standard for a cumulative period of more than 30 minutes in any hour;
- The noise standard plus five dB(A) for a cumulative period of more than 15 minutes in any hour;
- The noise standard plus ten dB(A) for a cumulative period of more than five minutes in any hour;
- The noise standard plus 15 dB(A) for a cumulative period of more than one minute in any hour; or
- The noise standard plus 20 dB(A) for any period of time.

Interior Noise

As shown in Table 4.11-11, the Laguna Niguel General Plan has set interior CNEL standards for various noise-sensitive land use categories. Interior noise standards are also regulated by California Building Code Title 24. Generally, the effect of noise from the surrounding environment does not need to be analyzed within a CEQA document but must show compliance with the Title 24 standards. However, pursuant to *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369, Case No. S213478, "when a proposed project risks exacerbating those environmental hazards or conditions that already exist, an agency must analyze the potential impact of such hazards on future residents or users. In those specific instances, it is the project's impact on the environment—and not the environment's impact on the project—that compels an evaluation of how future residents or users could be affected by exacerbated conditions." Therefore, if a project introduces a sensitive land use, such as residential, into a noisy environment and the project will exacerbate the existing noisy environment, the project may need to include a noise study to demonstrate how the project would be impacted by the project's contribution to the noisy environment. Furthermore, pursuant to *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369, Case No. S213478, housing projects that require an interior noise analysis include CEQA Housing Exemptions, Agricultural Employee Housing Exemptions, Low Income Housing Exemptions, and Infill Housing Exemptions.

Vibration

The CEQA Guidelines do not define the levels at which groundborne vibration or groundborne noise would be considered "excessive." However, California Department of Transportation (Caltrans) has published criteria for the analysis of vibration relating to transportation- and construction-induced vibration. Caltrans has established thresholds that pertain to both building damage and human annoyance from groundborne vibration. Therefore, the City's CEQA Manual has established the following standards from Caltrans as the thresholds of significance for vibration impacts, as shown in Table 4.11-12, *Construction Vibration Damage Criteria*, and Table 4.11-13, *Groundborne Vibration Potential Annoyance Criteria*, below.

Table 4.11-12 lists the vibration damage criteria for several categories of building structures. These criteria are expressed in terms of Peak Particle Velocity (PPV). PPV is the maximum instantaneous positive or negative peak of the vibration signal, often used in monitoring of construction vibration (such as blasting) since it is related to the stresses that are experienced by buildings.

Criteria listed in Table 4.11-13 are thresholds of vibration levels that would result in people's annoyance or interference with daily activities. These levels are also expressed in terms of PPV. Vibration levels that are "distinctly perceptible" or worse are adopted by the City as its thresholds of significance.

It should be noted, projects using only equipment that generates little or no ground vibration, such as air compressors, light trucks, and hydraulic loaders, would only require qualitative descriptions. A quantitative construction vibration analysis is appropriate for projects where construction vibration may result in building damage or prolonged annoyance. For example, activities involving blasting, piledriving, vibratory compaction, demolition, drilling, or heavy grading or excavation near sensitive structures require a quantitative vibration analysis.

Table 4.11-12
Construction Vibration Damage Criteria

Structure and Condition	Maximum PPV (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Source
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.10
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

Source: California Department of Transportation, *Transportation and Construction Vibration Guidance Manual*, September 2013.

Note: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

Table 4.11-13
Groundborne Vibration Potential Annoyance Criteria

Human Response	Maximum PPV (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Source
Barely perceptible	0.04	0.01
Distinctly perceptible	0.25	0.04
Strongly perceptible	0.9	0.10
Severe	2.0	0.4

Source: California Department of Transportation, *Transportation and Construction Vibration Guidance Manual*, September 2013.

Note: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

4.11.5 IMPACTS AND MITIGATION MEASURES

NOI-1: Would the project result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Impact Analysis:

CONSTRUCTION (TEMPORARY) NOISE

Subsequent construction activities associated with implementation of the General Plan Land Use Element would have the potential to temporarily emit noise through the use of heavy-duty construction equipment, such as excavators, cranes, and forklifts, and through vehicle trips generated from workers and haul trucks traveling to and from project sites. The degree of construction noise would vary depending on the nature, location, and length of the construction activities. Noise levels associated with construction activities would also vary with the different phases of construction. The proposed Project is a planning-level document, and, as such, there are no specific projects, project construction dates, or specific construction plans identified, except for the assumption that the Chet Holifield Federal Building (CHFB) site will be demolished as part of a future redevelopment effort. Therefore, quantification of construction noise associated with buildout of the General Plan Land Use Element cannot be specifically determined at this time. A separate analysis has been provided below for demolition of the CHFB site.

The Federal Transit Administration (FTA) has compiled data regarding the noise-generated characteristics of typical construction activities. The data is presented in Table 4.11-14, *Typical Construction Noise Levels*. These noise levels would diminish rapidly with distance from the construction site at a rate of 6 dBA per doubling of distance. For example, an 86 dBA noise level measured 50 feet from the noise source would reduce to 80 dBA at 100 feet. At 200 feet from the noise source, the noise level would reduce from 86 to 74 dBA. At 400 feet, the noise source would reduce by another six dBA to 68 dBA.

Table 4.11-14
Typical Construction Noise Levels

Equipment	Typical Noise Level 50 ft from Source, dBA
Air Compressor	80
Backhoe	80
Ballast Equalizer	82
Ballast Tamper	83
Compactor	82
Concrete Mixer	85
Concrete Pump	82
Concrete Vibrator	76
Crane, Derrick	88
Crane, Mobile	83
Dozer	85
Generator	82
Grader	85
Impact Wrench	85
Jack Hammer	88
Loader	80
Paver	85
Pile-driver (Impact)	101
Pile-driver (Sonic)	95
Pneumatic Tool	85
Pump	77
Rail Saw	90
Rock Drill	95
Roller	85
Saw	76
Scarifier	83
Scraper	85
Shovel	82
Spike Driver	77
Tie Cutter	84
Tie Handler	80
Tie Inserter	85
Truck	84
Source: U.S. Federal Transit Administration, 2018.	

Subsequent development activities with buildout of the General Plan Land Use Element would result in short-term noise impacts associated with construction activities.

On-Site Construction Activities

Site-specific construction activities associated with subsequent development may involve a broad variety of construction equipment based on the construction need for every construction phase – demolition, site preparation, grading, trenching, building construction, paving and application of architectural

coatings. Noise produced by construction activities is generally dictated by the loudest three pieces of construction equipment operating closest to offsite noise receptors. The location of construction equipment will also change based on the task that needs to be performed. As such, offsite exposure to construction noise and the potential for noise impacts is variable based on the construction phase, locations of activities, and distance of offsite receptors. The potential for noise reduction is project- and site-specific and can generally be achieved by the presence of intervening structures, selection of construction equipment, and limitations on when specific construction activities can occur.

The City recognizes that noise produced by construction activities is an unavoidable part of the construction process and has adopted Municipal Code Section 6-6-7 which limits noise produced from these activities to the least noise sensitive portions of the day. Specifically, construction is prohibited between the hours of 8:00 p.m. and 7:00 a.m. on weekdays, including Saturday, or any time on Sunday or a federal holiday. Noise sources associated with construction, repair, remodeling, or grading are exempt from the noise ordinance outside of those times.

As described above, the City of Laguna Niguel's CEQA Manual (2023) establishes the following noise screening criteria for new project construction:

- Would construction activities occur within 500 feet of a noise sensitive use?
- Would construction occur between the hours of 8:00 p.m. and 7:00 a.m. Monday through Saturday, or anytime on Sunday or federal holidays?

A "yes" response to either of the preceding questions indicates further study is required. Projects that are not screened based on the above, are required to prepare a detailed analysis of construction noise impacts on noise-sensitive uses according to the methodology and criteria contained in the FTA *Transit Noise and Vibration Impact Assessment Manual* dated September 2018 (FTA Manual) or most current version and as further described in the City's CEQA Manual.

As demonstrated in Table 2-1, *General Plan Update Growth Assumptions Compared to Existing Conditions*, of Section 2.0, *Project Description*, the General Plan Update Land Use Element identifies opportunities for new growth and development within the City. While the majority of the potential growth opportunities are located within specific areas of the City (Gateway Specific Plan, the Opportunity Areas (e.g., Marketplace at Laguna Niguel, CHFB site, and Town Center), and Hospitality Overlay sites), new development or redevelopment involving construction can occur throughout the City consistent with the General Plan Update.

Potential construction noise impacts associated with implementation of the Gateway Specific Plan have been analyzed within the Laguna Niguel Gateway Specific Plan Program EIR (Gateway Specific Plan EIR). Any subsequent development within the Gateway Specific Plan (Community Profile 4) would be required to comply with project-specific noise mitigation measures identified in the Gateway Specific Plan EIR which address the exposure of persons to construction noise levels in excess of City standards. The General Plan Update would not provide for new sensitive land uses or development potential beyond what is currently allowed by the Gateway Specific Plan and analyzed in the Gateway Specific Plan EIR.

Subsequent construction activities within the City, including the Marketplace at Laguna Niguel, CHFB site, and Town Center Opportunity Areas and Hospitality Overlay sites consistent with implementation of the

General Plan Land Use Element would be reviewed for the potential to result in construction noise that exceeds the City's noise standards at the project level. It is noted that the proposed Project assumes demolition of the CHFB site as part of a future redevelopment effort. Demolition of the site would involve removal of existing buildings and pavement and is analyzed at the project-level, below. The project-level analysis does not include subsequent construction activities. This analysis is provided herein at a programmatic level consistent with the buildout of the General Plan Land Use Element.

While construction activities would be limited to specific hours of the day in compliance with the City's Municipal Code, there is the potential that subsequent site-specific construction activities associated with implementation of the General Plan Land Use Element could generate a temporary increase in ambient noise levels in the vicinity of the project site in excess of the City's standards impacting sensitive land uses.

Typically, construction noise impacts on sensitive land uses can be reduced through the implementation of best practices including the type and location of equipment and the proximity to adjacent uses, the use of noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustic attenuating shields or shrouds), turning off construction equipment when not in use, utilizing temporary power poles, and use of temporary sound barriers. However, there is the potential that subsequent development projects may result in exceedances of the adopted significance thresholds, even with implementation of construction best management practices, resulting in a significant impact requiring the implementation of project-specific mitigation measures.

Mitigation Measure NOI-1 would require a construction noise assessment based on the screening criteria in the City's CEQA Manual. The construction noise assessment would be prepared in accordance with the methodologies, standards, and significance thresholds in the City's CEQA Manual and submitted for review and approval by the Laguna Niguel Community Development Department. The assessment would include an analysis of potential construction noise impacts on noise-sensitive land uses and include representative noise measurements, estimates of existing and projected noise levels, and Best Management Practices (BMPs), if necessary, to ensure compliance with the City's noise standards. Potential BMPs may include locating stationary noise sources as far from adjacent properties as possible, limiting construction hours, restricting delivery times, installing temporary noise barriers and/or other BMPs determined effective to minimize construction noise emissions.

Compliance with Mitigation Measure NOI-1 and incorporation of construction BMPs at the project level would reduce short-term construction-related noise impacts associated with subsequent project construction activities consistent with the General Plan Update to a less than significant level. Therefore, construction noise impacts would be less than significant at the General Plan Update program level.

The proposed Noise Element includes policies that would minimize on-site construction noise associated with subsequent development projects. Proposed Policy N-1.1 directs the City to rely on established noise standards and guidelines to evaluate development and infrastructure projects and consider project design features, conditions of approval, or mitigation measures to maintain acceptable noise levels for existing and future land uses. Policy N-1.7 would ensure the City's Noise Ordinance (Division 6 of Title 6 of the Laguna Niguel Municipal Code), and environmental review procedures (City California Environmental Quality Act Manual) are consistent with the General Plan and contemporary best practices.

Construction Related Traffic

Construction crew commute and the transport of construction equipment and materials to the site for subsequent development projects would incrementally increase noise levels on access roads leading to the site. Truck traffic associated with project construction would generally be limited to within the permitted construction hours at project sites, as listed in Laguna Niguel Municipal Code Section 6-6-7. Although there would be a relatively high single-event noise exposure potential at a maximum of 87 dBA Lmax at 50 feet from passing trucks, causing possible short-term intermittent annoyances, the effect on ambient noise levels would be less than 1 dBA when averaged over one hour or 24 hours. Generally, construction trucks would comprise a small proportion of local traffic and would not result in an audible change in the average noise level. The impact would be less than significant upon compliance with Laguna Niguel Municipal Code Section 6-6-7. Therefore, short-term construction-related noise impacts associated with worker commute and equipment transport on local streets with implementation of the General Plan Land Use Element would result in a less than significant impact on noise-sensitive uses along the access routes at the program level.

Further, the General Plan Update Noise Element includes policies intended to minimize exposure to excessive noise, including noise associated with construction-related traffic, as listed below. For example, Policy N-1.8 would limit, to the extent practically feasible, "through commercial truck traffic" to designated truck routes to minimize noise impacts to residential neighborhoods and other noise-sensitive uses.

Chet Holifield Federal Building Demolition

As noted above, the proposed Project assumes that the CHFB site will be demolished as part of a future redevelopment effort. Demolition of the site would involve removal of existing buildings and pavement by an assortment of equipment which are anticipated to include, but not limited to, excavators, dozers, loaders, trucks, and crushing equipment. This assessment is specific to the demolition of the site and does not include subsequent construction activities that may occur with buildout of the General Plan Update Land Use Element, which is included within the overall General Plan Update analysis, discussed above.

On-Site Demolition Activities

Noise-sensitive uses within 500 feet of the CHFB site include Aliso Niguel High School, Laguna Niguel Skate & Soccer Park, and Hillview Park. Other noise-sensitive land uses within the vicinity of the CHFB site include single-family residential uses along Niguel Village Drive, approximately 750 feet to the east of the CHFB site; single-family residential uses along Chat Drive, approximately 2,140 feet south of the CHFB site; single-family residential uses along Matisse Circle, approximately 1,150 feet west of the CHFB site; and La Paz Sports Park along La Paz Road, approximately 1,050 feet to the south of the CHFB site.

It is assumed that in accordance with Laguna Niguel Municipal Code Section 6-6-7, CHFB site demolition activities would occur outside of the hours of 8:00 p.m. and 7:00 a.m. Monday through Saturday, or anytime on Sunday or federal holidays.

Local residents would be subject to elevated noise levels due to the operation of construction equipment related to demolition of the CHFB site. Construction activities are carried out in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. Noise from the use

of excavators, dozers, loaders, trucks, crushing equipment and other equipment would change the character of the noise levels surrounding the construction site as work progresses. Construction noise levels reported in the Federal Transit Administration's *Transit Noise and Vibration Impact Assessment Manual* were used to estimate demolition noise levels associated with the CHFB site. Typically, the estimated demolition noise levels are governed primarily by equipment that produces the highest noise levels.

The degree to which noise-sensitive uses are affected by demolition activities depends heavily on their proximity. Estimated noise levels attributable to the demolition of the CHFB site are shown in Table 4.11-15, *CHFB Site Demolition Noise Levels at Noise-Sensitive Uses (Leq dBA)*, and calculations are included in Appendix E, *Noise*. These locations represent the closest noise sensitive uses in each cardinal direction that are proximate to the CHFB site and may experience the greatest noise impact.

Table 4.11-15
CHFB Site Demolition Noise Levels at Noise-Sensitive Uses (Leq dBA 8-Hour)

Construction Phase	Residential Uses to the East		La Paz Sports Park to the South		Skate & Soccer Park to the West		Residential Uses to the North	
	Pavement (750 ft)	Building (1,300 ft)	Pavement (1,050 ft)	Building (2,025 ft)	Pavement (145 ft)	Building (700 ft)	Pavement (2,900 ft)	Building (2,900 ft)
Demolition	64	59	61	55	78	65	52	52
FTA Threshold	80	80	80	80	80	80	80	80
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**	**No**	**No**

Source: Federal Transit Administration. *Transit Noise and Vibration Impact Assessment Manual. 2018.*

Note: Leq dBA: Average noise energy level; ft: feet. Noise levels from construction activities do not take into account attenuation provided by intervening structures.

Table 4.11-15 shows the noise levels associated with building and pavement demolition. Noise levels from demolition activities would range from 52 to 78 dBA Leq 8-hour for the maximum noise levels when construction equipment are located at the Project site's pavement and building locations closest to each of the analyzed receptors. For pavement demolition, the closest analyzed location would be at the property boundaries and for building demolition the analyzed location would be the portion of the federal building closest to the receptor being analyzed. This represents a conservative analysis of demolition noise exposure since demolition activities would generally be located substantially farther from the analyzed distances for the majority of the demolition phase. Noise level reductions from existing masonry walls were not included. Noise levels shown within Table 4.11-15 are below the FTA's noise thresholds at the nearest offsite noise sensitive uses. Other noise sensitive uses located further away from the Project site would likewise be under the noise thresholds. Consequently, there would be less than significant impacts related to construction noise for the demolition of CHFB site, and no mitigation measures would be required.

Construction Related Traffic

Construction crew commute and the transport of construction equipment and removal of demolition debris would incrementally increase noise levels on access roads leading to the CHFB site. Because truck trips needed for removal of demolition debris would occur over the demolition period, it is anticipated that there would be 875 truckloads (1,750 truck trips) that would be distributed over the course of the 270-day demolition period. This would result in an average of approximately seven truck trips distributed throughout the day. The anticipated travel route for the removal of materials as part of the demolition of the CHFB site would be La Paz Road which connects to State Route 73 less than a mile away. La Paz Road has an existing daily traffic volume of 16,400 trips.[1] Based on the characteristics of noise generation previously described, the Project would need to result in a doubling of volumes to achieve a 3 dBA increase in noise levels. An increase of 3 dBA is the City's threshold for areas that exceed 60 decibels. Because demolition activities would result in an average increase of seven truck trips to the existing 16,400 vehicle trips along La Paz Road, demolition of the CHFB site would result in a minimal increase in traffic volumes and the average noise level increase on La Paz Road would be substantially less than the City's 3 dBA increase threshold. Therefore, short-term construction-related noise impacts associated with truck trips specific to the demolition of the CHFB site would not exceed the threshold and would be less than significant and no mitigation measures would be required.

TRANSPORTATION NOISE IMPACTS

Transportation noise includes noise from aircraft, railways, and roadways. There are no airports located within the Planning Area, and the Planning Area is not located within any airport 65 dBA CNEL contours; therefore, there is no noise impact associated with aircraft.

One rail line runs through the northeast corner of the City (Community Profile Area 4), alongside Interstate 5 (I-5). This rail line is used by BNSF, AMTRAK, and Metrolink. Metrolink operates the Laguna Niguel/Mission Viejo Station located along Forbes Road between the I-5 and State Route 73 (SR-73). This rail line extends through the Gateway Specific Plan area, which comprises the entirety of Community Profile Area 4 and is generally developed with residential, commercial, and industrial/business park uses. The rail line is not located within proximity to any other areas of the City with the potential to expose noise-sensitive land uses to excessive noise. Subsequent development within Community Profile Area 4 would continue to be governed by the Gateway Specific Plan. The proposed General Plan Update does not provide for any additional development potential beyond what is currently allowed for by the adopted Gateway Specific Plan and analyzed in the Gateway Specific Plan EIR.

Under buildout of the General Plan Land Use Element, Community Profile Area 4 would allow up to 2,994 attached units, 1,812,800 SF of commercial, 350 hotel rooms, and 110 managed care facility units (a net of 1,495 attached, 701,777 SF commercial, and 317 hotel rooms above existing conditions), consistent with the Gateway Specific Plan. The potential for sensitive uses to be exposed to railway noise associated with implementation of the Gateway Specific Plan was analyzed within the Gateway Specific Plan EIR. Any subsequent development within the Gateway Specific Plan (Community Profile 4) would be required to

[1] Linscott, Law & Greenspan, Engineers (LLG), *City of Laguna Niguel General Plan Update Vehicle Miles Traveled (VMT) Analysis Report,* January 7, 2025.

comply with noise mitigation measures identified in the Gateway Specific Plan EIR which address the exposure of noise-sensitive land uses to noise levels with the potential to exceed noise standards due to the operational activities of the rail line. The General Plan Update would not increase railway operations within the Planning Area nor provide for new sensitive land uses or development potential beyond what is currently allowed. Potential noise impacts from railway noise with implementation of the General Plan Update would be less than significant.

The primary noise source in the Planning Area would continue to be roadway vehicle traffic. Future traffic noise level contours are presented in Figure 4.11-3, *2045 With Project Noise Level Contours (CNEL)*. Table 4.11-16, *2045 Plus Project Traffic Noise Levels (dBA, CNEL)*, shows the future noise levels at a distance of 50 feet from the centerline of studied roadways by the year 2045 with buildout consistent with the General Plan Update Land Use Element. The distances to the 55, 60, 65, and 70 dBA CNEL noise contours are also provided.

Table 4.11-16
2045 Plus Project Traffic Noise Levels (dBA, CNEL)

Roadway	Segment Limits	CNEL, dBA[1]	Distance to Noise Contour			
			70 dBA	65 dBA	60 dBA	55 dBA
Pacific Park Drive	Alicia Parkway to La Paz Road	74	118	372	1,177	3,723
Alicia Parkway	Pacific Park Drive to Avila Road	73.7	118	373	1,179	3,729
La Paz Road	Pacific Park Drive to Avila Road	70	49	155	490	1,548
Moulton Parkway	North of Avila Road	72.6	91	287	909	2,874
Alicia Parkway	Avila Road to Aliso Creek Road	73.4	110	347	1,099	3,474
La Paz Road	Avila Road to Aliso Creek Road	70	47	147	466	1,473
Moulton Parkway	Avila Road to Aliso Creek Road	73	100	315	997	3,153
Aliso Creek Road	Alicia Parkway to La Paz Road	73	102	321	1,016	3,212
Aliso Creek Road	La Paz Road to Moulton Parkway	69	38	121	381	1,206
Alicia Parkway	Aliso Creek Road to Highlands Avenue	75.6	181	573	1,813	5,735
La Paz Road	Aliso Creek Road to Rancho Niguel Road	67	26	83	261	826
Moulton Parkway	Aliso Creek Road to Rancho Niguel Road	75	171	540	1,709	5,405
Rancho Niguel Road	Moulton Parkway to Greenfield Drive	66.8	24	75	237	749
Crown Valley Parkway	Greenfield Drive to Cabot Road	74.8	152	481	1,522	4,813
Crown Valley Parkway	Cabot Road to Forbes Road	78.2	330	1,044	3,300	10,437
Moulton Parkway	Rancho Niguel Road to Crown Valley Parkway	73.6	114	359	1,136	3,593
Crown Valley Parkway	Moulton Parkway/Golden Lantern to Greenfield Drive	75.5	179	566	1,790	5,662
Paseo de Colinas	Golden Lantern to Cabot Road	70.9	62	196	619	1,957

Table 4.11-16 (continued)
2045 Plus Project Traffic Noise Levels (dBA, CNEL)

Roadway	Segment Limits	CNEL, dBA[1]	Distance to Noise Contour			
			70 dBA	65 dBA	60 dBA	55 dBA
Paseo de Colinas	Cabot Road and Camino Capistrano	70.5	56	177	561	1,773
Alicia Parkway	Highlands Avenue to Niguel Road	75.6	181	574	1,814	5,737
Crown Valley Parkway	La Paz Road to Moulton Parkway/Golden Lantern	73.5	111	351	1,111	3,514
Golden Lantern	Crown Valley Parkway to Paseo de Colinas	72.6	91	288	910	2,877
Crown Valley Parkway	Niguel Road to La Paz Road	73.1	103	326	1,031	3,259
Golden Lantern	Paseo de Colinas to Marina Hills Drive/Camino Los Padres	74.4	138	436	1,379	4,361
Crown Valley Parkway	Alicia Parkway to Club House Drive	74	121	382	1,206	3,815
Niguel Road	Crown Valley Parkway to Marina Hills Drive	69	43	137	434	1,371
Pacific Island Drive	Club House Drive to Starview Lane	64.2	13	41	131	413
Niguel Road	Marina Hills Drive to Club House Drive	70.1	52	163	516	1,632
Golden Lantern	Chapparosa Park Road to Beacon Hill Way	72.6	91	288	912	2,883
Crown Valley Parkway	Club House Drive to Pacific Island Drive/Camino Del Avion	74.2	133	420	1,327	4,197
Niguel Road	Ridgeway Avenue to Camino Del Avion	70.1	51	163	514	1,626
Golden Lantern	Beacon Hill Way to Camino Del Avion	73.2	104	330	1,044	3,302
Camino Del Avion	Crown Valley Parkway to Niguel Road	68.3	34	107	340	1,075
Camino Del Avion	Niguel Road to Golden Lantern	70.1	51	161	508	1,607

Source: MD Acoustics, LLC, *City of Laguna Niguel General Plan Update Noise Impact Study*, August 18, 2025.

Notes:

1. Noise levels calculated at a distance of 50 feet from the centerline. Exterior noise levels calculated at 5 feet above ground. Noise levels calculated from centerline of subject roadway. Contour distances do not take into account potential noise reduction from existing barriers such as buildings, walls, or berms as a worst-case scenario for planning screening purposes. Overall levels are likely lower at sensitive uses.

As shown in Table 4.11-16 and Figure 4.11-3, by the year 2045, existing land uses within 50 feet from the centerline of the studied roadways would continue to be exposed to noise levels that exceed the City's exterior standards of 65 dBA CNEL for sensitive uses. According to the City's CEQA Manual, a significant impact would occur if the Project resulted in any of the following:

- The project causes ambient exterior noise levels at nearby noise-sensitive uses to increase above the City's exterior noise standards in Table 4.11-11 (i.e., 65 dB CNEL for residential land uses); or
- Baseline noise levels at nearest noise-sensitive land uses without the project are below 55 dBA CNEL and the project results in noise level increases of 10 dBA CNEL or more in ambient noise levels; or
- Baseline noise levels at nearest noise-sensitive land uses without the project are in the range of 55-60 dBA CNEL and the project results in ambient noise levels that are 5 dBA CNEL or more above baseline noise levels; or
- Baseline noise levels at nearest noise-sensitive land uses without the project are above 60 dBA CNEL and the project results in a noise level increase of 3 dBA CNEL or more above baseline noise levels.

As demonstrated in Table 4.11-17, *Change in Noise Along Roadways (dBA, CNEL)*, under existing conditions at 50 feet from the centerline, none of the existing baseline noise levels are below 60 dBA CNEL. Only one roadway under existing conditions is below 65 dBA CNEL (Pacific Island Drive from Club House Drive to Starview Lane), and buildout of the Project would not cause the noise level of that roadway segment to exceed 65 dBA CNEL.

Compared to existing traffic noise levels, 2045 with Project traffic volumes are expected to be up to 1.6 dBA CNEL louder than existing ambient noise levels at existing land uses and would result in inaudible increases in ambient noise resulting in a less than significant impact associated with mobile noise; refer to Table 4.11-17.

Table 4.11-17
Change in Noise Along Roadways (dBA, CNEL)

Roadway	Segment	Existing	2045 With Project	
		CNEL dBA	CNEL dBA	Change in Noise Level
Pacific Park Drive	Alicia Parkway to La Paz Road	72.8	73.7	0.9
Alicia Parkway	Pacific Park Drive to Avila Road	73.7	73.7	0
La Paz Road	Pacific Park Drive to Avila Road	69.6	69.9	0.3
Moulton Parkway	North of Avila Road	72	72.6	0.6
Alicia Parkway	Avila Road to Aliso Creek Road	73.4	73.4	0
La Paz Road	Avila Road to Aliso Creek Road	70	69.7	-0.3
Moulton Parkway	Avila Road to Aliso Creek Road	72.4	73	0.6
Aliso Creek Road	Alicia Parkway to La Paz Road	72.5	73.1	0.6
Aliso Creek Road	La Paz Road to Moulton Parkway	67.4	68.8	1.4
Alicia Parkway	Aliso Creek Road to Highlands Avenue	75.3	75.6	0.3
La Paz Road	Aliso Creek Road to Rancho Niguel Road	68.5	67.2	-1.3
Moulton Parkway	Aliso Creek Road to Rancho Niguel Road	74.3	75.3	1
Rancho Niguel Road	Moulton Parkway to Greenfield Drive	66.4	66.8	0.4

Table 4.11-17 (continued)
Change in Noise Along Roadways (dBA, CNEL)

Roadway	Segment	Existing	2045 With Project	
		CNEL dBA	CNEL dBA	Change in Noise Level
Crown Valley Parkway	Greenfield Drive to Cabot Road	74.6	74.8	0.2
Crown Valley Parkway	Cabot Road to Forbes Road	78.1	78.2	0.1
Moulton Parkway	Rancho Niguel Road to Crown Valley Parkway	72.5	73.6	1.1
Crown Valley Parkway	Moulton Parkway/Golden Lantern to Greenfield Drive	75.4	75.5	0.1
Paseo de Colinas	Golden Lantern to Cabot Road	70.3	70.9	0.6
Paseo de Colinas	Cabot Road and Camino Capistrano	68.9	70.5	1.6
Alicia Parkway	Highlands Avenue to Niguel Road	75.5	75.6	0.1
Crown Valley Parkway	La Paz Road to Moulton Parkway/Golden Lantern	73.1	73.5	0.4
Golden Lantern	Crown Valley Parkway to Paseo de Colinas	71.9	72.6	0.7
Crown Valley Parkway	Niguel Road to La Paz Road	73	73.1	0.1
Golden Lantern	Paseo de Colinas to Marina Hills Drive/Camino Los Padres	74	74.4	0.4
Crown Valley Parkway	Alicia Parkway to Club House Drive	73.4	73.8	0.4
Niguel Road	Crown Valley Parkway to Marina Hills Drive	69.4	69.4	0
Pacific Island Drive	Club House Drive to Starview Lane	64	64.2	0.2
Niguel Road	Marina Hills Drive to Club House Drive	70.1	70.1	0
Golden Lantern	Chapparosa Park Road to Beacon Hill Way	71.9	72.6	0.7
Crown Valley Parkway	Club House Drive to Pacific Island Drive/Camino Del Avion	74.1	74.2	0.1
Niguel Road	Ridgeway Avenue to Camino Del Avion	70.1	70.1	0
Golden Lantern	Beacon Hill Way to Camino Del Avion	72.5	73.2	0.7
Camino Del Avion	Crown Valley Parkway to Niguel Road	68	68.3	0.3
Camino Del Avion	Niguel Road to Golden Lantern	69.7	70.1	0.4

Source: MD Acoustics, LLC, *City of Laguna Niguel General Plan Update Noise Impact Study*, August 18, 2025.
Notes: Existing and Future traffic volumes compiled by Linscott, Law & Greenspan, Engineers, 2025. Noise levels calculated at a distance of 50 feet from the centerline.

Subsequent discretionary development within the City, including the Marketplace at Laguna Niguel, CHFB site, and Town Center Opportunity Areas and Hospitality Overlay sites consistent with the General Plan Land Use Element would be reviewed for the potential for mobile noise sources to generate noise levels that exceed the City's noise standards at the project level. The City's CEQA Manual provides the criteria

for when specific projects are required to prepare a noise assessment to address potential project operational impacts, including mobile sources. Mitigation Measure NOI-2 requires applicable projects meeting the criteria identified in the City's CEQA Manual to prepare an operational noise assessment for review and approval by the City's Community Development Department. The operational noise assessment is required to be prepared in accordance with the methodologies, standards, and significance thresholds in the City's CEQA Manual. The assessment would include representative noise measurements, estimates of existing and projected noise levels, and BMPs, if necessary, to ensure compliance with the City's noise standards. BMPs may include, but are not limited to, noise barriers, setbacks, site design, building facades, use of noise-minimizing materials such as rubberized asphalt, and equipment shielding and maintenance. Compliance with Mitigation Measure NOI-2 would reduce potential mobile noise impacts associated with subsequent projects with implementation of the General Plan Update to a less than significant level.

Additionally, the General Plan Update Noise Element includes policies intended to minimize exposure to excessive noise, including noise associated with traffic, listed below. For example, Policy N-1.2 directs the City to consider the noise and land use compatibility matrix (Table N-1) prepared by the Office of Land Use and Climate Innovation as a guide to evaluate land use compatibility and appropriate project design features, conditions of approval or mitigation measures to maintain acceptable noise levels for future land uses. Policy N-1.3 directs the City to consider the Noise Contour Maps, which identified existing and projected noise conditions, when evaluating future development and infrastructure projects. Policy N-1.6 requires development projects located within 100 feet of rail lines (measured from the property line) to demonstrate, prior to approval of sensitive uses, that rail-related groundborne vibration and noise impacts have been adequately addressed. Policy N-1.7 would ensure the City's Noise Ordinance (Division 6 of Title 6 of the Laguna Niguel Municipal Code), and environmental review procedures (City's CEQA Manual) are consistent with the General Plan and contemporary best practices. Implementation of the General Plan Update Noise Element would further minimize noise exposure associated with future roadway noise.

STATIONARY NOISE SOURCES

Implementation of the General Plan Update could result in the subsequent development of land uses that include stationary noise sources that generate noise levels in excess of applicable City noise standards for non-transportation noise sources. As demonstrated in Table 2-17, *General Plan Update Growth Assumptions Compared to Existing Conditions*, the General Plan Update Land Use Element identifies opportunities for new growth and development within the City. The majority of the potential growth opportunities are located within specific areas of the City. These areas include the Gateway Specific Plan, the Opportunity Areas (e.g., Marketplace at Laguna Niguel, CHFB site, and Town Center), and Hospitality Overlay sites. Specific development projects and the details of future noise-generating land uses that may be located in the Planning Area are not known at this time. Additionally, noise from existing stationary sources, as previously described, would continue to expose noise-sensitive land uses in the vicinity of the noise sources.

While no specific development projects are proposed under the General Plan Update, implementation of the General Plan Land Use Element may allow for more intensive noise-generating uses in proximity to

noise-sensitive uses with the potential to exceed the City's noise standards. Stationary noise generators may include, but not be limited to, commercial area loading docks, industrial uses, HVAC equipment, car washes, daycare facilities, auto repair, and recreational uses.

Potential subsequent development within the Gateway Specific Plan (Community Profile 4) is governed by the previously adopted Gateway Specific Plan. The Gateway Specific Plan EIR analyzed the potential for future development to introduce stationary noise sources with the potential to generate noise levels in excess of applicable City noise standards. Any subsequent development within the Gateway Specific Plan (Community Profile 4) would be required to comply with noise mitigation measures identified in the Gateway Specific Plan EIR. The General Plan Update would not provide for new sensitive land uses or development potential beyond what is currently allowed by the Gateway Specific Plan and analyzed in the Gateway Specific Plan EIR.

Subsequent development within the City, including the Marketplace at Laguna Niguel, CHFB site, and Town Center Opportunity Areas and Hospitality Overlay sites consistent with implementation of the General Plan Land Use Element would be reviewed for the potential for stationary noise sources to generate noise levels that exceed the City's noise standards at the project level. As previously discussed, the City's CEQA Manual provides the criteria for when a project is required to prepare a noise study to address potential project operational impacts, including stationary sources. Mitigation Measure NOI-2 requires applicable projects meeting the criteria identified in the City's CEQA Manual to prepare an operational noise assessment for review and approval by the City's Community Development Department. The operational noise is required to be prepared in accordance with the methodologies, standards, and significance thresholds in the City's CEQA Manual. The assessment would include representative noise measurements, estimates of existing and projected noise levels, and BMPs, if necessary, to ensure compliance with the City's noise standards. BMPs may include, but are not limited to, noise barriers, setbacks, site design, building facades, use of noise-minimizing materials such as rubberized asphalt, and equipment shielding and maintenance.

Stationary noise would be evaluated against the City's stationary noise standards identified in Laguna Niguel Municipal Code Division 6. Section 6-6-5 establishes exterior noise standards, which constitute the thresholds of significance for stationary sources (i.e., 55 dBA Leq between 7 AM to 10 PM and 50 dBA Leq between 10 PM to 7 AM); refer to Table 4.11-10.

A significant impact would occur if noise levels on any residential property exceed:

- The noise standard for a cumulative period of more than 30 minutes in any hour;
- The noise standard plus five dB(A) for a cumulative period of more than 15 minutes in any hour;
- The noise standard plus ten dB(A) for a cumulative period of more than five minutes in any hour;
- The noise standard plus 15 dB(A) for a cumulative period of more than one minute in any hour; or
- The noise standard plus 20 dB(A) for any period of time.

Where this occurs, the operational noise assessment would be required to ensure that noise control measures are implemented into the project-specific design as described in Mitigation Measure NOI-2.

Upon compliance with existing regulations, including the City's noise limits established within Division 6 – Noise Control of the City's Municipal Code, and with implementation of Mitigation Measure NOI-2 noise impacts from stationary noise sources associated with implementation of the General Plan Update would be reduced to a less than significant level.

In addition to the requirements for stationary sources required under the City's Municipal Code, the General Plan Update Noise Element also includes policies that are intended to further address noise associated with stationary sources, as detailed below. For example, proposed Policy N-1.1 directs the City to rely on established noise standards and guidelines to evaluate development and infrastructure projects and consider project design features, conditions of approval, or mitigation measures to maintain acceptable noise levels for existing and future land uses. Policy N-1.2 directs the City to consider the noise and land use compatibility matrix (Table N-1) prepared by the Office of Land Use and Climate Innovation as a guide to evaluate land use compatibility and appropriate project design features, conditions of approval or mitigation measures to maintain acceptable noise levels for future land uses. Policy N-1.5 would require mixed-use and multi-family residential developments to demonstrate noise compatibility between different adjacent or on-site uses. Policy N-1.7 would ensure the City's Noise Ordinance (Division 6 of Title 6 of the Laguna Niguel Municipal Code), and environmental review procedures (City California Environmental Quality Act Manual) are consistent with the General Plan and contemporary best practices.

INTERIOR NOISE

The City's CEQA Manual acknowledges that in addition to the City's General Plan interior CNEL standards, interior noise standards are also regulated by California Building Code Title 24. Generally, the effect of noise from the surrounding environment does not need to be analyzed within a CEQA document but must show compliance with the Title 24 standards. However, if a project introduces a sensitive land use, such as residential, into a noisy environment and the project will exacerbate the existing noisy environment, the project may need to include a noise study to demonstrate how the project would be impacted by the project's contribution to the noisy environment.

Based on the data provided in the Environmental Protection Agency's (EPA) Protective Noise Levels (EPA 550/9-79-100, Nov 1979), standard homes in Southern California provide at least 12 dBA of noise exterior to interior noise attenuation with windows open and 20 dBA with windows closed. Therefore, residences would need to be exposed to exterior noise levels exceeding 65 dBA CNEL (45 dBA + 20 dBA = 65 dBA) to potentially exceed the interior noise standard of 45 dBA CNEL with windows closed. A windows closed condition is defined as the interior noise level with the windows closed. Upgrades are required for residential structures that would experience interior noise levels exceeding the 45 dBA CNEL noise standard when windows are closed (e.g., higher grade of insulation in outdoor walls and/or double-paned windows and air condition units). Interior noise within habitable rooms would need to comply with the State's Title 24 interior noise standard of 45 dBA CNEL. If exterior noise levels exceed 65 dBA CNEL, an acoustics analysis would be required to be conducted to demonstrate that the window, door, and wall assemblies would be sufficient to meet the State and City's interior noise requirements pursuant to Municipal Code Section 6-6-6.

As demonstrated in Table 4.11-17, under existing conditions at 50 feet from the centerline, existing exterior baseline noise levels are above 65 dBA CNEL except for one roadway segment (Pacific Island Drive

from Club House Drive to Starview Lane). Therefore, there is the potential that subsequent development that involves sensitive land uses could be exposed to exterior noise levels exceeding 65 dBA CNEL, which may exceed the City's interior noise standard of 45 dBA CNEL and require an acoustic analysis to demonstrate that the window, door, and wall assemblies would be sufficient to meet the State and City's interior noise requirements. Compliance with Title 24 requirements and the City's Municipal Code requirement relative to interior noise levels would ensure potential interior noise impacts would be reduced to a less than significant level.

Mitigation Measures:

NOI-1: As part of the development review process for qualifying projects, the Laguna Niguel Community Development Department shall determine if a construction noise assessment is required, based on the screening criteria provided in the City of Laguna Niguel CEQA Manual. For projects with the potential to result in significant construction-related noise impacts, applicants shall retain a qualified environmental professional to prepare a construction noise assessment.

The construction noise assessment shall be prepared in accordance with the methodologies, standards, and significance thresholds in the City's CEQA Manual and submitted for review and approval by the Laguna Niguel Community Development Department. This includes an analysis of potential construction noise impacts on noise-sensitive land uses and includes representative noise measurements, estimates of existing and projected noise levels, and Best Management Practices (BMPs), if necessary, to ensure compliance with the City's noise standards. Potential BMPs may include locating stationary noise sources as far from adjacent properties as possible, limiting construction hours, restricting delivery times, installing temporary noise barriers and/or other BMPs determined effective to minimize construction noise emissions.

NOI-2: As part of the development review process for qualifying projects, the Laguna Niguel Community Development Department shall determine if an operational noise assessment is required, based on the screening criteria provided in the City of Laguna Niguel CEQA Manual. For projects with the potential to result in significant operational-related noise impacts, applicants shall retain a qualified environmental professional to prepare an operational noise assessment.

The operational noise assessment shall be prepared in accordance with the methodologies, standards, and significance thresholds in the City's CEQA Manual and submitted for review and approval by the Laguna Niguel Community Development Department. The assessment shall include representative noise measurements, estimates of existing and projected noise levels, and BMPs, if necessary, to ensure compliance with the City's noise standards. BMPs may include, but are not limited to, noise barriers, setbacks, site design, building facades, use of noise-minimizing materials such as rubberized asphalt, and equipment shielding and maintenance.

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

General Plan Noise Element Table N-1, *Land Use Compatibility for Community Noise Exposure*, presents a land use compatibility chart for community noise derived from a similar table originally prepared by the

Office of Land Use and Climate Innovation. This table is proposed to be included in the General Plan Update Nosie Element. The table identifies "normally acceptable," "conditionally acceptable," "normally unacceptable," and "clearly unacceptable" exterior noise levels for various land uses. A "conditionally acceptable" designation implies new construction, or development should be undertaken only after a detailed analysis of the noise reduction requirements for each land use is made and needed noise insulation features are incorporated in the design. By comparison, a "normally acceptable" designation indicates that standard construction can occur with no special noise reduction requirements.

NOISE ELEMENT

Goal N-1: **Land Use Compatibility.** Foster a healthy and livable community by effectively managing noise through strategic planning and regulatory compliance to safeguard against harmful or disruptive noise impacts.

Policy N-1.1: **Land Use and Infrastructure Planning.** Rely on established noise standards and guidelines to evaluate development and infrastructure projects and consider project design features, conditions of approval, or mitigation measures to maintain acceptable noise levels for existing and future land uses.

Policy N-1.2: **Land Use Compatibility.** Consider the noise and land use compatibility matrix (Table N-1) prepared by the Office of Land Use and Climate Innovation as a guide to evaluate land use compatibility and appropriate project design features, conditions of approval or mitigation measures to maintain acceptable noise levels for future land uses.

Policy N-1.3: **Noise Contour Map (Figures N-1 and N-2).** Consider the Noise Contour Maps, which identified existing and projected noise conditions, when evaluating future development and infrastructure projects. The Noise Contour Map provides a tool to help determine appropriate project design features, conditions of approval or mitigation measures to maintain acceptable noise levels for existing and future land uses.

Policy N-1.4: **Roadway Noise Abatement.** Consider noise impacts on sensitive land uses in the design and maintenance of the roadway network. Where feasible, roadway design should minimize noise impacts on adjacent areas

Policy N-1.5: **Noise Compatibility in Mixed-Use and Multi-Family Developments.** Require mixed-use and multi-family residential developments to demonstrate noise compatibility between different adjacent or on-site uses.

Policy N-1.6: **Rail Vibration and Noise Assessments.** Require development projects located within 100 feet of rail lines (measured from the property line) to demonstrate, prior to approval of sensitive uses, that rail-related groundborne vibration and noise impacts have been adequately addressed.

Policy N-1.7: **City Noise Ordinance and Manual.** Ensure the City's Noise Ordinance (Division 6 of Title 6 of the Laguna Niguel Municipal Code) and environmental review procedures (City

California Environmental Quality Act Manual) are consistent with the General Plan and contemporary best practices.

Policy N-1.8: **Commercial Truck Traffic Noise.** To the extent practically feasible, limit "through commercial truck traffic" to designated truck routes to minimize noise impacts to residential neighborhoods and other noise-sensitive uses (See Mobility Element).

Goal N-2: **Noise Management Collaboration.** Collaborative partnerships and strategies to address noise impacts from mobile sources for a quieter and healthier environment for Laguna Niguel.

Policy N-2.1: **Freeway and Toll Road Noise Abatement.** Collaborate with the California Department of Transportation and the Transportation Corridor Agency to incorporate effective and feasible noise abatement measures into the design and construction of Interstate 5 and SR-73 Toll Road projects that could affect Laguna Niguel.

Policy N-2.2: **Regional Noise Coordination.** Coordinate with neighboring cities and other relevant public and transportation agencies to address and minimize potential noise conflicts between land uses within and along Laguna Niguel's boundaries.

Policy N-2.3: **Rail Noise Management.** Collaborate with Amtrak and Metrolink, the California Public Utilities Commission, and other relevant agencies to minimize community noise and vibration impacts along the rail corridor through Laguna Niguel.

Policy N-2.4: **Airplane Noise Management.** Participate in efforts led by John Wayne Airport and other relevant air transportation agencies to implement flight paths and operational strategies to minimize noise impacts on residential neighborhoods and other noise-sensitive areas, in compliance with applicable regulatory frameworks.

Policy N-2.4: **Mobile Noise Enforcement.** Coordinate with Orange County Sheriff's Department and other relevant agencies to enforce noise standards in the state motor vehicle code and other state and federal legislation for mobile noise sources, including regulations exhaust systems, speed limits, and other regulations addressing vehicle noise.

Policy N-2.5: **Legislative Monitoring.** Monitor federal and state legislation and programs aimed at reducing noise impacts that may have implications in Laguna Niguel.

Policy N-2.6: **Promotion of Multimodal Transportation.** Encourage alternatives to single-occupancy vehicle travel, such as walking, bicycling, public transit, to help reduce the number of vehicles on the roadways and corresponding roadway noise.

NOI-2: Would the project result in the generation of excessive groundborne vibration or groundborne noise levels?

Impact Analysis: The main sources of vibration in the Planning Area are related to vehicles, construction, and railway. Typical roadway traffic, including heavy trucks, rarely generates vibration amplitudes high enough to cause structural or cosmetic damage. However, there have been cases in which heavy trucks

traveling over potholes or other discontinuities in the pavement have caused vibration high enough to result in complaints from nearby residents. These types of issues typically can be resolved by smoothing the roadway surface.

Construction Vibration

As demonstrated in Table 2-1, *General Plan Update Growth Assumptions Compared to Existing Conditions*, the General Plan Update Land Use Element identifies opportunities for new growth and development within the City. While the majority of the potential growth opportunities are located within specific areas of the City (Gateway Specific Plan, the Opportunity Areas, and Hospitality Overlay sites), new development or redevelopment involving construction can occur throughout the City consistent with the General Plan Update.

Construction activities that produce vibration that can be felt by adjacent land uses include the use of vibratory equipment, large construction vehicles, and pile drivers. The primary sources of vibration during construction are usually vibratory rollers and large construction vehicles. As shown in Table 4.11-18, *Vibration Source Levels for Construction Equipment*, a vibratory roller has a peak particle velocity of 0.21 inches per second (in/sec), and a large bulldozer or equivalent has a peak particle velocity of 0.089 in/sec at 25 feet. The use of impact pile driving equipment can generate a peak particle velocity of 1.5 in/sec depending on the size and model.

Table 4.11-18
Vibration Source Levels for Construction Equipment

Equipment	Peak Particle Velocity (inches/second) at 25 feet	Approximate Vibration Level LV (VdB) at 25 feet
Pile driver (impact)	1.518 (upper range)	112
	0.644 (typical)	104
Pile driver (sonic)	0.734 upper range	105
	0.170 typical	93
Clam shovel drop (slurry wall)	0.202	94
Hydromill	0.008 in soil	66
(slurry wall)	0.017 in rock	75
Vibratory Roller	0.21	94
Hoe Ram	0.089	87
Large bulldozer	0.089	87
Caisson drill	0.089	87
Loaded trucks	0.076	86
Jackhammer	0.035	79
Small bulldozer	0.003	58
Source: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, May 2006.		

Subsequent construction activities within the City, including the Marketplace at Laguna Niguel, CHFB site, and Town Center Opportunity Areas and Hospitality Overlay sites consistent with implementation of the General Plan Land Use Element would be reviewed for the potential to result in construction ground-borne noise and vibration that exceeds the City's standards at the project level. It is noted that the proposed Project assumes demolition of the CHFB site as part of a future redevelopment effort. Demolition of the site would involve removal of existing buildings and pavement and is analyzed at the project-level, below. The project-level analysis does not include subsequent construction activities. This analysis is provided herein at a programmatic level consistent with the buildout of the General Plan Land Use Element.

Caltrans has published an analysis of ground-borne noise and vibration relating to transportation- and construction-induced vibrations which is used as a significance threshold for construction vibration in the City's CEQA Manual. Table 4.11-12, *Construction Vibration Damage Criteria*, provides maximum PPV levels (in/sec) to be used to determine if groundborne vibration may result in damage, depending on the type of structure. Table 4.11-13, *Groundborne Vibration Potential Annoyance Criteria*, provides the potential annoyance criteria for PPV levels. When evaluated in light of the estimated groundborne vibration levels presented in Table 4.11-12 and Table 4.11-13, construction activities in the Planning Area have the potential to result in significant impacts related to groundborne vibration associated with construction activities. As shown in Table 4.11-13, a PPV of 0.04 is considered "distinctly perceptible" and is considered significant. Thus, impacts may be significant if construction activities result in ground-borne vibration of 0.20 or higher at adjacent buildings, or if construction activities result in ground-borne vibration of 0.04 or higher at sensitive uses.

Therefore, Mitigation Measure NOI-3 would require applicants of subsequent development projects prepare a construction vibration assessment in accordance with the methodologies, standards, and significance thresholds in the City of Laguna Niguel CEQA Manual for review and approval by the Laguna Niguel Community Development Department. The assessment would include a detailed plan to avoid potential significant impacts to existing buildings due to groundborne vibrations. If necessary, the plan would identify and incorporate BMPs to ensure consistency with the City's CEQA Manual criteria. With implementation of Mitigation Measure NOI-3, impacts related to construction-related ground-borne vibration would be less than less than significant.

Chet Holifield Federal Building Demolition

Demolition would occur up to the property lines of the CHFB site. Table 4.11-19, *CHFB Site Demolition Vibration Impacts at Nearest Buildings*, shows the vibration annoyance criteria from demolition-generated vibration activities proposed at the CHFB site. Table 4.11-19 shows the PPV relative to annoyance and structural damage to the nearest buildings to the demolition activities.

Table 4.11-19
CHFB Site Demolition Vibration Impacts at Nearest Buildings

Equipment	Industrial Building to the North	Industrial Building to the East	Commercial Building to the South	Park Building to the West
	PPV @ 160 ft	PPV @ 100 ft	PPV @ 95 ft	PPV @ 325 ft
Large bulldozer	0.005	0.011	0.012	0.002
Small bulldozer	0.000	0.000	0.000	0.000
Jackhammer	0.002	0.004	0.005	0.001
Loaded trucks	0.005	0.010	0.010	0.002
Building Damage Criteria	0.500	0.500	0.500	0.500
Annoyance Criteria	0.100	0.100	0.100	0.100
Exceeds Criteria?	No	No	No	No

PPV: peak particle velocity; Max: maximum; avg: average; ft: feet

Source: California Department of Transportation, *Transportation and Construction Vibration Guidance Manual*, September 2013.

As shown in Table 4.11-19, all PPV levels would be below the annoyance structural damage threshold due to the substantial distance between demolition activities and the nearest offsite buildings. Impacts related to the potential for cosmetic structural damage would be less than significant. Exposure at buildings/structures located further away would be exposed to less vibration and would likewise result in less than significant impacts related to vibration. Therefore, demolition of the CHFB site would not result in the generation of excessive groundborne vibration or groundborne noise levels and impacts would be less than significant; no mitigation measures would be required.

Transportation Vibration

As previously discussed, one rail line runs through the northeast corner of the City (Community Profile Area 4), alongside Interstate 5 (I-5). This rail line is used by BNSF, AMTRAK, and Metrolink. Metrolink operates the Laguna Niguel/Mission Viejo Station located along Forbes Road between the I-5 and State Route 73 (SR-73). There are an estimated 49 daytime and 17 nighttime trains that pass through the City each day at a maximum of 90 miles per hour (MPH), according to the Federal Railroad Administration Crossing Inventory. This rail line extends through the Gateway Specific Plan area, which comprises the entirety of Community Profile Area 4 and is generally developed with residential, commercial, and industrial/business park uses. The rail line is not located within proximity to any other areas of the City with the potential to expose sensitive land uses to excessive vibration.

Under buildout of the General Plan Land Use Element, Community Profile Area 4 would allow up to 2,994 attached units, 1,812,800 SF of commercial, 350 hotel rooms, and 110 managed care facility units (a net of 1,495 attached, 701,777 SF commercial, and 317 hotel rooms above existing conditions), consistent with the Gateway Specific Plan. The potential for sensitive uses to be exposed to railway ground-borne

noise and vibration associated with implementation of the Gateway Specific Plan was analyzed within the Gateway Specific Plan EIR. Any subsequent development within the Gateway Specific Plan (Community Profile 4) would be required to comply with project-specific noise mitigation measures identified in the Gateway Specific Plan EIR which address the exposure of noise-sensitive land uses to ground-borne noise and vibration levels with the potential to exceed noise standards due to the operational activities of the rail line. The General Plan Update would not increase railway operations within the Planning Area nor provide for new sensitive land uses or development potential beyond what is currently allowed. Potential ground-borne noise and vibration impacts from the railway with implementation of the General Plan Update would be less than significant.

The General Plan Update Noise Element includes policies intended to minimize exposure to excessive groundborne vibration or groundborne noise levels, including Policy N-1.6, which requires development projects located within 100 feet of rail lines (measured from the property line) to demonstrate, prior to approval of sensitive uses, that rail-related groundborne vibration and noise impacts have been adequately addressed, and Policy N-2.3 which directs the City to collaborate with Amtrak and Metrolink, the California Public Utilities Commission, and other relevant agencies to minimize community noise and vibration impacts along the rail corridor through Laguna Niguel.

Mitigation Measures:

NOI-3 Prior to issuance of a grading permit, applicants of qualifying development projects shall have a construction vibration assessment prepared by a qualified environmental professional in accordance with the methodologies, standards, and significance thresholds in the City of Laguna Niguel CEQA Manual and submitted for review and approval by the Laguna Niguel Community Development Department. The assessment shall include a detailed plan to avoid potential significant impacts to existing buildings due to groundborne vibrations. If necessary, the plan shall identify and incorporate Best Management Practices (BMPs) to ensure consistency with the City's CEQA Manual criteria. BMPs may include, but are not limited to, pre-construction surveys, vibration monitoring, equipment selection and placement, alternative construction methods, open trenches, and installing vibration isolators based on California Department of Transportation's Construction Vibration Guidance Manual and/or other BMPs determined effective to minimize construction vibration impacts.

Level of Significance: Less than Significant Impact with Mitigation Incorporated.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

NOISE ELEMENT

Policy N-1.6: **Rail Vibration and Noise Assessments.** Require development projects located within 100 feet of rail lines (measured from the property line) to demonstrate, prior to approval of sensitive uses, that rail-related groundborne vibration and noise impacts have been adequately addressed.

Policy N-1.7: **City Noise Ordinance and Manual.** Ensure the City's Noise Ordinance (Division 6 of Title 6 of the Laguna Niguel Municipal Code) and environmental review procedures (City

California Environmental Quality Act Manual) are consistent with the General Plan and contemporary best practices.

Policy N-2.3: **Rail Noise Management.** Collaborate with Amtrak and Metrolink, the California Public Utilities Commission, and other relevant agencies to minimize community noise and vibration impacts along the rail corridor through Laguna Niguel.

4.11.6 CUMULATIVE IMPACTS

Section 3.0, *Basis of Cumulative Analysis*, identifies projected regional growth having the potential to interact with the proposed Project to the extent that a significant cumulative effect may occur. The geographic setting for noise is typically localized and considers development within the City adjacent to neighboring jurisdictions.

Would the project, combined with other related cumulative projects, generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Impact Analysis:

CONSTRUCTION NOISE

Short-term construction noise and vibration is localized and would affect only land uses that are proximate to a specific project site. Potential impacts would be site-specific, depending on the equipment used, the existing noise environment, and the distance to noise-sensitive land uses. While unlikely, there is the potential that subsequent development consistent with the General Plan Update could occur adjacent to a neighboring jurisdiction and combine with the construction activities of other related cumulative projects within the immediate area.

As discussed above, construction activities in the City are required to comply with Municipal Code Section 6-6-7 which limits noise produced from these activities to the least noise sensitive portions of the day. Further, subsequent development based on the screening criteria in the City's CEQA Manual would be required to prepare a construction noise assessment to identify potential construction noise impacts on noise-sensitive land uses and implement BMPs, if necessary, to ensure compliance with the City's noise standards (Mitigation Measures NOI-1).

Similar to the Project, related cumulative development would be required to assess potential construction noise impacts associated with site-specific development on a project-by-project basis in compliance with any construction noise requirements and significance thresholds established by the jurisdiction in which the project is located. Individual construction projects would implement BMPs to reduce potential construction noise impacts. Therefore, the General Plan Update's incremental effects associated with the potential to generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies specific to construction would not be cumulatively considerable.

Chet Holifield Federal Building Demolition

The CHFB site is located within the northwestern portion of the City adjacent to Alicia Parkway. West of Alicia Parkway are the Aliso Niguel High School and residential uses within the City of Aliso Viejo. The remainder of the City is surrounded by uses within the City of Laguna Niguel. As previously noted, noise is localized and would only combine with other noise activities within the immediate area. As discussed above and shown in Table 4.11-15, demolition of the CHFB site would not exceed noise thresholds at the Laguna Niguel Skate & Soccer Park, which is situated west of Alicia Parkway, between the City of Aliso Viejo and CHFB site. Therefore, demolition of the CHFB site would not have the potential to combine with cumulative related development projects that are proximate to the CHFB site within Aliso Viejo. The incremental effects associated with the potential to generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies associated with noise resulting from demolition activities at the CHFB site would not be cumulatively considerable.

TRANSPORTATION NOISE IMPACTS

Table 4.11-17 shows the cumulative noise levels associated with traffic on the local roadway network. Cumulative conditions include traffic due to 2045 buildout of the General Plan Update in addition to pass-through traffic from other jurisdictions. As shown in Table 4.11-17, compared to existing traffic noise levels, 2045 with Project traffic volumes are expected to be up to 1.6 dBA CNEL louder than existing ambient noise levels at existing land uses and would result in inaudible increases in ambient noise. The General Plan Update's incremental effects associated with the potential to generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies specific to transportation noise would not be cumulatively considerable.

STATIONARY NOISE

While the Project does not explicitly propose any new noise-generating uses, implementation of the Project could result in subsequent development of land uses that generate noise levels in excess of applicable City noise standards for non-transportation noise sources. However, these noise impacts would be primarily localized to the City and occur within proximity to the specific site being developed. There is the potential that subsequent development could occur adjacent to a neighboring jurisdiction and combine with other related cumulative projects in the immediate area. However, as discussed above, where specific conditions occur, an operational noise assessment would be required to determine whether the development being proposed would have the potential to generate stationary noise at levels that exceed applicable thresholds and implement BMPs, if necessary, to ensure compliance with the City's noise standards. Therefore, conformance with the existing regulatory framework and implementation of Mitigation Measure NOI-2 would reduce project-level impacts from stationary noise sources to a less than significant level.

Similar to the Project, related cumulative development would be required to assess potential stationary noise impacts associated with site-specific development on a project-by-project basis in compliance with any operational noise requirements and significance thresholds established by the jurisdiction in which

the project is located. Individual projects would implement BMPs to reduce potential operational noise impacts. Therefore, the General Plan Update's incremental effects associated with the potential to generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies specific to stationary noise would not be cumulatively considerable.

Mitigation Measures: Refer to Mitigation Measures NOI-1 and NOI-2.

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan goals and policies cited above.

Would the project, combined with other related cumulative projects, generate excessive groundborne vibration or groundborne noise levels?

Impact Analysis:

CONSTRUCTION VIBRATION

Short-term construction noise and vibration is a localized activity and would generally affect only land uses that are immediately adjacent to a specific project site (within 50 feet). Therefore, potential groundborne vibration or groundborne noise level impacts would be primarily localized to the City and occur within proximity to the specific site being developed. There is the potential that subsequent development could occur adjacent to a neighboring jurisdiction and combine with other related cumulative projects in the immediate area. However, as discussed, subsequent development consistent with the General Plan Update would comply with Mitigation Measure NOI-3 which requires a construction vibration assessment for qualifying development projects which would include a detailed plan to avoid potential significant impacts to existing buildings due to groundborne vibrations. Because vibration impacts would generally be extremely localized (within 50 feet), and the Project's potential for vibration impacts would be reduced to a less than significant level, the General Plan Update's incremental effects associated with the generation of excessive groundborne vibration or groundborne noise levels during construction would not be cumulatively considerable.

Chet Holifield Federal Building Demolition

The CHFB site is located within the northwestern portion of the City adjacent to Alicia Parkway. West of Alicia Parkway are the Aliso Niguel High School and residential uses within the City of Aliso Viejo. As discussed above, construction vibration is localized and would generally affect only land uses that are immediately adjacent to a specific project site (within 50 feet). CHFB site demolition activities would not result in a significant impact associated with construction vibration. Further, demolition activities would not occur within 50 feet of Aliso Viejo and therefore would not have the opportunity to combine with cumulative related development outside of the City with the potential to result in a cumulative impact. Thus, the incremental effect associated with the generation of excessive groundborne vibration or groundborne noise levels from demolition activities at the CHFB site would not be cumulatively considerable.

TRANSPORTATION VIBRATION

One rail line runs through the northeast corner of the City (Community Profile Area 4), alongside Interstate 5 (I-5). This rail line extends through the Gateway Specific Plan area, which comprises the entirety of Community Profile Area 4. The rail line is not located within proximity to any other areas of the City. Subsequent development within Community Profile Area 4 would continue to be governed by the Gateway Specific Plan. The proposed General Plan Update does not provide for any additional development potential beyond what is currently allowed for by the adopted Gateway Specific Plan and analyzed in the Gateway Specific Plan EIR. The potential for cumulative impacts due to sensitive uses being exposed to railway ground-borne noise and vibration associated with implementation of the Gateway Specific Plan was analyzed within the Gateway Specific Plan EIR. Due to the location of the Gateway Specific Plan area and its physical separation from adjacent jurisdictions, any subsequent development consistent with implementation of the General Plan Land Use Element and the Gateway Specific Plan would not have the opportunity to combine with related cumulative development within an adjacent jurisdiction. Further, the General Plan Update would not increase railway operations within the Planning Area nor provide for new sensitive land uses or development potential beyond what is currently allowed. The General Plan Update's incremental effect associated with the generation of excessive groundborne vibration or groundborne noise levels from transportation would not be cumulatively considerable.

Mitigation Measures: Refer to Mitigation Measure NOI-3.

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan goals and policies cited above.

4.11.7 SIGNIFICANT UNAVOIDABLE IMPACTS

Noise and vibration impacts associated with the implementation of the General Plan Update would be less than significant. No significant unavoidable noise and vibration impacts would occur as a result of the General Plan Update.

4.11.8 REFERENCES

California Department of Transportation (Caltrans), *California Airport Land Use Planning Handbook*, January 2002.

California Department of Transportation (Caltrans), *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, September 2013.

California Department of Transportation (Caltrans), *Transportation and Construction Vibration Guidance Manual*, April 2020.

California Department of Transportation, *Transportation and Construction Vibration Guidance Manual*, September 2013.

City of Laguna Niguel, *City of Laguna Niguel CEQA Manual*, June 2021 (revised February 2023).

Federal Transit Administration. *Transit Noise and Vibration Impact Assessment Manual. 2018.*

Federal Transit Administration, Transit Noise and Vibration Impact Assessment, May 2006.

FHWA Noise Standard (23 Code of Federal Regulations 772).

Linscott, Law & Greenspan, Engineers (LLG), *City of Laguna Niguel General Plan Update Vehicle Miles Traveled (VMT) Analysis Report,* January 7, 2025.

MD Acoustics, LLC, *City of Laguna Niguel General Plan Update Noise Impact Study*, August 18, 2025.

U.S. Federal Transit Administration, 2018.

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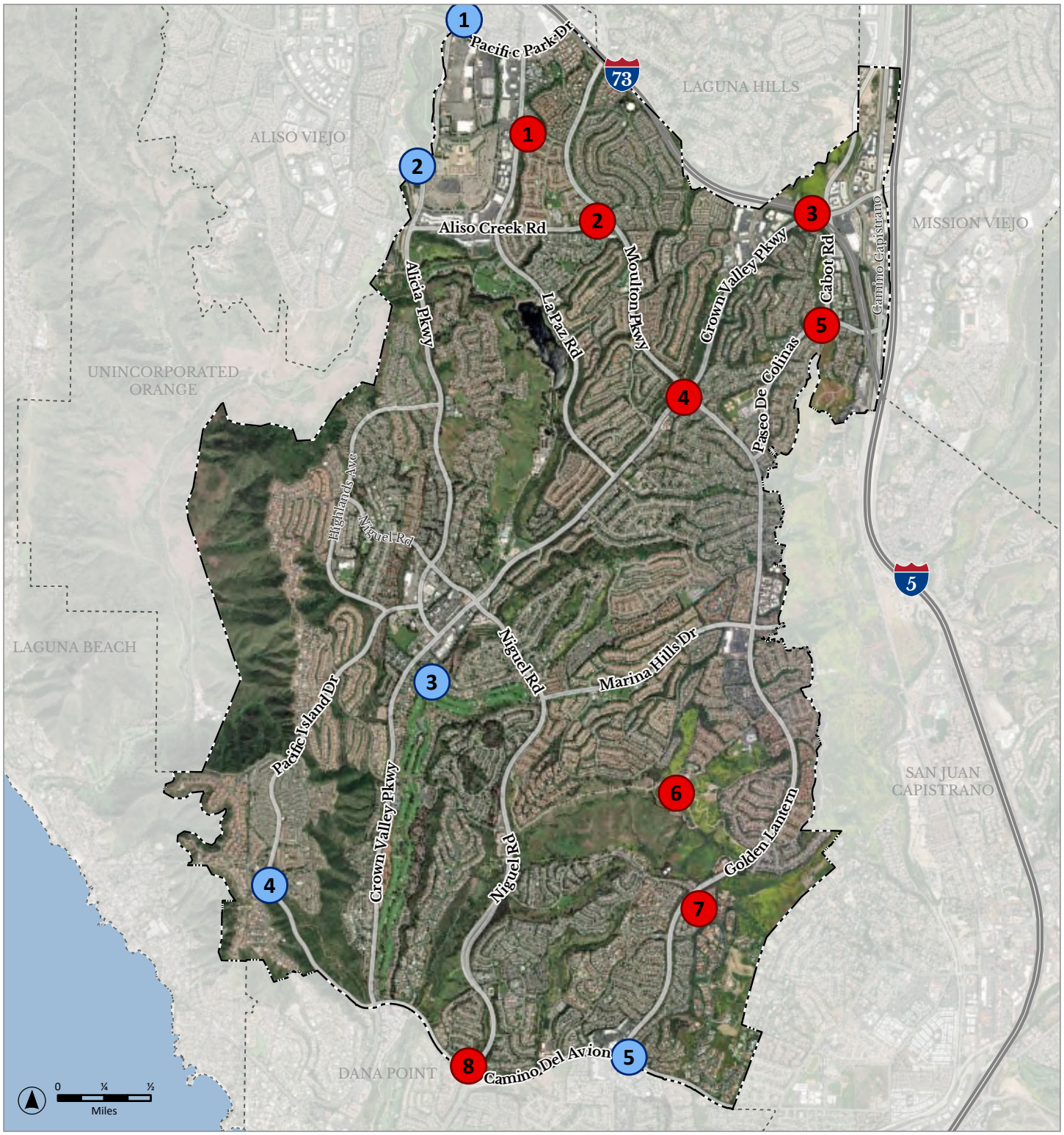

Data sources: MD Acoustics; City of Laguna Niguel; Orange County GIS.

Prepared for the City of Laguna Niguel by De Novo Planning Group
May 21, 2025

LEGEND

- Laguna Niguel City Boundary
- Other Jurisdictions
- Long-Term Measurment Location
- Short-Term Measurment Location

Figure 4.11-1.

Noise Measurement Locations

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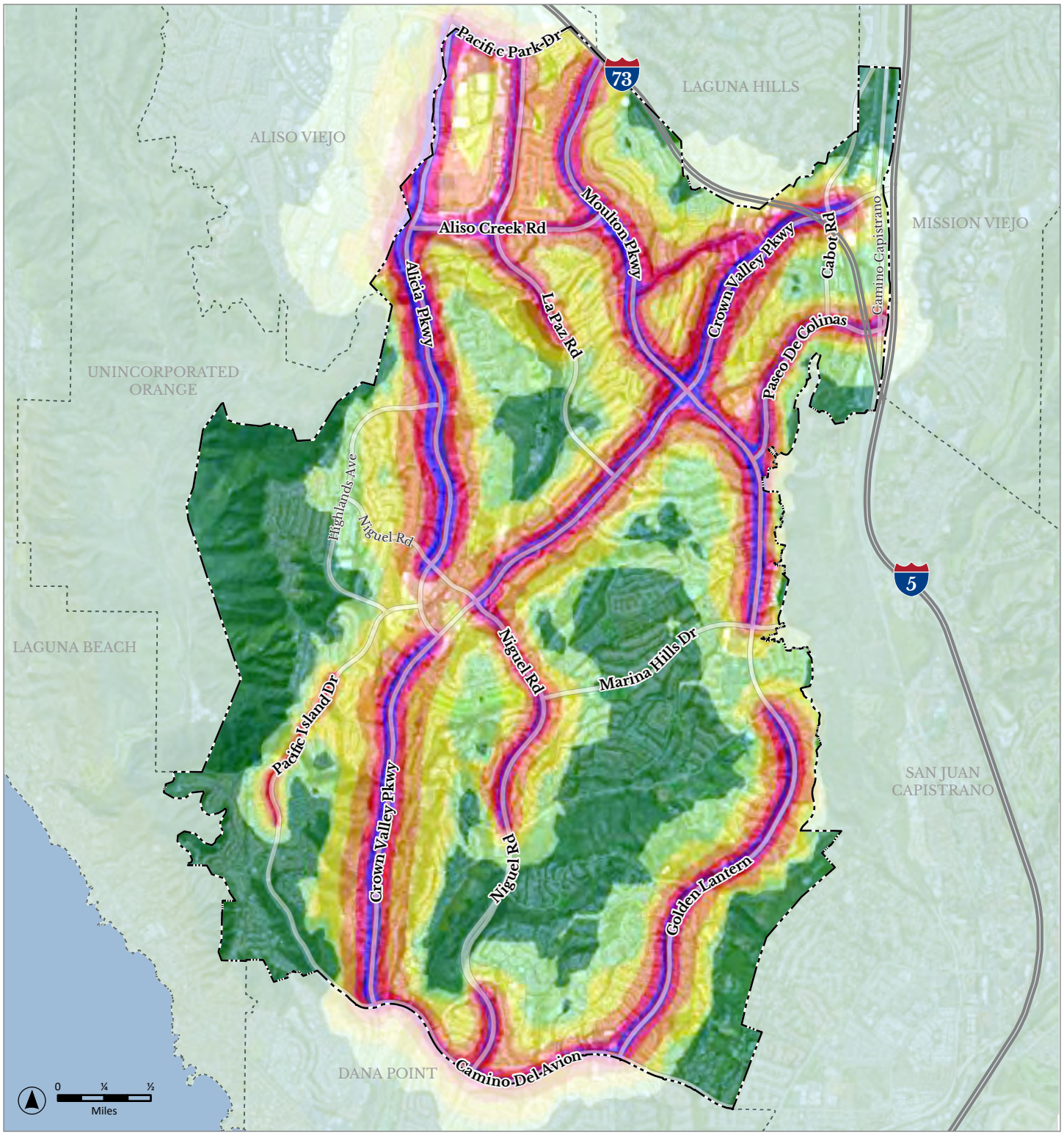

Data sources: MD Acoustics; City of Laguna Niguel; Orange County GIS.

Prepared for the City of Laguna Niguel by De Novo Planning Group
May 21, 2025

LEGEND

- Laguna Niguel City Boundary
- Other Jurisdictions

Levels in dB(A)

<45	50–55	60–65
45–50	55–60	>=65

Figure 4.11-2.

Existing Roadway Noise Level Contours (CNEL)

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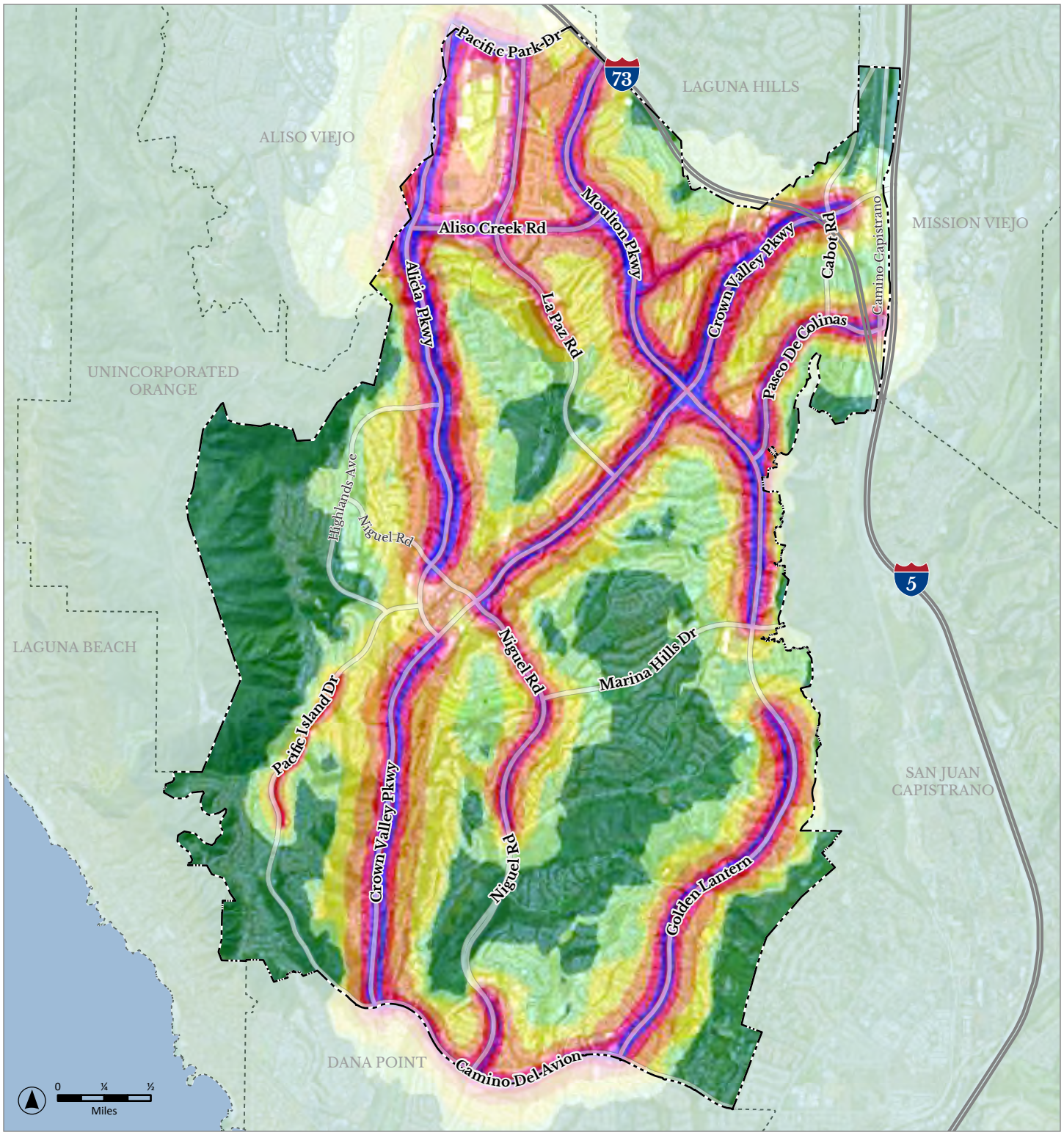

Data sources: MD Acoustics; City of Laguna Niguel; Orange County GIS.

Prepared for the City of Laguna Niguel by De Novo Planning Group
May 21, 2025

LEGEND

Laguna Niguel City Boundary

Other Jurisdictions

Levels in dB(A)

<45	50–55	60–65
45–50	55–60	>=65

Figure 4.11-3.

2045 With Project Roadway Noise Level Contours (CNEL)

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4.12 POPULATION AND HOUSING

4.12.1 PURPOSE

This section identifies the existing population, housing, and employment for the Planning Area and Orange County, as applicable, and provides an analysis of potential population and housing impacts associated with implementation of the General Plan Update.

4.12.2 ENVIRONMENTAL SETTING

POPULATION AND HOUSEHOLD GROWTH

Orange County has experienced moderate growth over the last two decades driven by vibrant communities, natural resources, and employment opportunities. Table 4.12-1, *Historic Population Trends*, shows the historical population and household growth trends for Laguna Niguel and for Orange County as reported by the Department of Finance (DOF).

Table 4.12-1
Historic Population Trends

Category	Laguna Niguel			Orange County		
	2010[1]	2025[2]	% Change	2010[1]	2025[2]	% Change
Total Population	62,979	65,257	3.6%	3,010,232	3,175,427	5.5%

Sources:
1. State of California, Department of Finance, *E-8 Historical Population and Housing Estimates for Cities, Counties, and the State, 2010-2020. Sacramento, California, May 2025.*
2. State of California, Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties, and the State – January 1, 2021-2025. Sacramento, California, May 2025.*

The Southern California Association of Governments (SCAG) forecasts 2050 projections as part of the Connect SoCal 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy (2024-2050 RTP/SCS). SCAG's 2024-2050 RTP/SCS provides population, household, and employment data and projections for the counties in the SCAG region, including Orange County. SCAG's forecasts are based in part on jurisdictions' existing land uses and General Plan land use designations. As indicated in the 2024-2050 RTP/SCS Demographics & Growth Forecast Technical Report (adopted April 4, 2024), population projections are calculated based on household growth and household size at the County level. It is noted by SCAG that population in the 2019 plan base year, benchmarked to the 2020 Census is provided. However, SCAG population projections below the county level were developed for required modeling purposes only. SCAG indicates a rough estimate of the future jurisdiction-level population based on the 2024-2050 RTP/SCS household forecast can be derived using a county level population to housing ratio

and apply it to the jurisdictions future household growth.[1] As shown in Table 4.12-2, *SCAG Growth Forecasts (2019-2050)*, the 2024-2050 RTP/SCS forecasts that the City and County population would increase by approximately 21.3 percent and eight percent, respectively, between 2019 and 2050.

Table 4.12-2
SCAG Growth Forecasts (2019-2050)

Category	2019	Forecast 2050	% Change
Laguna Niguel			
Population	64,400	78,090	21.3%
Households	25,400	28,500	12.2%
Orange County			
Population[1]	3,191,000	3,439,000	7.8%
Households	1,069,000	1,253,000	17.2%

Source: Southern California Association of Governments, 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments, *Demographics & Growth Forecast Technical Report*, Adopted April 4, 2024.
Notes:
1. Based upon SCAG's projected Orange County persons per household ratio of 2.74.

It is important to note that the SCAG projections, which are compiled using a number of sources including adopted plans, historical trends, and interviews with local jurisdictions, tend to be more accurate on a regional level than on a local or city level. It is likely that through a combination of market changes, catalytic projects, updated land use direction in the General Plan, and other factors, Laguna Niguel could capture either more or less of expected regional growth than forecasted by SCAG.

HOUSING UNITS

Similar to the region overall, the housing stock in Laguna Niguel consists primarily of single-family homes. This home type makes up more than half (72.1 percent) of all housing units in the City of Laguna Niguel, which is a higher proportion than in all of Orange County (62.0 percent). The proportion of units in Laguna Niguel within multifamily buildings is approximately 27.7 percent. In comparison, similar unit types make up 35.2 percent of housing in Orange County. The breakdown of housing unit types is shown in Table 4.12-3, *Housing Supply Mix*.

[1] Southern California Association of Governments, 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments, *Demographics & Growth Forecast Technical Report*, Adopted April 4, 2024.

Table 4.12-3
Housing Supply Mix

Category	2020		2025	
	Orange County	Laguna Niguel	Orange County	Laguna Niguel
Single-family Units (detached and attached)	704,888	20,498	717,940	20,516
Multi-family Units	392,736	6,735	407,299	7,888
Mobile Home	32,161	48	32,186	48
Total Housing Units	**1,129,785**	**27,281**	**1,157,425**	**28,452**
Occupied	1,074,105	24,425	1,100,269	26,519
Vacancy Rate	4.9%	6.8%	4.9%	6.8%
Persons per Household	2.92	2.52	2.81	2.44

Source: State of California, Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties, and the State – January 1, 2021-2025*. Sacramento, California, May 2025.

The DOF estimates housing units by adding new construction and land annexations; subtracting housing that is removed (e.g., demolition); and adjusting for units lost or gained by conversions. Annual housing unit change data is supplied to the DOF by local jurisdictions and the U.S. Census Bureau. As indicated in Table 4.12-3, based on DOF estimates, the City's housing stock as of January 2025 was an estimated 28,452 housing units.

Vacancy rates are a measure of general availability of housing. They also indicate how well the types of available units meet the housing market demand. The availability of vacant housing units provides households with choices of type and price to accommodate their specific needs. Low vacancy rates can result in higher prices, limited choices, and settling with inadequate housing. Low vacancy rates may also contribute to overcrowding. Studies suggest "healthy" vacancy rates are generally between six to eight percent for rental housing and between one to two percent for owner-occupied housing.[2] As indicated in Table 4.12-3, Laguna Niguel's vacancy rate is 6.8 percent, which is higher than Orange County (4.9 percent).

SCAG's Connect SoCal projects housing estimates up to 2050. For Laguna Niguel, the number of projected households in 2050 is 28,500; for Orange County, the number of projected households is 1,253,000. SCAG forecasts total housing need for each community in southern California based on three general factors:

(1) The number of housing units needed to accommodate future population and employment growth;
(2) The number of additional units needed to allow for housing vacancies; and
(3) The number of very low, low, moderate, and above moderate-income units needed in the community.

[2] California State Auditor's Office (CSA), *Report 2021-125: All Recommendation Responses*, https://www.bsa.ca.gov/reports/responses/2021-125/all, accessed May 15, 2024.

Additional factors used to determine the Regional Housing Needs Assessment (RHNA) include tenure, the average rate of units needed to replace housing units demolished, proximity to high quality transit areas, and other factors.

EMPLOYMENT

As shown in Table 4.12-4, *Labor Force Participation and Unemployment,* Laguna Niguel has a labor force participation rate of 65.5 percent among residents aged 16 and older, and an unemployment rate of 6.7 percent. The labor force participation rate is similar to the County, while the unemployment rate is slightly higher than the County.

Table 4.12-4
Labor Force Participation and Unemployment

Category	Laguna Niguel	Orange County
Population 16 years and over	54,334	2,572,232
In Labor Force	35,780	1,687,986
Labor Force Participation Rate	65.5%	65.6%
Employment/Population Ratio	62.0%	61.2%
Unemployment Rate	6.7%	5.3%
Mean Travel Time to work (Minutes)	26.5	27.0
Source: U.S Census Bureau, 2023 American Community Survey 5-Year Estimates.		

As shown in Table 4.12-5, *Employment Growth Projections*, in 2019, Orange County's employment totaled approximately 1,805,000 jobs and is forecast to increase by approximately 11.9 percent to 2,019,000 jobs by 2050. Employment numbers are forecast to increase from approximately 20,800 jobs to 22,400 jobs in 2050 within Laguna Niguel, representing an increase of 7.7 percent.

Table 4.12-5
SCAG Employment Growth Projections

Location	2019	Forecast 2050	2019-2050 SCAG % Difference
Laguna Niguel	20,800	22,400	7.7%
Orange County	1,805,000	2,019,000	11.9%
Source: Southern California Association of Governments, 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments, *Demographics & Growth Forecast Technical Report*, Adopted April 4, 2024.			

SCAG states that "a balance between jobs and housing in a metropolitan region can be defined as a provision of an adequate supply of housing to house workers employed in a defined area (i.e., community or subregion). Alternatively, a jobs/housing balance can be defined as an adequate provision of employment in a defined area that generates enough local workers to fill the housing supply." Jobs and housing are considered in balance when a subregion has enough employment opportunities for most of

the people who live there and enough housing opportunities for most of the people who work there. The jobs/housing balance is one indicator of a project's effect on growth and quality of life in a project area. SCAG uses the jobs/housing ratio to assess the relationship between housing and employment growth.

More specifically, the 2024-2050 RTP/SCS states that "an imbalance between employment and housing in a community is a key contributor to local traffic congestion. These types of origin/destination disparities may also be considered an impediment to environmental justice." According to SCAG, improvements in the jobs to housing balance may result in a reduction of transportation congestion and related air quality problems. Communities with more than 1.5 jobs per dwelling unit (DU) are considered "jobs rich" and those with fewer than 1.5 jobs per DU are considered "housing rich." As identified in Table 4.12-6, *Jobs to Housing Ratio*, under 2019 conditions and forecast 2050 conditions, Orange County is considered jobs rich, and Laguna Niguel is considered housing rich.

Table 4.12-6
Jobs to Housing Ratio

Category	2019	Forecast 2050
Orange County		
Jobs	1,805,000	2,019,000
Total Households	1,069,000	1,253,000
Jobs/house ratio	1.69	1.61
Laguna Niguel		
Jobs	20,800	22,400
Total Households	25,400	28,500
Jobs/house ratio	0.82	0.79
Source: Southern California Association of Governments, 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments, *Demographics & Growth Forecast Technical Report*, Adopted April 4, 2024.		

4.12.3 REGULATORY SETTING

STATE

Regional Housing Needs Assessment (RHNA)

State law requires that jurisdictions provide their fair share of regional housing needs. The State of California Department of Housing and Community Development (HCD) is mandated to determine the statewide housing need. In cooperation with HCD, local governments and Councils of Governments (COGs) are charged with making a determination of the existing and projected housing needs as a share of the statewide housing need of their city or region.

The RHNA quantifies the housing need by income group within each jurisdiction during specific planning periods. The RHNA is incorporated into local general plans through updates to the local housing element. The RHNA allows communities to anticipate growth, so that collectively the region can grow in ways that enhance quality of life, improve access to jobs, promote transportation mobility, and address social equity and fair share housing needs. The 6th Cycle Final RHNA Allocation Plan was adopted by the SCAG Regional Council on March 4, 2021, and covers the planning period from October 15, 2021, to October 15, 2029.

Table 4.12-7, *Laguna Niguel 6th Cycle Regional Housing Needs Allocation*, shows the City's 6th Cycle RHNA for the 2021-2029 planning period.

Table 4.12-7
Laguna Niguel 6th Cycle Regional Housing Needs Allocation

Income Level	Dwelling Unit Allocation
Very-low income	348
Low income	202
Moderate income	223
Above-moderate income	434
Total	**1,207**

Source: City of Laguna Niguel, *2021-2029 Housing Element*, December 2023 (revised February 2024).

LOCAL

Southern California Association of Governments

Regional planning agencies such as SCAG recognize that planning issues extend beyond the boundaries of individual cities. Efforts to address regional planning issues such as affordable housing, transportation, and air pollution have resulted in the adoption of regional plans affecting the Planning Area.

SCAG has evolved as the largest COG in the United States, functioning as the Metropolitan Planning Organization (MPO) for six counties (Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial) and 191 cities. The region encompasses a more than 38,000-square-mile area. As the designated MPO, the federal government mandates SCAG research and develop plans for transportation, growth management, hazardous waste management, and air quality. As a result, SCAG prepares comprehensive regional plans to address these concerns.

SCAG is responsible for the maintenance of a continuous, comprehensive, and coordinated planning process resulting in a Regional Transportation Plan (RTP) and a Regional Transportation Improvement Program. SCAG is responsible for development of demographic projections and is also responsible for development of the integrated land use, housing, employment, transportation programs, measures, and strategies for the Air Quality Management Plan.

Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)

The passage of California Senate Bill (SB) 375 in 2008 requires MPOs, such as SCAG, to prepare and adopt a Sustainable Communities Strategy (SCS) that sets forth a forecasted regional development pattern which, when integrated with the transportation network, measures, and policies, will reduce greenhouse gas (GHG) emissions from automobiles and light duty trucks (Government Code Section 65080(b)(2)(B)). The SCS outlines certain land use growth strategies that provide for more integrated land use and transportation planning and maximize transportation investments. The intent for the SCS is to provide a regional land use policy framework that local governments may consider and build upon.

Every four years, SCAG updates Connect SoCal, the RTP/SCS, as required by federal and State regulations. On April 4, 2024, SCAG's Regional Council adopted the 2024-2050 RTP/SCS. The 2024-2050 RTP/SCS discusses a variety of land use tools to help achieve the state-mandated reductions in GHG emissions through reduced per capita Vehicle Miles Traveled (VMT). Some of these tools include center-focused placemaking, focusing on priority growth areas, job centers, transit priority areas, as well as high quality transit areas and green regions.

The 2024-2050 RTP/SCS outlines a vision for a more resilient and equitable future, with investment, policies, and strategies for achieving the region's shared goals through 2050. As with the previous RTP/SCS, the 2024-2050 RTP/SCS is a long-term plan for the southern California region that details investment in the transportation system and development in communities. SCAG worked closely with local jurisdictions to develop the 2024-2050 RTP/SCS, which incorporates current demographics and anticipated future population, household, and employment growth patterns based, in part, upon local growth forecasts, projects and programs, and includes complimentary regional policies and initiatives. The 2024-2050 RTP/SCS outlines a forecasted development pattern that demonstrates how the region can sustainably accommodate needed housing. In addition, the 2024-2050 RTP/SCS is supported by a combination of transportation and land use strategies that outline how the region can achieve California's GHG-emission-reduction goals and federal Clean Air Act requirements.

The Regional Planning Policies provide guidance for integrating land use and transportation planning to realize the vision of the 2024-2050 RTP/SCS. The policies are within the following categories:

- Mobility
- Communities
- Environment
- Economy

Growth Forecasts

SCAG's Forecasting Section is responsible for producing socioeconomic estimates and projections at multiple geographic levels and in multiple years. The Forecasting Section develops, refines, and maintains SCAG's regional and small area socioeconomic forecasting/allocation models. The socioeconomic estimates and projections are used by federal- and state-mandated long-range planning efforts such as the RTP, Air Quality Management Plan, Regional Transportation Improvement Program, and RHNA. SCAG's adopted RTP/SCS Growth Forecasts are used to assess a project's consistency with adopted plans that have addressed growth management from a local and regional standpoint; refer to Section 5.3, *Growth-Inducing Impacts*.

City of Laguna Niguel 6th Cycle 2021-2029 Housing Element

Housing elements are one of the general plan elements that are mandated by the State of California (California Government Code Sections 65580 to 65589.8). State law requires that the housing element consists of "an identification and analysis of existing and projected housing needs and a statement of goals, policies, quantified objectives, financial resources, and scheduled programs for the preservation, improvement, and development of housing" (Government Code Section 65580).

Laguna Niguel's Housing Element is a guide for housing within the Planning Area and provides an indication of the need for housing in the community in terms of affordability, availability, adequacy, and accessibility. The Housing Element provides a strategy to address housing needs and identifies a series of specific housing programs to meet community needs.

The City of Laguna Niguel's 6th Cycle Housing Element was adopted in December 2023 and specifically addresses housing needs for the City, from October 15, 2021, through October 15, 2029, in line with the 6th Cycle RHNA planning period for the SCAG region. Laguna Niguel's share of the regional housing need for the 2021-2029 RHNA period was allocated by SCAG based on factors such as existing need, recent growth trends, income distribution, and capacity for future growth. The Housing Element identifies adequate land with appropriate zoning and development standards to accommodate its allocation of the regional housing need. Table 4.12-7 shows the City of Laguna Niguel's 6th Cycle RHNA for the 2021-2029 planning period.

City of Laguna Niguel Municipal Code

The City's Zoning Ordinance (Zoning Code) is codified in Title 9, *Planning and Zoning*, of the Laguna Niguel Municipal Code. The Zoning Code is intended to guide the development of the City in an orderly manner, implement the policies of the General Plan, protect and enhance the quality of the natural and built environment, promote the public health, safety and general welfare by regulating the use of land and buildings and the location and basic form of structures, and provide the physical, environmental, economic, and social advantages that result from the orderly planned use of land resources. The Zoning Code is a primary tool in implementing the Laguna Niguel General Plan.

City of Laguna Niguel CEQA Manual

The City of Laguna Niguel CEQA Manual provides the City and project applicants with local guidelines, procedures, requirements, and thresholds of significance for the environmental review process within the City of Laguna Niguel consistent with the California Environmental Quality Act (Public Resources Code [PRC] Section 21000 et seq.), referred to as "CEQA" or "CEQA Statutes," and the State CEQA Guidelines (Title 14, California Code of Regulations (CCR), Division 6, Chapter 3, Section 15000 et seq.). The City's CEQA Manual applies to all public and private projects under the jurisdiction of the City of Laguna Niguel that constitute a "project" and therefore subject to CEQA review.

4.12.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

CEQA Guidelines Appendix G contains the Initial Study Environmental Checklist, which includes questions related to population and housing. The City relies on the questions included in Appendix G as the thresholds of significance for assessing impacts on population and housing (City of Laguna Niguel CEQA Manual, Revised February 24, 2023). A significant impact will occur if implementation of the proposed Project will:

- 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) (refer to Impact Statement POP-1); and

- Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere (refer to Impact Statement POP-2).

4.12.5 IMPACTS AND MITIGATION MEASURES

POP-1: Would the project 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?

Impact Analysis: The Project is a comprehensive update to the City of Laguna Niguel's existing General Plan. The proposed Land Use Map identifies land use designations for each parcel in the Planning Area; refer to Figure 2-5, *General Plan Update Land Use Map*.

The proposed Land Use Element continues to separate Laguna Niguel into 14 Community Profile Areas, as shown in Figure 2-6, *General Plan Update Community Profile Areas* and Figure 2-7, *General Plan Update Community Profile and Sub-Profile Areas*, to facilitate a manageable approach to community planning and land use implementation. The delineation of the 14 Community Profile Areas was based upon factors such as land use types, planning area boundaries, major streets, natural features, homeowners' association boundaries, and the Orange County Transportation Authority (OCTA) TAZ regional transportation modeling system.

The 14 Community Profile Areas and their respective Sub-profile Areas establish the baseline General Plan buildout limits, hereafter referred to as Maximum Development Intensities (MDIs). As detailed in Tables 2-2 through 2-15, the proposed MDIs are provided by Sub-profile Area, categorizing residential development by type (maximum detached or attached dwelling units) and maximum density, as well as commercial development by maximum square footage and maximum Floor Area Ratio (FAR). Additional land use specific MDIs are also provided for public institutional, hospitality, and managed care uses. The Community Profile Area summaries are for statistical purposes only. MDIs may not be transferred between Sub-profile Areas.

It is important to note that beyond MDIs, various factors influence parcel development. These include, but are not limited to, a parcel's physical characteristics, compatibility with surrounding uses, market conditions, infrastructure and access constraints, and historical development trends.

A statistical summary of buildout potential associated with the General Plan Update's Community Profile Areas and future implementation of three Opportunity Area Overlays is shown in Table 2-17, *General Plan Update Growth Assumptions Compared to Existing Conditions*, and Table 2-18, *General Plan Update Growth Assumptions*. As shown in Tables 2-17 and 2-18, buildout of the General Plan Land Use Element could yield a total of up to 31,124 dwelling units, 520 managed care facility units, a population of 76,151 people, approximately 6,862,257 square feet of commercial building floor area, approximately 401,658 square feet of public institutional building floor area, 590 hotel rooms, and 19,267 jobs within the Planning Area. Buildout of the General Plan Land Use Element represents growth above existing conditions of up to approximately 3,464 new dwelling units, 8,418 people, 1,099,496 square feet of new commercial building floor area, 557 hotel rooms, and 5,467 jobs (no new managed care facility units or public institutional square footage are anticipated).

Subsequent development with buildout of the General Plan Land Use Element would increase residential densities and non-residential land use intensities in specific areas of the City. In general, buildout of the General Plan Land Use Element would result in new development in and around existing urbanized areas. The majority of the potential growth opportunities are located within specific areas of the City. These areas include the Laguna Niguel Gateway Specific Plan, the Opportunity Areas (e.g., Marketplace at Laguna Niguel, Chet Holifield Federal Building [CHFB] site, and Town Center), and Hospitality Overlay sites. Focused growth and development within these areas would preserve existing residential, parks and recreation, and open space areas of the City while furthering State and regional planning goals such as those outlined in SCAG's 2024-2050 RTP/SCS, which includes strategies to promote an overall land use pattern that focuses new housing and employment in infill areas in order to meet State GHG-emission-reduction goals and federal Clean Air Act requirements. Further, the General Plan Update proposes goals and policies to plan for and accommodate the identified growth.

Given the historical and current population, housing, and employment trends, growth in the City, as well as the entire State, is inevitable. The primary factors that account for population growth are natural increase and net migration. Other factors that affect growth include the cost of housing, the location of jobs, the economy, the climate, and transportation. Residential growth within the Planning Area would continue to occur based primarily on the demand of the housing market. Existing roads, transit, infrastructure, and public services serve existing development within the Planning Area. Further, the area surrounding the Planning Area is generally developed.

Potential growth inducing impacts are also assessed based on a project's consistency with adopted plans that have addressed growth management from a local and regional standpoint. As discussed above, SCAG is the responsible agency for developing and adopting regional growth forecasts for local Orange County governments, among other counties. SCAG provides household, population, and employment projection estimates through 2050 at the County level and household and employment projection estimates through 2050 at the City level. It is important to note that the General Plan Update accommodates a buildout year of 2045, whereas SCAG provides growth forecasts for 2035 and 2050. Therefore, a direct comparison cannot be provided.

Table 4.12-8, *General Plan Update Compared to SCAG*, compares the General Plan Update 2045 growth projections with SCAG's 2050 growth forecasts for the City. As previously discussed, SCAG's 2024-2050 RTP/SCS does not provide population forecasts at the city level. SCAG indicates a rough estimate of the future jurisdiction-level population based on the 2024-2050 RTP/SCS household forecast can be derived using a county level population to housing ratio and apply it to the jurisdiction's future household growth.[3]

[3] Southern California Association of Governments, 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments, *Demographics & Growth Forecast Technical Report*, Adopted April 4, 2024.

Table 4.12-8
General Plan Update Compared to SCAG

Forecast Category	2045 General Plan Update	SCAG 2050 Growth Forecast	GPU Difference	Percent Change
Population	76,151	78,090	-1,939	-2.5%
Households	29,008[1]	28,500	+508	1.8%
Dwelling Units	31,124	30,580[1]	+544	1.8%
Employment	19,267	22,400	-3,133	-14.0%

Source: Southern California Association of Governments (SCAG), *Local Data Exchange*, https://scag.ca.gov/local-data-exchange, accessed January 27, 2025.

Notes:

1. Based on 6.8 percent vacancy rate (California Department of Finance, 2025).

As indicated in Table 4.12-8, SCAG projects that the City's population will reach 78,090 persons and employment will reach 22,400 by 2050. Buildout of the General Plan Land Use Element is projected to yield a total of 76,151 persons at the theoretical full buildout year (2045). The 2045 population projected by the General Plan Update is approximately 2.5 percent less than SCAG's 2050 forecast. Therefore, the population anticipated by buildout of the General Plan Land Use Element would be within SCAG's 2050 forecasts.

Laguna Niguel's projected housing stock would be approximately 1.8 percent greater than SCAG's 2050 forecasts. It is noted that the State of California has identified a shortage of housing. While SCAG's 2050 housing growth projections may be slightly less than the General Plan Update, it is generally consistent. Further, the City adopted its Housing Element and obtained state certification, including several policies that support a variety of housing types and densities to accommodate the requirements of the RHNA as well as to ensure the provision of housing units. As discussed above, SCAG projections, which are compiled using a number of sources including adopted plans, historical trends, and interviews with local jurisdictions, tend to be more accurate on a regional level than on a local or city level. It is likely that through a combination of market changes, catalytic projects, updated land use direction in the General Plan, and other factors, the City could capture either more or less of expected regional growth than forecasted by SCAG. While the General Plan Update growth projections would slightly exceed SCAG's housing projections for the City, General Plan Update growth projections form the basis of SCAG's planning and policy documents, including regional growth forecasts. Therefore, the housing units anticipated by buildout of the General Plan Land Use Element would not be substantial when compared to SCAG's growth forecasts; impacts would be less than significant in this regard.

Laguna Niguel's projected employment would be approximately 19,267 jobs at the theoretical full buildout year (2045). The 2045 employment projected by the General Plan Update is approximately 14.0 percent less than SCAG's 2050 forecast. New employment opportunities could result in an increase in population associated with people relocating to the City to fill the jobs. However, the employment anticipated by buildout of the General Plan Land Use Element would not exceed SCAG's 2050 forecasts.

Therefore, the employment opportunities are not anticipated to induce substantial unplanned population growth in an area; impacts would be less than significant.

As described in Table 2-16, the General Plan Circulation Plan includes proposed changes to existing roadways and intersections to accommodate the future growth outlined in the proposed Land Use Element; however, implementation of the General Plan Update would not require the extension of roads into areas that are not already served. New utility infrastructure or improvements would occur as needed to continue to serve existing development and provide for subsequent development. These improvements would occur within the Planning Area typically adjacent to existing development and would not require the extension of infrastructure into areas that are not already served or already anticipated for development. Therefore, the General Plan Update would not indirectly induce substantial unplanned population growth in the Planning Area and impacts would be less than significant in this regard.

Sections 4.1 through 4.17 and 5.0 of this EIR provide a discussion of environmental effects associated with development allowed under the proposed General Plan Update. Each of these EIR sections include mitigation measures, if necessary, that would mitigate potential environmental impacts associated with growth.

With implementation of General Plan Land Use Element and policies intended to guide growth to appropriate areas and provide services necessary to accommodate growth, the land uses allowed under the proposed General Plan Update, the infrastructure anticipated to accommodate proposed land uses, and the goal and policy framework would not induce growth that would exceed adopted thresholds, beyond those disclosed and analyzed throughout this EIR. Therefore, population and housing growth associated with the proposed General Plan Update would result in a less than significant impact, as there are no additional potential environmental impacts, beyond those analyzed and disclosed in this EIR, which would result from growth accommodated by the proposed project.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

LAND USE ELEMENT

Policy LU-1.1: **Promote Mixed-Use Development.** Encourage mixed-use zoning in strategic locations to combine residential, commercial, and employment uses. This approach aims to create vibrant, walkable neighborhoods that enhance community engagement and drive economic activity.

Policy LU-1.4: **Diversified Housing Options.** Support a diverse range of housing development options and densities, ensuring that residents across income levels, age groups, and those with special needs can live within the community.

Policy LU-1.6: **Maintain and Expand Public Facilities.** Ensure the planning, maintenance, and enhancement of public facilities and services, including emergency and safety services, infrastructure, educational and library facilities, and recreational and public gathering

areas. These resources support social engagement, cultural activities, and a high quality of life for residents.

Policy LU-1.8: **Multi-Jurisdictional Coordination.** Coordinate with neighboring jurisdictions to address land use compatibility within areas surrounding Laguna Niguel. Partnerships with adjacent cities can aid in developing cohesive strategies to address regional planning challenges and development.

Policy LU-1.12: **Residential and Non-residential Capacities.** Ensure the levels of residential and non-residential building development remain within the established baseline General Plan buildout limits (Maximum Development Intensities – MDIs) for the Sub-profile Areas.

Policy LU-2.5: **Neighborhood Setting.** Ensure new development projects are appropriately scaled and designed in consideration of the surrounding setting. This includes well-designed building height and massing transitions to complement the surrounding neighborhood's scale and share common aesthetic themes or architectural styles, preserving the area's desirable character and sense of place.

Policy LU-4.1: **Preserve Single-Family Neighborhoods.** Focus growth to underutilized parcels within Opportunity Areas, reducing development pressure on established single-family residential neighborhoods.

Policy LU-4.2: **New Development Sensitivity.** Ensure new development projects are sensitively designed to complement surrounding low-density residential neighborhoods, including architectural character, appropriate building massing and scale, and minimizing any operational impacts on the surrounding area.

Policy LU-4.5: **Neighborhood Infrastructure.** Maintain adequate neighborhood infrastructure, community facilities, and services to support the livability and long-term sustainability of neighborhoods.

Policy LU-4.6: **Community Programming.** Support local outreach and education initiatives that improve neighborhoods and strengthen community connections in Laguna Niguel.

POP-2: Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Impact Analysis: The General Plan Update emphasizes preserving Laguna Niguel's established neighborhoods and encouraging growth on underutilized sites within the existing urbanized areas of the City. The Project does not propose the removal or displacement of existing housing or residents. Instead, the Project maintains the existing type and number of residential dwelling units and introduces new policies and land use designations that support additional housing opportunities.

The General Plan Update provides for new housing and population growth consistent with the City's vision and continues to accommodate the City's 2021-2029 RHNA. The majority of future residential growth opportunities are located within specific areas of the City (see Table 2-17). These areas include the Laguna

Niguel Gateway Specific Plan and the Opportunity Areas (e.g., Marketplace at Laguna Niguel, CHFB site, and Town Center).

The proposed Land Use Element continues to separate Laguna Niguel into 14 Community Profile Areas and their respective Sub-profile Areas, which establish the MDIs. Under existing conditions, Laguna Niguel includes a total of 27,660 dwelling units. The General Plan Update does not propose any reductions in the City's existing housing stock or population. This includes accounting for the built environment and currently vacant, undeveloped properties designated for residential use. At buildout, the General Plan Update could yield a total of up to 31,124 dwelling units representing residential growth above existing conditions of up to approximately 3,464 new dwelling units.

No specific development projects are proposed as part of the General Plan Update, except for the assumption that the CHFB site would be demolished as part of a future redevelopment effort. However, the CHFB site does not contain any residential uses; therefore, no existing people or housing would be displaced.

It should also be noted, for all parcels within adopted Specific Plans (e.g., Laguna Niguel Gateway Specific Plan and the South Laguna and Aliso Creek Local Coastal Programs), where development capacity is regulated by the Specific Plan's adopted land plan, are proposed to be redesignated to "Specific Plan" for administrative clarity. This change would not affect existing housing and population as no revisions to the adopted Specific Plans' land use plan, including their approved development capacity, are proposed as part of the General Plan Update.

Similarly, land use designations for parcels located within existing residential communities that are developed with private neighborhood parks, recreation amenities, and landscaped slopes within scenic corridors abutting roadways, that have been consistently regulated since initial entitlement to preclude development of residential dwelling units are proposed to be redesignated to "Parks and Recreation" and "Open Space" as appropriate. These updates bring previously developed areas in-line with current practices governing development and would not affect existing housing and population or the number of residential units allowed in the Sub-profile Areas where these redesignations are proposed.

Although the General Plan Update does not propose demolition of any housing, future private redevelopment projects could result in the removal of residential units. In such cases, compliance with Government Code Section 66300(d)(2) would be required to ensure a no-net-loss in housing, including affordable housing, when applicable.

In addition, Government Code Section 65863 and Action 1.1 of the Laguna Niguel Housing Element require monitoring and reporting on the City's RHNA progress and the maintenance of adequate housing capacity at applicable income levels. If a shortfall is identified, the City would be required to amend its Housing Element sites inventory accordingly. The Housing Element is not being amended as part of the Project.

As summarized, the General Plan Update would not displace substantial numbers of people or housing, nor necessitate the construction of replacement housing elsewhere. No impact would therefore occur.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

LAND USE ELEMENT

Policy LU-1.1: **Promote Mixed-Use Development.** Encourage mixed-use zoning in strategic locations to combine residential, commercial, and employment uses. This approach aims to create vibrant, walkable neighborhoods that enhance community engagement and drive economic activity.

Policy LU-1.4: **Diversified Housing Options.** Support a diverse range of housing development options and densities, ensuring that residents across income levels, age groups, and those with special needs can live within the community.

Policy LU-1.12: **Residential and Non-residential Capacities.** Ensure the levels of residential and non-residential building development remain within the established baseline General Plan buildout limits (Maximum Development Intensities – MDIs) for the Sub-profile Areas.

Policy LU-4.1: **Preserve Single-Family Neighborhoods.** Focus growth to underutilized parcels within Opportunity Areas, reducing development pressure on established single-family residential neighborhoods.

4.12.6 CUMULATIVE IMPACTS

Section 3.0, *Basis of Cumulative Analysis*, identifies projected regional growth having the potential to interact with the proposed Project to the extent that a significant cumulative effect may occur. The geographic setting for population and housing considers development with the SCAG region.

Would the project, combined with other related cumulative projects, 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)?

Impact Analysis: As discussed in impact POP-1, potential growth inducing impacts are assessed based on a project's consistency with adopted regional plans that have addressed growth management. As discussed, subsequent development with buildout of the General Plan Update's Land Use Element would provide for increased population growth within the Planning Area. Project population and housing projections are anticipated to be generally consistent with SCAG's population and housing forecasts. It is likely that through a combination of market changes, catalytic projects, updated land use direction in the General Plan Update, and other factors, Laguna Niguel could capture either more or less of expected regional growth than forecasted by SCAG. Through the local data exchange process, the General Plan Update would be considered as part of SCAG's future growth forecasts. Related cumulative projects within the SCAG region would be assessed for their potential to induce unplanned population growth within their local jurisdiction and the region. Similar to the proposed General Plan Update, growth within other municipalities in the SCAG region would be considered as part of SCAG's future growth forecasts. As the

proposed General Plan Update would not induce substantial unplanned population growth in the area, the proposed General Plan Update's incremental effect associated with the potential to 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) would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan policies cited above.

Would the project, combined with other related cumulative projects, displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Impact Analysis: As discussed in impact POP-2, implementation of the General Plan Update would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. The Project does not propose any site-specific development or modifications to the General Plan Land Use Map resulting in the potential to displace substantial numbers of existing people or housing. The General Plan Update would provide for additional housing opportunities and housing types within the City consistent with the currently adopted Housing Element. The proposed General Plan Update would not have any influence or control over development in other areas of the SCAG region. As with the Laguna Niguel, other cities within the region would be required to maintain a certified Housing Element and comply with Government Code Section 66300(d)(2), which requires that any project that would demolish residential units create at least as many units as will be demolished. Since the proposed General Plan Update would not contribute to the displacement of existing people or housing, the General Plan Update's incremental effects associated with the potential to displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere, would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies: Refer to the General Plan policies cited above.

4.12.7 SIGNIFICANT UNAVOIDABLE IMPACTS

Population and housing impacts associated with the implementation of the General Plan Update would be less than significant. No significant unavoidable population and housing impacts would occur as a result of the General Plan Update.

4.12.8 REFERENCES

California State Auditor's Office (CSA), *Report 2021-125: All Recommendation Responses*, https://www.bsa.ca.gov/reports/responses/2021-125/all, accessed May 15, 2024.

City of Laguna Niguel, *2021-2029 Housing Element*, December 2023 (revised February 2024).

Southern California Association of Governments, 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments, *Demographics & Growth Forecast Technical Report*, Adopted April 4, 2024.

Southern California Association of Governments (SCAG), *Local Data Exchange*, https://scag.ca.gov/local-data-exchange, accessed January 27, 2025.

State of California, Department of Finance, *E-8 Historical Population and Housing Estimates for Cities, Counties, and the State, 2010-2020. Sacramento, California, May 2025.*

State of California, Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties, and the State – January 1, 2021-2025. Sacramento, California, May 2025.*

U.S Census Bureau, 2023 American Community Survey 5-Year Estimates.

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4.13 PUBLIC SERVICES AND RECREATION

4.13.1 PURPOSE

This section identifies the existing public services within the Planning Area and provides an analysis of potential impacts associated with implementation of the General Plan Update Land Use Element. Public Services include fire protection, police protection, schools, public parks, and libraries. Public parks and recreation facilities are also discussed in this section.

4.13.2 ENVIRONMENTAL SETTING

FIRE PROTECTION AND EMERGENCY SERVICES

The City of Laguna Niguel contracts the Orange County Fire Authority (OCFA) for fire and emergency services for the City. OCFA is a regional fire service agency that provides fire protection and emergency services to 23 cities in Orange County and all unincorporated areas. There are a total of 78 fire stations located throughout Orange County that help protect over two million residents. OCFA is comprised of seven divisions and 11 battalions. The fire stations provide regional emergency response to all fires, medical aids, rescues, hazardous materials incidents, wildland fire, and other miscellaneous emergencies. The Planning Area has three fire stations which provide fire and emergency medical services – Station No. 5 (23600 Pacific Island Drive), Station No. 39 (24241 Avila Road), and Station No. 49 (31461 Golden Lantern). Each of these fire stations have 12 staff members. The City of Laguna Niguel is in OCFA Operations Division 5, which includes a total of nine fire stations and serves the cities of Laguna Niguel, Aliso Viejo, Laguna Hills, Laguna Woods, and Lake Forest.

The Emergency Medical Services (EMS) Section of OFCA manages the delivery of medical services by OCFA emergency medical technicians and paramedics.[1] The EMS Section serves as a liaison to County and State regulatory agencies, hospitals, ambulance providers and other EMS groups. The EMS Section is responsible for meeting paramedic staffing needs through recruitment, selection, support and evaluation, and accreditation of prospective paramedics. The EMS Section participates in the review of local, State, and national legislation, regulations, and policies that affect EMS. Members of the EMS Section participate in EMS workgroups, committees, and advisory boards at the county, State, and federal levels. The EMS Section is also responsible for the immunization and communicable disease prevention and surveillance program.

Response times in the City vary based on the level of the emergency. OCFA reports that it takes five to seven minutes to arrive on the scene after a 911 call has been placed.[2] The OCFA 90 percent first-due-unit

[1] Orange County Fire Authority. *Emergency Medical Services.* https://ocfa.org/AboutUs/Departments/OperationsDirectory/EmergencyMedicalServices.aspx
[2] Orange County Fire Authority, Frequently Asked Questions, n.d. Available at: https://ocfa.org/AboutUs/FAQs.aspx#:~:text=It%20takes%20between%205%2D7,1%20call%20has%20been%20placed. Accessed February 28, 2025.

total response performance goal for an urban area is 8 minutes and 30 seconds from the time of OCFA's Emergency Commend Center receiving the call.[3]

ISO Rating

The Insurance Services Office (ISO) reviews the fire protection resources within communities and provides a Community Fire Protection Rating system from which insurance rates are often based. ISO rating class 1 represents the best public protection, and Class 10 indicates no recognized protection. OCFA is divided into six ISO regions and rating areas (OC Central, East, North, South, West, and Santa Ana). Most of the populated areas of OCFA have a Class 3 ISO rating.[4] The Planning Area has a Class 2 ISO rating.[5]

Orange County Fire Authority Programs

In addition to traditional fire services and emergency medical services, OCFA participates and manages a range of additional programs related to community health and safety.[6] OCFA offers a variety of educational programs and community outreach events. These programs include safety presentations, fire station tours, school programs, and community events.

POLICE PROTECTION

Laguna Niguel contracts with the Orange County Sherriff's Department (OCSD) for its law enforcement services. Police Services, located at City Hall, provides the Planning Area with general law enforcement services including patrol, traffic enforcement, accident analysis and investigation, parking enforcement, and general and special investigations. The Orange County Sheriff's captain assigned to the Laguna Niguel Police Service Center serves as the City's chief of police and is responsible for deploying law enforcement resources that are available via the City's contract. Sheriff's deputies are responsible for general patrol, traffic enforcement, criminal investigations, and other law enforcement related duties.

The City does not have an adopted target officer-to-population service ratio. However, the City works closely with OCSD to determine and meet community needs for adequate personnel and equipment to effectively combat crime and meet existing and projected service demands. Supervisory staff at the Laguna Niguel Police Services consists of a captain, a lieutenant, two sergeants, and a deputy traffic officer. The City of Laguna Niguel is divided into four quadrants with a Special Assignment Officer (deputy) assigned to each section. The Sheriff's Department provides 24-hour per day coverage.

The Laguna Niguel Police Services also provides programs and services to the City related to public safety including neighborhood watch, business watch, home security checks, and child car seat inspections. The Police Auxiliary Citizen's Team (PACT) is a group of senior volunteers who assist with various duties within police services.

[3] Citygate Fire & EMS. *Orange County Fire Authority: Standards of Response Coverage Update, Technical Report*. March 4, 2025.
[4] Orange County Fire Authority, 2014. Standards of Coverage and Deployment Plan.
[5] Orange County Fire Authority. ISO Rating Web App. Available at: https://www.ocfa.org/Residents/ISORatingMap.aspx.
[6] Orange County Fire Authority. Safety Programs. https://ocfa.org/SafetyPrograms, accessed August 25, 2023.

SCHOOLS

The City of Laguna Niguel is served by the Capistrano Unified School District (CUSD). CUSD educates K-12 students in south Orange County including the cities of San Juan Capistrano, Dana Point, Laguna Niguel, and the San Clemente, and portions of the cities of Aliso Viejo, Mission Viejo, Rancho Santa Margarita, Laguna Beach, and Laguna Woods. Across the district, CUSD has a total of 63 campuses which includes 33 elementary schools, three K-8 Schools, 10 middle schools, six comprehensive high schools, and eight alternative schools and programs.[7]

As shown in Table 4.13-1, *Schools Serving the Planning Area*, there are six public elementary and one middle public school in the Planning Area. High school education facilities (grades 9 through 12) are located outside the Planning Area. The three high schools serving the Planning Area are Aliso Niguel High School (28000 Wolverine Way) in Aliso Viejo and Capistrano Valley High School (26301 Via Escolar) and Dana Hills High School (33333 Golden Lantern Street) in Dana Point.[8] There are two charter schools located within the Planning Area. Community Roots Academy (29292 Crown Valley Parkway) is part of CUSD and Orange County Academy of Sciences and Arts (29292 Crown Valley Parkway) is part of the Orange County Board of Education District.

Table 4.13-2, *Existing School Facilities Capacity and Student Enrollment*, shows the total capacity and enrollment for the 2023-2024 school year. CUSD's 2024 Fee Justification Study found that while CUSD has enough facilities for elementary school students, the school district enrollment in the 2023-24 academic year exceeded its capacity for middle and high school students. CUSD anticipates that current facilities will be enough to accommodate elementary school student growth but will likely need to develop additional facilities to accommodate current and future middle and high school student enrollment. According to the 2024 Fee Justification study, CUSD expects a total of 5,403 single-family homes and 6,786 multi-family homes to be constructed in the next 20 years within the school district.[9]

[7] Capistrano Unified School District, About us, n.d. Available at: https://www.capousd.org/District/Our-District/About-Us/index.html. Accessed January 27, 2025.
[8] City of Laguna Niguel. *Schools*. Available at: https://www.cityoflagunaniguel.org/292/Schools. Accessed September 6, 2023.
[9] King Consulting, Developer Fee Justification Study, Capistrano Unified School District, May 15, 2024. Available at: https://www.capousd.org/documents/Developer%20Fees/Residential-and-Commercial-Industrial-Fee-Study-May-2024-Res.-2324-30.pdf, accessed January 17, 2025.

Table 4.13-1
Schools Serving the Planning Area

School	Grade	Address	Total Enrollment (2022-2023 School Year)
Capistrano Unified School District			
George White Elementary	K-5	25422 Chapparosa Park Road	396
Moulton Elementary	K-5	29851 Highlands Avenue	552
Marian Bergeson Elementary	K-5	25302 Rancho Niguel Road	502
John Malcom Elementary	K-5	32261 Charles Road	548
Laguna Niguel Elementary	K-5	27922 Niguel Heights Boulevard	401
Hidden Hills Elementary	K-5	25142 Hidden Hills Road	327
Niguel Hills Middle School	6-8	29070 Shark Bay	720
Aliso Niguel High School	9-12	28000 Wolverine Way (Aliso Viejo)	2,772
Capistrano Valley High School	9-12	26301 Via Escolar	2,010
Dana Hills High School	9-12	33333 Golden Lantern (Dana Point)	1,940
Charter Schools			
Community Roots Academy	K to 8	29292 Crown Valley Parkway	783
Orange County Academy of Sciences and Arts	TK-5	29292 Crown Valley Parkway	249
Source: National Center for Education Statistics, 2022-2023 School Enrollment Characteristics. Capistrano Unified School District, Predictive Enrollment Analytics, 2022-2023 School Enrollment, 2023.			

Table 4.13-2
Existing School Facilities Capacity and Student Enrollment

School Level	2023-2024 Enrollments	Current Capacity	Surplus/ (Deficit)
Elementary School (TK-5)	18,841	23,774	4,933
Middle School (6-8)	8,543	7,328	(1,215)
High School (9-12)	14,290	12,543	(1,747)
Total	**41,674**	**2,130**	**-**
Source: King Consulting, Developer Fee Justification Study Capistrano Unified School District, 2024. Available at: https://www.capousd.org/documents/Developer%20Fees/Residential-and-Commercial-Industrial-Fee-Study-May-2024-Res.-2324-30.pdf. Accessed January 27, 2025.			

LIBRARY FACILITIES

Laguna Niguel is served by Orange County Public Libraries (OCPL), a county-wide network of 32 community libraries. Library branches are located in the unincorporated County area and within 33 Orange County cities. Residents are provided the opportunity to check out materials at any of the OCPL branches. The Laguna Niguel Library (30341 Crown Valley Parkway) is located within the Planning Area.

The Laguna Niguel Library has a variety of services and activities for residents, this includes book clubs, public computer stations, free Wi-Fi, wireless printing, and a special collection of foreign and art house movies on DVD. The library is typically open 10:00 a.m. to 7:00 p.m. Monday to Thursday and 9:00 am - 5:00 pm, Friday to Sunday. The Laguna Niguel City Center Project was approved by the City Council on June 21, 2022. The City Center Project includes a new and larger County library (approximately 16,300 square feet with over 2,600 square feet of additional outdoor programmable space) that will replace the existing library (approximately 14,400 square feet with limited outdoor space). The existing library facilities will continue operations until the City Center Project begins construction and interim library facilities will be provided at an off-site location during the construction period.[10]

Two other branches within neighboring cities are the Dana Point Library (33841 Niguel Road) and the Aliso Viejo Library (1 Journey).

PARKS

There are a wide variety of parks located within the City, including City-owned parks, County-owned parks, and private homeowners' association (HOA) parks.

Types of Parks

The current General Plan Open Space/Parks/Conservation Element identifies the following parks and facilities classifications within the City:

County Regional Parks

Regional parks are operated by OC Parks and serve the varied recreation needs of County residents. Regional parks provide significant open space, and opportunities for picnicking, boating, and organized sports activities.

Community Parks

A community park typically ranges from 20 to 50 acres and is designed to meet the active recreational needs of several neighborhoods. These parks are intended to serve a drive-to clientele within a radius of up to three miles. They contain facilities which require more space than neighborhood parks, and which may include playfields, basketball courts, tennis courts, swimming pools, community centers, and off-street parking.

Neighborhood Parks

A neighborhood park is any general use local park developed to serve the needs of a particular neighborhood within a community. The size of the park depends on the population within its service area and the extent of desired amenities but usually ranges from two to 20 acres. Typical neighborhood parks may be within walking or bicycling distance of park users with a service radius of approximately 0.5-mile. These parks may feature such amenities as children's play areas, ball fields, and open turf areas.

[10] City of Laguna Niguel. *City Center Mixed Use Project*. Available at: https://www.cityoflagunaniguel.org/1213/City-Center-Mixed-Use-Project, accessed July 28, 2025.

Mini Parks

A mini park is a small park site generally ranging from 2,500 square feet to one acre in size. These parks may serve any age group, depending on the characteristics of the neighborhood. They usually feature play apparatus, a paved area, benches, and landscape treatment. They may also feature a children's play area, quiet game areas and some sports activities if space allows. Some mini parks are natural areas with minimal improvements, which help safeguard identified natural resources or serve as viewpoints.

Private Park or Recreational Facilities

These facilities are operated by HOAs or other private entities for the exclusive use of their members. They may feature a range of recreational amenities, such as recreational clubs with gymnasiums, indoor and outdoor sports courts, ballfields, swimming pools and spas, and trail systems. These facilities generally vary in size from less than 1 acre to 10 acres. Notable private facilities include Laguna Niguel Racquet Club and El Niguel Country Club.

School Recreational Facilities

School recreation facilities are operated by the CUSD. School recreation facilities are for the use of students during school hours and are available to the public at other times.

Parks

There are currently 30 City-owned and operated parks which encompass approximately 172.8 acres of developed parkland within the City. Figure 4.13-1, *Parks and Recreation Facilities*, and Table 4.13-3, Existing Parkland and Recreational/Community Uses, identifies the location of park facilities within the City.

There are also five Orange County-owned and operated regional parks within the City, including Aliso and Woods Canyon Wilderness Park, Badlands Park, Laguna Niguel Regional Park, Salt Creek Corridor, and Seaview Park, described further below. Besides these public parks, there are also privately-owned park facilities throughout the City that are part of various HOAs.

Table 4.13-3
Existing Parkland and Recreational Community Uses Facilities

Park	Address	Facilities	Acres
Beacon Hill Park	24472 Beacon Hill Way	One grass soccer area, two picnic tables with shade structure, one playground with rubber surface, and two swings (including one handicap accessible).	4.0
Bear Brand Park	32385 Bear Brand Park Road	Two lighted (turf) baseball fields, one lighted (turf) soccer field, five barbecues, seven picnic tables, one playground (wood chips), and restrooms.	6.1
Blu Community Park	27766 Forbes Road	Picnic tables with shade structure, fitness equipment, and dog run.	1.2
Chapparosa Park	25191 Chapparosa Park Rd.	Salt Creek paved trail begins at end of park, one large playground (with wood chips), one tot-lot (with wood chips), four restrooms, one payphone, drinking fountains, one artificial turf soccer field with lights, two grass pony/adult softball fields with lights, two grass baseball fields with lights, three full basketball courts, two sand volleyball courts, six picnic tables, six barbecues, and 227 parking spaces (five handicap spaces).	18.2
Clipper Cove Park	29325 Clipper Way	One large shelter, three picnic tables, one large playground (with rubber surface), four swings (including two baby swings and two regular swings), and four park benches.	2.4
Crown Royale Park	24697 Crown Royale	--	0.5
Crown Valley Park	29751 Crown Valley Parkway	One pool with diving boards (one fit pool), 30 picnic tables, one playground, seven barbecues, one baseball field, two soccer fields, two restrooms, two playgrounds (with rubber surface), one outdoor amphitheater, 280 parking spaces (including 9 handicap spaces), the Niguel Botanical Preserve (18 acres), and 11 community rental rooms.	38.4
Hidden Hills Park	27802 Springwood	Three picnic tables, two play structures (with rubber surface), four swings (including two baby and two regular), six park benches, half basketball court, one bike rack, one drinking fountain and large grass area, Doggie waste station.	2.4
Juaneno Park	25078 Hidden Hills Road	One grass soccer field, three baseball backstops (no brick dust), one restroom, two bleachers, and large grass area.	2.9
La Hermosa Park	24462 La Hermosa Ave.	One play structure (with rubber surface), two picnic tables, and two swings.	0.2
La Paz Sports Park	28051 La Paz Road	One artificial turf soccer field (with lights), two artificial turf baseball fields (with lights), one restroom, drinking fountain, bleachers, and 120 parking spaces (including 5 ADA spaces).	4.3
La Plata Park	25006 La Plata Drive	Two play structures (with wood chips), two regular swings, three picnic tables, three park benches, one barbecue, one drinking fountain, large grass area, and Doggie waste stations.	1.3
Laguna Niguel Skate and Soccer Park	27745 Alicia Parkway	20,000 square foot concrete skateboard park, one lighted soccer field, one full basketball court, and two half basketball courts.	4.7

Table 4.13-3 (continued)
Existing Parkland and Recreational Community Uses Facilities

Park	Address	Facilities	Acres
Long View Park	Old Ranch Road	1.35-mile trail for equestrian uses, hiking, and bicycle.	0.2
Marina Hills Park	24802 Marina Hills Drive	Two grass soccer fields, one grass baseball field, two basketball courts (including one full court and one-half court), three bocce ball courts, one restroom, four picnic tables, one play structure (with wood chips), one sand pit, two regular swings, and 24 parking spaces (including one handicap).	15
Niguel Heights Park	27804 Niguel Heights Blvd.	Three picnic tables, eight park benches, two playgrounds (with rubber surface), four swings (including two baby swings and two regular swings), one paved trail, large grass area, and one (1) drinking fountain.	2.7
Niguel Road Park	30983 Killini	Bike trail access with open grass area.	1.0
Niguel Woods Park	29883 White Otter Lane	One play structure (with rubber surface), four swings (two regular, two baby swings), and grass area with soccer backstop.	1.4
Ocean Breeze Park	32311 Charles Road	One shelter, four picnic tables, two playgrounds (including one small play structure with wood chips and one larger play structure with rubber surface), four swings (including one regular, one handicap accessible, and two baby swings), five benches, one full size basketball court, one drinking fountain, one grass volleyball court, large grass area, and fenced-in park.	1.7
Parc Vista Overlook Park	30618 Parc Vista Road	--	0.4
Parc Vista Park	30618 Parc Vista Road	One large play structure (with rubber surface), three swings (including one baby swing and two regular), one trail through the park, large grass area, one picnic table, and four benches.	2.5
Parc Vista View Park	31114 Parc Vista Road	--	1.1
Pooch Park	31575 Golden Lantern Street	Fully fenced off-leash dog park, 25 parking spaces (including two handicap spaces), two shelters, four picnic tables, one water faucet with hose, one fire hydrant (non-functional), one (1) restroom (portable), wood chips for ground cover, and Doggie waste stations.	1.0
Rancho Niguel Park	28333 Crown Valley Parkway	One small play structure (with rubber surface), one grass soccer field, one grass softball field, one grass baseball field, one play structure, five barbecues, five picnic tables, one restroom, one drinking fountain, 65 parking spaces (Two handicap spaces available at Marian Bergeson Elementary School).	3.8
Redondo View Node	25575 Redondo	Three picnic tables, one shelter, one barbecue, large grass area, and a paved path around the park.	1.2
Reef View Node	25326 Reef	One large play structure (with rubber surface), two regular swings, four benches, and paved path around park.	3.4
Ridge View Park	29061 Ridgeview	Three benches and a large sandy area.	1.0

Table 4.13-3 (continued)
Existing Parkland and Recreational Community Uses Facilities

Park	Address	Facilities	Acres
Seminole Park	30802 Seminole Place	Two play structures (including one small play structure, one large play structure, and both with rubber surfaces), four swings (including two regular and two baby swings), two picnic tables, three benches, large grass area, and Doggie waste stations.	2.3
Vista Plaza Park	29541 Vista Plaza	--	0.4
Yosemite Park	24481 Yosemite Road	One large play structure (with rubber surface), four swings (including two regular and two baby swings), one volleyball net (on grass), paved trail around park, and large grass area.	5.4
		Total	**172.8**
Source: City of Laguna Niguel, 2022, and City of Laguna Niguel Park Needs Assessment, 2022.			

Regional and Other Park and Recreation Facilities

A small portion of the Aliso and Woods Canyons Wilderness Park is located within the City. Within the park there are mature oaks, sycamores, and elderberry trees, streams, and an extensive network of trails. Many rare and endangered plants and animals can be found in this park.

Badlands Park is a five-acre site located in the southwestern area of the City. The park site is primarily passive in character, providing expansive views of the coastline and ocean.

Salt Creek Corridor begins in the central portion of the City and flows west and south through a narrow canyon referred to as the Salt Creek Corridor, which is mostly inside a long and narrow regional park that includes hiking trails and natural landscapes.

Seaview Park is approximately seven acres in size with one acre of useable area and is located on Talavera Drive near Pacific Island Drive. The park is primarily passive in character providing views of expansive views of the coastline and ocean.

The El Niguel Country Club and Golf Course is an 18-hole private golf course located in the southern part of the City.

Trails

The City of Laguna Niguel maintains and operates approximately 80 miles of trails which include the Aliso Summit Trail, Colinas Bluff Trail, Laguna Ridge Trail, Long View Trail, Niguel Trail, Oso Creek Trail, and Salt Creek Trail. Refer to Section 4.14, *Transportation*, for additional discussion of trails.

PARKLAND STANDARDS

The current General Plan establishes a parkland standard for the establishment of future parkland as a minimum of 3.0 usable acres of parkland for every 1,000 persons living in the City. The General Plan also acknowledges that Laguna Niguel contains a considerable amount of private recreation facilities that contribute significantly to the open space and recreation needs of the community and are heavily used by

its residents. Therefore, private parks and recreation facilities may also receive partial or full parkland credit.

Based on a 2025 population of 65,257 persons,[11] the City would need 195.8 acres of usable parkland to serve existing residents. As shown in Table 4.13-3, there are currently 172.8 acres of City-owned developed parkland within the City. According to the existing General Plan Land Use Element, there are approximately 442.3 acres of land currently designated Parks and Recreation.

In 2022, the City adopted the Citywide Park Needs Assessment. This needs assessment is the guiding document for recreation programming, trails, parks, and recreation facilities in the City. According to the Citywide Park Needs Assessment, partial credit for the County Regional Parks, public school facilities, and private park/facilities is considered in the parkland acreage credit. If this acreage is included, the needs assessment identifies a total of 431.13 acres of parkland, which provides 6.54 acres per 1,000 persons based on a population of 65,953 (2021 population per the needs assessment). Based on the 2025 population of 65,257 persons, the 431.13 acres of parkland identified in the needs assessment, provides 6.60 acres per 1,000 persons. Therefore, the City currently exceeds the parkland standard of 3.0 acres per 1,000 persons.

COMMUNITY FACILITIES

Notable public facilities in Laguna Niguel include the Crown Valley Community Center and the Sea Country Senior and Community Center, both offering multi-use spaces for a variety of events and activities.

Crown Valley Community Center

Located at 29751 Crown Valley Parkway, this approximately 48,000 square foot facility features aquatic facilities, a dedicated art room, fitness and dance room, collaborative tech room, multi-purpose room with a 217-person dining capacity, a catering kitchen, and several multi-purpose classrooms. This community center is suitable for events such as wedding receptions, anniversary celebrations, graduation galas, corporate meetings, trainings, and community events for a fee determined by the City Council.

Sea Country Senior and Community Center

Located at 24602 Aliso Creek Road, this approximately 25,000 square foot facility features two ballrooms, two kitchens, two meeting rooms, and a courtyard. The facility is suitable for large events, wedding receptions, corporate meetings, training, and community events for a fee determined by the City Council.

[11] State of California, Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties, and the State – January 1, 2021-2025. Sacramento, California, May 2025.*

4.13.3 REGULATORY SETTING

FIRE PROTECTION & EMERGENCY SERVICES

Federal

National Incident Management System (NIMS)

The Orange County Sherrif's Department adopted NIMS, which provides a systematic, proactive approach to guide government agencies, nongovernmental organizations, and the private sector to work together to prevent, respond to, recover from, and mitigate the effects of incidents, regardless of cause, size, location, or complexity, in order to reduce the loss of life and property and harm to the environment. NIMS improves the County's ability to prepare for and respond to potential incidents and hazard scenarios.

State

California Government Code

California Government Code Section 65302.5 requires the State Board of Forestry and Fire Protection to provide recommendations to a local jurisdiction's General Plan fire safety element at the time that the General Plan is amended. While not a direct and binding fire prevention requirement for individuals, General Plans that adopt the Board's recommendations will include goals and policies that provide for contemporary fire prevention standards for the jurisdiction.

California Department of Forestry and Fire Protection

Under CCR Title 14, Natural Resources, the California Department of Forestry and Fire Protection (CAL FIRE) has the primary responsibility for implementing wildfire planning and protection for State Responsibility Area (SRA) lands. CAL FIRE develops fire safe regulations and issues fire safe clearances for land within the SRA. The CAL FIRE Resource Management Program manages more than 31 million acres of California's privately-owned wildlands and provides emergency services in 36 of the state's 58 counties via contracts with local governments.

In addition to fighting and planning for wildland fires, CAL FIRE's responsibilities involve responding to other types of emergencies that may occur on a daily basis, including residential or commercial structure fires, automobile accidents, heart attacks, drowning victims, lost hikers, hazardous material spills on highways, train wrecks, floods, and earthquakes.

Under CCR Title 24, Regulations Development, the Office of the State Fire Marshal is responsible for promulgating regulations that promote fire and life safety for inclusion into the State Building Codes, including the California Building Code, California Fire Code, California Electrical Code, California Mechanical Code, California Plumbing Code, and California Historical Building Code. The process incorporates a great deal of public participation and is guided by the state Building Standards Law.

California Occupational Safety and Health Administration

In compliance with CCR, Title 8, Section 1270, Fire Prevention, and Section 6773, Fire Protection and Fire Equipment, the California Occupational Safety and Health Administration (Cal/OSHA) has established

minimum standards for fire suppression and emergency medical services. Cal/OSHA standards include guidelines on the handling of highly combustible materials, fire hose sizing requirements, restrictions on the use of compressed air, access roads, and the testing, maintenance, and use of firefighting and emergency medical equipment, among others.

Mutual Aid Agreements of the California Emergency Services Act

The California Disaster and Civil Defense Master Mutual Aid Agreement, as provided by the California Emergency Services Act, provides statewide mutual aid between and among local jurisdictions and the state. The statewide mutual aid system exists to ensure that adequate resources, facilities, and other supports are provided to jurisdictions whenever resources prove to be inadequate for a given situation. Each jurisdiction controls its own personnel and facilities but can give and receive help whenever needed.

California Building Code (California Code of Regulations Title 24)

The California Building Code (CBC) contains general building design and construction requirements relating to fire and life safety, structural safety, and access compliance. CBC provisions provide minimum standards to safeguard life or limb, health, property, and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all buildings and structures and certain equipment.

California Health and Safety Code and Uniform Building Code Section 13000 et seq.

State fire regulations are set forth in Section 13000 et seq. of the California Health and Safety Code, which is divided into “Fires and Fire Protection” and “Buildings Used by the Public.” The regulations provide for the enforcement of the Uniform Building Code (UBC) and mandate the abatement of fire hazards. The California Health and Safety Code establishes broadly applicable regulations, such as standards for buildings and fire protection devices, in addition to regulations for specific land uses, such as childcare facilities and high-rise structures.

Assembly Bill 1600 Mitigation Fee Act

A development impact mitigation fee is a monetary exaction, other than a tax or special assessment, that is charged by a local governmental agency to an applicant in connection with an approval of a development project for the purpose of defraying all or a portion of the cost of public facilities related to the development project (Government Code Section 66000(b)). The legal requirements for enactment of development impact fee program are set forth in Government Code Sections 66000-66025 (the "Mitigation Fee Act"), the bulk of which were adopted as Assembly Bill (AB) 1600 and commonly referred to as “AB 1600 requirements.” A development impact fee is not a tax or special assessment; by its definition, a fee is voluntary and must be reasonably related to the cost of the service provided by the local agency.

Local

OCFA Fire Master Plan for Commercial and Residential Development

The OFCA Fire Master Plan, most recently updated in 2023, is a general guideline pertaining to the creation and maintenance of fire department access roadways, access walkways to and around buildings, and

hydrant quantity and placement as required by the California Fire and Building Codes (CFC and CBC) and as amended by local ordinance. These guidelines apply to new, remodeled, reconstructed, or relocated residential or commercial structures and developments to which emergency response may be necessary. This document details plan check submittal requirements for fire safety review, identification of fire lanes and premises, hydrant availability, access requirements, etc.

Unified County of Orange and Orange County Operational Area Emergency Operations Plan (OAEOP)

Unified County of Orange and Orange County Operational Area Emergency Operations Plan (OAEOP) was most recently adopted in 2023. The OAEOP provides guidance and procedures for Orange County and the County Operational Area to prepare for and respond to emergencies that are natural, technological, conflict-related, and human-caused incidents creating situations, which all requires a coordinated response. The policy document provides guidance for management concepts, identifies organizational structures and relationships, and describes responsibilities and functions of the emergency organization to protect life and property within Orange County.

City of Laguna Niguel Emergency Plan

The City of Laguna Niguel Emergency Operations Plan was adopted in 2002 and revised in 2015. This plan is designed to provide the framework for responding to major emergency disasters in the Planning Area. The main goals for this plan are to (1) prepare for, (2) respond to, and (3) recover from an emergency or disaster that affects the Planning Area.

Laguna Niguel Municipal Code

The Laguana Niguel Municipal Code Section 11.3.1 adopts the 2022 Edition of the California Fire Code as the fire code of the City. The California Fire Code sets fire safety related building standards and practices to safeguard life and property. As part of the development review process, site-specific development proposals would be required to comply with standard OCFA conditions of approval.

Title 11, Division 15, *Emergency Preparedness*, provides for the preparation and carrying out of plans for the protection of persons and property within the City in the event of an emergency; the direction of the emergency organization; and the coordination of the emergency functions of the City with other public agencies, corporations, organizations and affected private persons.

POLICE PROTECTION

Unified County of Orange and Orange County Operational Area Emergency Operations Plan (OAEOP)

Refer to the discussion above.

City of Laguna Niguel Emergency Plan

Refer to the discussion above.

City of Laguna Niguel Municipal Code

Article 7, *Police Regulations and Public Protection*, sets regulations for Tort Claims, False Reporting, and multiple responses to Loud or Disruptive, Parties, Gathering or events.

SCHOOLS

State

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

The "Leroy F. Greene School Facilities Act of 1998," also known as Senate Bill No. 50 or SB 50 (Chapter 407, Statutes of 1998), governs a school district's authority to levy school impact fees. This comprehensive legislation, together with the $9.2 billion education bond act approved by the voters in November 1998 known as "Proposition 1A," reformed methods of school construction financing in California. SB 50 instituted a new school facility program by which school districts can apply for State construction and modernization funds. It imposed limitations on the power of cities and counties to require mitigation of school facilities impacts as a condition of approving new development, and provided the authority for school districts to levy fees at three different levels:

- Level I fees are the current statutory fees allowed under Education Code 17620. This code section provides the basic authority for school districts to levy a fee against residential and commercial construction for the purpose of funding school construction or reconstruction of facilities. These fees vary by district for residential construction and commercial construction and are increased biannually.
- Level II fees are outlined in Government Code Section 65995.5, allowing school districts to impose a higher fee on residential construction if certain conditions are met. These conditions include having a substantial percentage of students on multi-track year-round scheduling, having an assumed debt equal to 15 to 30 percent of the district's bonding capacity (percentage is based on revenue sources for repayment), having at least 20 percent of the district's teaching stations housed in relocatable classrooms, and having placed a local bond on the ballot in the past four years which received at least 50 percent plus one of the votes cast. A Facility Needs Assessment must demonstrate the need for new school facilities for unhoused pupils is attributable to projected enrollment growth from the construction of new residential units over the next five years.
- Level III fees are outlined in Government Code Section 65995.7. If State funding becomes unavailable, this code section authorizes a school district that has been approved to collect Level II fees to collect a higher fee on residential construction. This fee is equal to twice the amount of Level II fees. However, if a district eventually receives State funding, this excess fee may be reimbursed to the developers or subtracted from the amount of State funding.

California Department of Education

The California Department of Education (CDE) School Facilities Planning Division (SFPD) prepared a School Site Selection and Approval Guide that provides criteria for locating appropriate school sites in the State of California. School site and size recommendations were changed by the CDE in 2000 to reflect various changes in educational conditions, such as lowering of class sizes and use of advanced technology. The expanded use of school buildings and grounds for community and agency joint use, and concern for the safety of the students and staff members also influenced the modification of the CDE recommendations.

Specific recommendations for school size are provided in the School Site Analysis and Development Guide. This document suggests a ratio of 1:2 between buildings and land. CDE is aware that in a number of cases, primarily in urban settings, smaller sites cannot accommodate this ratio. In such cases, the SFPD may approve an amount of acreage less than the recommended gross site size and building-to-ground ratio.

Certain health and safety requirements for school site selection are governed by State regulations and the policies of the SFPD relating to:

- Proximity to airports, high-voltage power transmission lines, railroads, and major roadways;
- Presence of toxic and hazardous substances;
- Hazardous facilities and hazardous air emissions within one-quarter mile;
- Proximity to high-pressure natural gas lines, propane storage facilities, gasoline lines, pressurized sewer lines, or high-pressure water pipelines;
- Noise;
- Results of geological studies or soil analyses; and
- Traffic and school bus safety issues.

Local

Laguna Niguel Municipal Code

Article 6, Interim School Facilities Fee, sets conditions for local school districts to charge development fees. Local school districts who make the finding that overcrowding conditions exist within the district in accordance with government code Section 65971 must notify the City Council in writing about overcrowding conditions and possible mitigation measures. If the City Council and Planning Commission find that additional facilities are needed to be consistent with the City's General Plan, then provisions in this article shall be applicable to the relevant attendance areas.

PARKS AND RECREATION

State

Quimby Act

The Quimby Act (California Government Code Section 66477) states that "the legislative body of a city or county may, by ordinance, require the dedication of land or impose a requirement of the payment of fees in lieu thereof, or a combination of both, for park or recreational purposes as a condition to the approval of a tentative or parcel map." Requirements of the Quimby Act apply only to the acquisition of new parkland and do not apply to the physical development of new park facilities or associated operations and maintenance costs. The Quimby Act seeks to preserve open space needed to develop parkland and recreational facilities; however, the actual development of parks and other recreational facilities is subject to discretionary approval and is evaluated on a case-by-case basis with new residential development. The City of Laguna Niguel has adopted park fees as allowed by the Quimby Act.

Mitigation Fee Act

The California Mitigation Fee Act, Government Code Sections 66000, et seq., allows cities to establish fees which would be imposed upon development projects for the purpose of mitigating the impact that the

development projects have upon the city's ability to provide specified public facilities. In order to comply with the Mitigation Fee Act, a 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) For fees that have been in the possession of the city for five years or more and for which the dollars have not been spent or committed to a project, the city must make findings each fiscal year describing the continuing need for the money; and 4) Refund any fees with interest for developer deposits for which the findings noted above cannot be made.

California Public Park Preservation Act of 1971

The California Public Park Preservation Act is the primary measure for protecting and preserving parkland in California. The legislation states that "No city, city and county, county, public district, or agency of the state, including any division department or agency of the state government, or public utility, shall acquire any real property, which property is in use as a public park at the time of such acquisition, for the purposes of utilizing such property for any non-park purpose, unless the acquiring entity pays or transfers to the legislative body of the entity operating the park sufficient compensation or land, or both."

Local

City of Laguna Niguel Parks and Recreation Master Plan (1998)

The Parks and Recreation Master Plan was created to guide for the orderly development and management of parks, recreation, and trail facilities in the Planning Area. This policy document has been utilized over the last twenty-four years to focus recreation development based on community input.

City of Laguna Niguel Hiking/Equestrian Trails Plan

The Hiking/Equestrian Trails Plan identifies the orderly and efficient development of the City's extensive trails network for both multi-use and off-road systems. Some of the trails provide linkages to regional open space areas located within and outside of Laguna Niguel. Through the review of existing trail conditions, the plan establishes strategies for improving their systems and meeting the recreation needs of residents.

City of Laguna Niguel Parks Needs Assessment (2022)

The Laguna Niguel Citywide Park Needs Assessment serves as a guide and implementation tool for the management and development of parks and recreation facilities throughout Laguna Niguel. This document represents a community inspired plan for the future of parks and recreation in Laguna Niguel. The Laguna Niguel Citywide Park Needs Assessment serves as a guide and implementation tool for the management and development of parks and recreation facilities throughout the City.

City of Laguna Niguel Municipal Code

Title 9, Article 5, *Local Park Code*, provides for the acquisition and development of local park facilities and ensures that adequate park and recreation facilities will be provided. Article 5 establishes the requirement

of three acres of land or the proportionate share thereof for each 1,000 persons residing within the City to be supplied by persons proposing to establish dwelling units.

Title 9, Article 2, *Comprehensive Zoning Code*, Subarticle 3, *Residential Districts*, Section 9-1-35.13, Landscaping and Open Area, establishes landscaping and open area requirements within the RM and RP zoning districts. Projects within the RM and RP zoning districts are required to include common open area equal to at least 25 percent of the buildable project area. These open areas are required to consist of landscaped and active recreation areas.

Title 13, *Parks and Recreational Facilities*, provides the rule and regulations related to the use and maintenance of Parks and Recreational Facilities.

City of Laguna Niguel CEQA Manual

The City of Laguna Niguel CEQA Manual provides the City and project applicants with local guidelines, procedures, requirements, and thresholds of significance for the environmental review process within the City of Laguna Niguel consistent with the California Environmental Quality Act (Public Resources Code [PRC] Section 21000 et seq.), referred to as "CEQA" or "CEQA Statutes," and the State CEQA Guidelines (Title 14, California Code of Regulations (CCR), Division 6, Chapter 3, Section 15000 et seq.). The City's CEQA Manual applies to all public and private projects under the jurisdiction of the City of Laguna Niguel that constitute a "project" and therefore subject to CEQA review.

4.13.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

CEQA Guidelines Appendix G contains the Initial Study Environmental Checklist, which includes questions related to public services and recreation. The City relies on the questions included in Appendix G as the thresholds of significance for assessing impacts on public services and recreation (City of Laguna Niguel CEQA Manual, Revised February 24, 2023). A significant impact will occur if implementation of the proposed Project will:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
    - Fire Protection (refer to Impact Statement PS-1);
    - Police Protection (refer to Impact Statement PS-1);
    - Schools (refer to Impact Statement PS-1);
    - Parks (refer to Impact Statement PS-2); and
    - Other Public Facilities (refer to Impact Statement PS-1).
- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated (refer to Impact Statement PS-2).

- Include the construction of or cause a substantial increase in demand for recreation, resulting in the need for additional recreation facilities the construction of which would result in an impact to the environment (refer to Impact PS-3).

4.13.5 IMPACTS AND MITIGATION MEASURES

PS-1: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

FIRE PROTECTION AND EMERGENCY SERVICES

Impact Analysis: While no new specific development projects are proposed as part of the General Plan Update Land Use Element except for the assumption that the Chet Holifield Federal Building (CHFB) site will be demolished as part of a future redevelopment effort, buildout of the General Plan Update Land Use Element would result in additional growth in Laguna Niguel. Based on the anticipated growth, as described in in Section 2.0, *Project Description*, and summarized in Table 2-18, *General Plan Growth Assumptions*, buildout of the General Plan Update Land Use Element could yield a net change over existing conditions of an additional 3,464 housing units, an additional population of 8,418 people, and additional 1,099,496 square feet of non-residential building square footage, an additional 557 hotel rooms, and an additional 5,467 jobs within the Planning Area.

Subsequent development may result in the need for additional OCFA resources (i.e., additional staffing, equipment, expanded/new facilities). At this time, it is unknown whether OCFA would need to expand or construct new facilities to meet the demand of subsequent development in the Planning Area. Subsequent development with buildout of the General Plan Update Land Use Element would increase residential densities and non-residential land use intensities in specific areas of the City. In general, buildout of the General Plan Update Land Use Element would result in new development in and around existing urbanized areas. The majority of the potential growth opportunities are located within specific areas of the City. These areas include the Laguna Niguel Gateway Specific Plan (Specific Plan), the Opportunity Areas (e.g., Marketplace at Laguna Niguel, CHFB site, and Town Center), and Hospitality Overlay sites. Except for one of the Hospitality Overlay sites, these areas are currently developed and receive services from OCFA as needed. Although the Hospitality Overlay site at Pacific Island Drive and Crown Valley Parkway is not currently developed, development occurs within the surrounding area and as the site is located within the Planning Area, OCFA would respond to the site if needed. Subsequent development is assumed to occur over time with 2045 as the theoretical full buildout year of the General Plan; thus, any increase in demand for fire protection services would occur gradually as additional development and associated population growth is added to the City. OCFA would continue to regularly monitor fire department resources in coordination with the City to ensure that adequate facilities are available to serve existing and subsequent development and population increases.

The environmental effect of providing fire protection and emergency services is associated with the physical impacts of providing new and expanded facilities. The specific impacts of providing new and

expanded facilities cannot be determined at this time, as the General Plan Update Land Use Element does not propose or authorize development nor designate specific sites for new or expanded fire facilities. Although buildout of the General Plan Update Land Use Element would provide for new growth within the City, the need for expanded fire facilities or new fire facilities and there potential location would be based on multiple factors, including but not limited to the location of existing fire facilities, the condition of existing facilities and equipment, growth in the service area, and response times, and would consider the larger OCFA service area, which includes the Planning Area as well as other City partners.

However, any potential new fire facilities would likely be provided on sites with land use designations that allow such uses and the environmental impacts of constructing and operating the facilities would be similar to those associated with new development, redevelopment, and infrastructure projects under the General Plan Update Land Use Element. These impacts are described in the relevant sections (Sections 4.1 through 4.17, and 5.0) of this EIR. Any subsequent development of fire facilities would be subject to project-specific CEQA review and be required to comply with all federal, State, and local laws and regulations. With adherence to the City's development review process and compliance with applicable regulations, impacts related to the provision of new or physically altered fire facilities would be less than significant.

Additionally, the General Plan Update includes a range of policies to ensure that fire protection and emergency services are provided in a timely fashion, are adequately funded, are coordinated between the City and the OCFA, and that new development funds its fair share of services. Land Use Policy LU-1.6 directs the City to ensure the planning, maintenance, and enhancement of public facilities and services, including emergency and safety services, infrastructure, educational and library facilities, and recreational and public gathering areas. Public Safety Element Policy PF-4.1 directs the City to ensure OCFA staffing levels, equipment and facilities, programs, and practices align with the City's high safety standards, including timely emergency responses and effectively addresses the community's evolving needs. Public Safety Element Policy PS-4.3 directs the City to ensure OCFA review of applicable development projects for fire-safe design, proximity to adequate emergency services, sufficient water supply and fire flow, and emergency vehicle access, in accordance with current California Building and Fire Codes, including local amendments adopted by the City. Public Safety Element Policy PS-4.6 directs the City, when feasible, to locate new essential public facilities and infrastructure (e.g., hospitals, emergency shelters, fire and police stations, emergency command centers, communication facilities, and utilities) outside of Very High Fire Hazard Severity Zones. If located within these zones, construction methods or other measures should be utilized to minimize risk.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

LAND USE ELEMENT

Policy LU-1.6: **Maintain and Expand Public Facilities.** Ensure the planning, maintenance, and enhancement of public facilities and services, including emergency and safety services, infrastructure, educational and library facilities, and recreational and public gathering areas. These resources support social engagement, cultural activities, and a high quality of life for residents.

PUBLIC SAFETY ELEMENT

Policy PS-4.1: **Fire Authority Staffing and Resources.** Ensure Orange County Fire Authority staffing levels, equipment and facilities, programs, and practices align with the City's high safety standards, including timely emergency responses and effectively address the community's evolving needs.

Policy PS-4.3: **Fire-Safe Design.** Ensure Orange County Fire Authority review of applicable development projects for fire-safe design, proximity to adequate emergency services, sufficient water supply and fire flow, and emergency vehicle access, in accordance with current California Building and Fire Codes, including local amendments adopted by the City.

Policy PS-4.6: **Critical Facilities (Fire Hazard Zones).** When feasible, locate new essential public facilities and infrastructure (e.g., hospitals, emergency shelters, fire and police stations, emergency command centers, communication facilities, and utilities) outside of Very High Fire Hazard Severity Zones. If located within these zones, utilize construction methods or other measures to minimize risk.

POLICE PROTECTION

Impact Analysis: Buildout of the General Plan Update Land Use Element would result in additional residents and businesses in the City, which would increase demand for police protection services provided by OCSD. Additional facilities, personnel, and equipment may be required to maintain adequate levels of police protection within the City.

Subsequent development with buildout of the General Plan Update Land Use Element would increase residential densities and non-residential land use intensities in specific areas of the City. In general, buildout of the General Plan Update Land Use Element would result in new development in and around existing urbanized areas. The majority of the potential growth opportunities are located within specific areas of the City. These areas include the Gateway Specific Plan, the Opportunity Areas (e.g., Marketplace at Laguna Niguel, CHFB site, and Town Center), and Hospitality Overlay sites. Except for one of the Hospitality Overlay sites, these areas are currently developed and receive services from OCSD as needed. Although the Hospitality Overlay site at Pacific Island Drive and Crown Valley Parkway is not currently developed, development occurs within the surrounding area and as the site is located within the Planning Area, OCSD would respond to the site if needed.

Subsequent development is assumed to occur over time with 2045 as the theoretical full buildout year of the General Plan Update; thus, any increase in demand for police protection services would occur

gradually as additional development and associated population growth is added to the Planning Area. In coordination with the City, OCSD service levels and staffing requirements would be evaluated on an annual basis to determine if additional staffing and/or facilities would be required to meet increases in population and demand for police protection services.

The environmental effect of providing police protection services is associated with the physical impacts of providing new and expanded facilities. The specific need for and the potential environmental effect of providing new police facilities cannot be known at this time, as the General Plan Update Land Use Element does not propose or authorize development nor designate specific sites for new or expanded police facilities. Although buildout of the General Plan Update Land Use Element would provide for new growth within the City, the need for expanded police facilities or new police facilities and the potential location would be based on multiple factors, including but not limited to the location of existing police facilities, the condition of existing facilities and equipment, growth in the service area, and response times, and would consider the larger OCSD service area, which includes the Planning Area as well as other city partners.

However, any potential new police facilities would likely be provided on sites with land use designations that allow such uses and the environmental impacts of constructing and operating the facilities would be similar to those associated with new development, redevelopment, and infrastructure projects under the General Plan Update Land Use Element. These impacts are described in the relevant sections (Sections 4.1 through 4.17, and 5.0) of this EIR. Any subsequent development of police facilities would be subject to CEQA review and be required to comply with all federal, State, and local laws and regulations. With adherence to the City's development review process and compliance with applicable regulations, impacts related to the provision of new or physically altered police facilities would be less than significant.

Additionally, the General Plan Update includes a range of policies to ensure that adequate police protection services are provided to serve growth associated with implementation of the General Plan Update Land Use Element. Land Use Element Policy LU-1.6 ensures the planning, maintenance, and enhancement of public facilities and services, including police services. Public Safety Element Goal PS-7 encourages Laguna Niguel to maintain high standards of public safety through effective police services. Public Safety Element Policy PS-7.1 directs the City to ensure that police staffing levels, programs, and practices align with the City's high safety standards. Public Safety Element Policy PS-7.2 directs the City to monitor population growth, development trends, and crime and service statistics to ensure that adequate police service levels are maintained.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

LAND USE ELEMENT

Policy LU-1.6: **Maintain and Expand Public Facilities.** Ensure the planning, maintenance, and enhancement of public facilities and services, including emergency and safety services, infrastructure, educational and library facilities, and recreational and public gathering

areas. These resources support social engagement, cultural activities, and a high quality of life for residents.

PUBLIC SAFETY ELEMENT

Policy PS-7.1: **Police Services Staffing and Resources.** Ensure police staffing levels, programs, and practices align with the City's high safety standards, including timely emergency responses and effectively address the community's evolving needs.

Policy PS-7.2: **Monitoring Statistics and Trends.** Monitor the City's population growth, development trends, and crime and service statistics to ensure that adequate police service levels are maintained.

PARKS

As stated under Impact PS-2, buildout of the General Plan Update Land Use Element would result in additional growth in Laguna Niguel. Based on the anticipated growth, as described in Section 2.0, *Project Description*, and summarized in Table 2-18, *General Plan Update Growth Assumptions*, 2045 buildout associated with the General Plan Update Land Use Element could yield a net change over existing conditions of an additional 3,464 housing units and an additional population of 8,418 people, resulting in a 2045 total population of 76,151 persons within the Planning Area.

As previously discussed, according to the Citywide Park Needs Assessment, partial credit for the County Regional Parks, public school facilities, and private park/facilities is considered in the parkland acreage credit. If this acreage is included, based on a 2045 buildout population of 76,151, the 431.13 acres of parkland identified in the needs assessment, would provide 6.60 acres per 1,000 persons, which would exceed the parkland standard of 3.0 acres per 1,000 persons. The proposed General Plan Update Land Use Element would result in a total of 475.68 acres of land designated as Parks and Recreation. Based on a 2045 buildout population of 76,151 persons, 228.45 acres of parkland would be required, according to the City's adopted parkland standard. Therefore, adequate parkland acreage would be available to serve the population growth associated with the General Plan Update Land Use Element. The General Plan Update Land Use Element would not require the provision of new or physically altered park facilities in order to maintain acceptable service ratios and impacts would be less than significant.

Although site-specific development is not currently proposed, there is the potential that the requirements of the City's Local Park Code may be applicable to subsequent residential development, resulting in the construction of new park facilities with the potential to have an adverse physical effect on the environment. These new facilities would be provided at a pace and in locations appropriate to serve new development, as required to maintain the City adopted parkland standard of 3.0 acres of parkland for every 1,000 residents as well as Laguna Niguel Municipal Code requirements related to new residential development. Any new park facilities that may be constructed in the future would be primarily provided on sites with land use designations that allow such uses and the environmental impacts of constructing and operating the park facilities would likely be similar to those associated with new development, redevelopment, and infrastructure projects under the General Plan Update Land Use Element. These impacts are described in the relevant chapters (Sections 4.1 through 4.17, and 5.0) of this EIR. Any subsequent development of park facilities would be subject to project-specific CEQA review and be

required to comply with all federal, State, and local laws and regulations. With adherence to the City's development review process and compliance with applicable regulations, impacts related to the provision of new recreational facilities, or the construction or expansion of recreational facilities would be less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

LAND USE ELEMENT

Policy LU-1.6: **Maintain and Expand Public Facilities.** Ensure the planning, maintenance, and enhancement of public facilities and services, including emergency and safety services, infrastructure, educational and library facilities, and recreational and public gathering areas. These resources support social engagement, cultural activities, and a high quality of life for residents.

RESOURCE MANAGEMENT ELEMENT

Policy RM-1.1: **Open Space Preservation.** Preserve open space lands for recreation, habitat protection and enhancement, resource conservation, flood hazard management, public safety,

Policy RM-2.1: **Park Acreage.** Maintain the City adopted standard for park space acreage at 3.0 acres for every 1,000 residents.

Policy RM-2.8: **Joint-Use Agreements.** Collaborate with public, charter, and private schools on joint-use agreement for shared and enhanced educational, recreational, and/or other public service opportunities.

SCHOOLS

Impact Analysis: Buildout associated with the General Plan Update Land Use Element could result in the development of up to 3,464 housing units over existing conditions. School districts typically use student generation factors to determine the potential number of students that would be generated by the amount of residential development in order to accurately anticipate the needs for new/expanded facilities. Table 4.13-4, *CUSD Student Generation Factors*, identifies the number of potential students that would be generated from development anticipated by the General Plan Update Land Use Element.

Table 4.13-4
CUSD Student Generation Factors

Grades	Student Per Household	Proposed Housing Units	Potential Student Generation
TK-5	0.119	3,464	413
6-8	0.027		94
9-12	0.1061		387
Total	-		**894**

Source: King Consulting, Developer Fee Justification Study Capistrano Unified School District, 2024. Available at: https://www.capousd.org/documents/Developer%20Fees/Residential-and-Commercial-Industrial-Fee-Study-May-2024-Res.-2324-30.pdf. Accessed January 27, 2025.

As indicated in Table 4.13-4, approximately 894 students (413 elementary students, 94 middle school students, and 387 high school students) are anticipated to be generated from buildout associated with the General Plan Update Land Use Element. CUSD's 2024 Fee Justification Study found that while CUSD has enough facilities for elementary school students, the school district enrollment in the 2023-24 academic year exceeded its capacity for middle and high school students. As described in the CUSD Fee Justification Study, CUSD anticipates that current school facilities will be enough to accommodate elementary school student growth but will likely need to develop additional facilities to accommodate current and future middle and high school student enrollment. According to the 2024 Fee Justification study, CUSD expects a total of 5,403 single-family homes and 6,786 multi-family homes to be constructed in the next 20 years within the school district. However, enrollment projections for schools that serve the Planning Area indicate a general reduction in enrollment through 2033. Enrollment projections for Niguel Hills Middle School shows a decline in enrollment between 2026 and 2029 with enrollment steady in 2030 and 2031 and a minimal increase in 2032 and 2033. Aliso Niguel High School, Capistrano Valley High School, and Dana Hills High School all show declines in enrollment through 2033 and availability of open seats.[12] Therefore, based on available information, adequate school capacity would be available to serve the potential student generation associated with buildout of the General Plan Update Land Use Element.

Development associated with the General Plan Update Land Use Element is anticipated to occur gradually through 2045 and would be largely based on market demand. Thus, any increase in demand for school services would occur gradually, as additional development occurs in the Planning Area. The General Plan Update Land Use Element does not propose or authorize development nor designate specific sites for new or expanded school facilities. However, in the event the school district determines that new or expanded school facilities would be needed, it is likely that existing campuses would be utilized to accommodate increased students before new school sites are developed. Similar to fire and police facilities, it is likely that any potential new schools would be located on sites with land use designations that allow such uses and the environmental impacts of constructing and operating the facilities would be similar to those

[12] Capistrano Unified School District, Predictive Enrollment Analytics, Projections 2024.

associated with new development, redevelopment, and infrastructure projects under the General Plan Update Land Use Element. These impacts are described in the relevant sections (Sections 4.1 through 4.17, and 5.0) of this EIR. Any subsequent development of schools or expansion of schools would be subject to their own CEQA review and be required to comply with all federal and state laws and regulations. With compliance with applicable regulations, impacts related to the provision of new or physically altered school facilities would be less than significant.

Further, school districts assess development impact fees against residential and non-residential development to mitigate impacts resulting from the increase in demand for school related services. Pursuant to SB 50, payment of fees to the applicable school district constitutes full mitigation for project impacts. Therefore, individual development projects would be required to pay the statutory fees, so that school facilities can be constructed/expanded, if necessary, at the nearest sites to accommodate the impact of project-generated students; therefore, impacts would be further reduced to a less than significant level.

The proposed General Plan Update includes several policies related to school services. Public Facilities Element Policy PF-1.2 directs the City to collaborate with Capistrano Unified School District and other educational organizations to ensure that school facilities are maintained and equipped to support high-quality learning environments.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

LAND USE ELEMENT

Policy LU-1.6: **Maintain and Expand Public Facilities.** Ensure the planning, maintenance, and enhancement of public facilities and services, including emergency and safety services, infrastructure, educational and library facilities, and recreational and public gathering areas. These resources support social engagement, cultural activities, and a high quality of life for residents.

Policy LU-1.7: **Multigenerational Planning.** Encourage new development projects to incorporate services, facilities, and spaces available to the public, with a focus on serving local youth, teens, and senior citizens.

PUBLIC FACILITIES ELEMENT

Policy PF-1.2: **Educational Providers**. Collaborate with Capistrano Unified School District, charter, private, and faith-based schools, and other educational organizations to ensure that school facilities are maintained and equipped to support high-quality learning environments.

Policy PF-1.3: **Early Childhood Education.** Collaborate with local childcare providers, preschools, and other early education organizations to promote early childhood education programs.

OTHER PUBLIC FACILITIES

Impact Analysis: Buildout associated with the General Plan Update Land Use Element may result in increased demand for additional public facilities, such as Orange County Public Library resources (i.e., additional staffing, equipment, expanded/new facilities). The Laguna Niguel Library is part of the Orange County Public Library system. As part of the Laguna Niguel City Center Project, construction of a new library facility is already planned to replace the existing library that was originally constructed in the mid-1980s. Although this branch would be located within the Planning Area, Laguna Niguel residents have access to the Orange County Public Libraries 29 branches. Branch libraries are located within the neighboring cities of Aliso Viejo, San Juan Capistrano, Laguna Beach, and Dana Point. While it is unknown whether the Orange County Public Library system would need to expand or construct new facilities to meet the demand of subsequent development in the Planning Area, with construction of the new planned library, it is not likely that other new facilities would be needed in the near future. Subsequent development is assumed to occur over time through 2045; thus, any increase in demand for library services would occur gradually as additional development and associated population growth is added to the City.

The environmental effect of providing library and community services is associated with the physical impacts of providing new and expanded facilities. The specific impacts of providing new and expanded facilities cannot be determined at this time, as the General Plan Update Land Use Element does not propose or authorize development, nor does it designate specific sites for new or expanded public facilities; construction of the new library has been evaluated as part of the Laguna Niguel City Center Mixed Use Project EIR. However, if it is determined that new or expanded public facilities would be needed, they would likely be provided on sites with land use designations that allow such uses, and the environmental impacts of constructing and operating the facilities would likely be similar to those associated with new development, redevelopment, and infrastructure projects under the General Plan Update Land Use Element. These impacts are described in the relevant sections (Sections 4.1 through 4.17, and 5.0) of this EIR. Any subsequent development of public facilities would be subject to project-specific CEQA review and be required to comply with all federal, State, and local laws and regulations. With adherence to the development review process and compliance with applicable regulations, impacts related to the provision of new or physically altered public facilities would be less than significant.

The General Plan Update includes a range of policies to ensure that library and community services are adequately funded, are coordinated between the Orange County Public Library, and that new development funds its fair share of services.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

LAND USE ELEMENT

Policy LU-1.6: **Maintain and Expand Public Facilities.** Ensure the planning, maintenance, and enhancement of public facilities and services, including emergency and safety services,

infrastructure, educational and library facilities, and recreational and public gathering areas. These resources support social engagement, cultural activities, and a high quality of life for residents.

Policy LU-1.7: **Multigenerational Planning.** Encourage new development projects to incorporate services, facilities, and spaces available to the public, with a focus on serving local youth, teens, and senior citizens.

PUBLIC FACILITIES ELEMENT

Policy PF-1.4: **Library Services**. Collaborate with Orange County Public Libraries to ensure the Laguna Niguel Library continues to offer technology access, diverse resources, and community programs that promote education and personal growth for residents of all ages.

PSR-2: Would the project 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?

Impact Analysis: As described above, buildout of the General Plan Update Land Use Element would result in additional growth in Laguna Niguel. Based on the anticipated growth, as described in Section 2.0, *Project Description*, and summarized in Table 2-18, *General Plan Update Growth Assumptions*, 2045 buildout associated with the General Plan Update Land Use Element could yield a net change over existing conditions of an additional 3,464 housing units and an additional population of 8,418 people, resulting in a 2045 total population of 76,151 persons within the Planning Area.

As previously discussed, according to the Citywide Park Needs Assessment, partial credit for the County Regional Parks, public school facilities, and private park/facilities is considered in the parkland acreage credit. If this acreage is included, based on a 2045 buildout population of 76,151, the 431.13 acres of parkland identified in the needs assessment, would provide 6.60 acres per 1,000 persons, which would exceed the parkland standard of 3.0 acres per 1,000 persons.

The General Plan Update Land Use Element does not designate any new sites for parks, nor does it propose changes to existing park sites. The General Plan Update Land Use Element proposes changing the land use designation of approximately 85.55 acres of land to Parks and Recreation. This acreage is currently designated Community Commercial (0.8 acres), Open Space (70.7 acres), Public Institutional (2.89 acres), Residential Attached (10.22 acres), Residential Detached (0.37 acres), and Water (1.31 acres). This includes land use designations for parcels located within existing residential communities that are developed with private neighborhood parks, recreation amenities, and landscaped slopes within scenic corridors abutting scenic highways, that have been consistently regulated since initial entitlement to preclude development of residential dwelling units are proposed to be redesignated to “Parks and Recreation” and “Open Space” as appropriate. These updates bring previously developed areas in-line with current practices governing development; refer to Section 4.12, *Population and Housing*.

Similarly, the General Plan Update Land Use Element proposes changing the land use designation of approximately 52.7 acres currently designated Parks and Recreation to other land use designations, including Open Space (35.99 acres), Public Institutional (12.75 acres) and Specific Plan (3.43 acres) to

reflect their current developed and/or operating conditions. The proposed General Plan Update Land Use Element would result in a total of 475.68 acres of land designated as Parks and Recreation. Based on a 2045 buildout population of 76,151 persons, 228.45 acres of parkland would be required, according to the City's adopted parkland standard. Therefore, adequate parkland acreage would be available to serve the population growth associated with the General Plan Update Land Use Element. The General Plan Update Land Use Element would not require the provision of new or physically altered park facilities in order to maintain acceptable service ratios and impacts would be less than significant.

The General Plan Update includes a range of policies to further ensure that park facilities continue to be available and maintained to serve growth associated with implementation of the General Plan Update Land Use Element. Land Use Element Policy LU-1.6 directs the City to ensure planning, maintenance, and enhancement of public facilities such as parks and recreational facilities. Resource Management Element RM-1.1 encourages the preservation of open space for recreational purposes and overall community benefit. Resource Management Policy RM-2.1 directs the City to maintain the adopted standard for park space acreage at 3.0 acres for every 1,000 residents. Resource Management Policy RM-2.2 directs the City to provide a broad range of public recreational lands, facilities, trails, and other amenities for all community members. Resource Management Policy RM-2.3 directs the City to ensure high-quality outdoor recreation opportunities by maintaining and updating design standards for City parks, open spaces, trails, and other public amenities. Resource Management Policy RM-2.8 directs the City to collaborate with educational institutions on joint use agreements for enhanced public service opportunities. Resource Management Policy RM-2.10 encourages the City to pursue funding opportunities from established sources and explore non-traditional funding options and innovative partnerships to support the development, improvement, and maintenance of City parks and recreational amenities.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

LAND USE ELEMENT

Policy LU-1.6: **Maintain and Expand Public Facilities.** Ensure the planning, maintenance, and enhancement of public facilities and services, including emergency and safety services, infrastructure, educational and library facilities, and recreational and public gathering areas. These resources support social engagement, cultural activities, and a high quality of life for residents.

RESOURCE MANAGEMENT ELEMENT

Policy RM-1.1: **Open Space Preservation.** Preserve open space lands for recreation, habitat protection and enhancement, resource conservation, flood hazard management, public safety, aesthetic visual appeal, and overall community benefit.

Policy RM-1.10: **Open Space Education.** Promote public awareness about the importance of conserving open spaces like the Aliso Creek Greenbelt, Aliso and Wood Canyons Regional Park, and the Salt Creek Corridor.

Policy RM-2.1: **Park Acreage.** Maintain the City adopted standard for park space acreage at 3.0 acres for every 1,000 residents.

Policy RM-2.2: **Diverse Recreation Opportunities.** Provide a broad range of public recreational lands, facilities, trails, and other amenities for community members of all ages, abilities, and interests.

Policy RM-2.3: **Outdoor Recreation Design Standards.** Ensure high-quality outdoor recreation opportunities by maintaining and updating design standards for City parks, open spaces, trails, and other public amenities. Incorporate best practices and innovative approaches to public safety, active transportation, and recreation planning to promote physical activity and community engagement.

Policy RM-2.4: **Outdoor Recreation Maintenance.** Regularly maintain parks, recreational facilities, open spaces, trails, and other public amenities to ensure accessibility and enhance community use and enjoyment.

Policy RM-2.8: **Joint-Use Agreements.** Collaborate with public, charter, and private schools on joint-use agreement for shared and enhanced educational, recreational, and/or other public service opportunities.

Policy RM-2.10: **Recreational Funding Opportunities.** Pursue funding opportunities from established sources and explore non-traditional funding options and innovative partnerships to support the development, improvement, and maintenance of City parks and recreational amenities.

Policy RM-2.11: **Parks and Recreation Public Engagement.** Encourage community participation in shaping outdoor recreation priorities and opportunities within the in the City's Park Master Plan.

Policy RM-2.12: **Recreation Types.** Provide a broad range of public recreational lands, facilities, trails, and other amenities for community members of different ages and abilities.

Policy RM-2.17: **Design Standards.** Maintain and update design standards for City parks and trails based on proven best practices and innovations in public safety, active transportation, and recreation planning that promote quality of life benefits such as community health, physical activity, and social interaction.

PSR-3: Would the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Impact Analysis: The City of Laguna Niguel contains City-owned and operated parks, Orange County-owned and operated regional parks within the City, as well as privately-owned park facilities throughout

the City that are part of various HOAs. Additionally, the current General Plan designates over 2,250 acres of land as Open Space. Lands designated for Open Space are primarily for passive recreation, visual enhancement, and resource conservation. The General Plan Update Land Use Element does not propose new recreational facilities.

As described above, the General Plan Update Land Use Element would result in future growth in Laguna Niguel, including but not limited to new businesses, expansion of existing businesses, and new residential uses. New residents, employees, and visitors to the City would potentially increase the use of existing neighborhood and regional parks or other recreational facilities in the Planning Area such that deterioration of these facilities could occur or be accelerated. The additional demand on existing parks and recreational facilities could increase the need for maintenance and improvements. The improvements are not currently known and therefore the potential for environmental impacts cannot be determined at this time. However, it is anticipated that the improvements would occur within the existing improved parkland area.

The provision of new parks and recreation facilities would help to reduce the potential for adverse impacts and physical deterioration of existing parks and recreation facilities, by providing additional facilities to accommodate the increased demand. These new facilities would be provided at a pace and in locations appropriate to serve new development, as required to maintain the City adopted parkland standard of 3.0 acres of parkland for every 1,000 residents as well as Laguna Niguel Municipal Code requirements related to new residential development.

More specifically, Municipal Code Title 9, Article 5, *Local Park Code*, establishes specific regulations for subdivisions to provide park land, the payment of park fees, or a combination of both. Additionally, Title 9, Article 2, *Comprehensive Zoning Code*, Subarticle 3, *Residential Districts*, Section 9-1-35.13, Landscaping and Open Area, establishes landscaping and open area requirements within the RM and RP zoning districts. Projects within the RM and RP zoning districts are required to include common open area equal to at least 25 percent of the buildable project area. These open areas are required to consist of landscaped and active recreation areas. Recreation facilities may include swimming pools, spas, and related facilities; clubhouses; tot lots with play equipment; court game facilities such as tennis, basketball, or racquetball; improved softball or other playfields; or similar facilities for active recreational use.

Although site-specific development is not currently proposed, there is the potential that the requirements of the City's Local Park Code may be applicable to subsequent residential development, resulting in the construction of new recreational facilities with the potential to have an adverse physical effect on the environment. Any new parks or recreational facilities that may be constructed in the future would be primarily provided on sites with land use designations that allow such uses and the environmental impacts of constructing and operating the parks and recreational facilities would likely be similar to those associated with new development, redevelopment, and infrastructure projects under the General Plan Update Land Use Element. These impacts are described in the relevant chapters (Sections 4.1 through 4.17, and 5.0) of this EIR. Any subsequent development of parks and recreational facilities would be subject to project-specific CEQA review and be required to comply with all federal, State, and local laws and regulations. With adherence to the City's development review process and compliance with

applicable regulations, impacts related to the provision of new recreational facilities, or the construction or expansion of recreational facilities would be less than significant.

The General Plan Update supports the creation of new parks and recreation facilities, including new parks and trails, to accommodate a wide range of activities for all age groups and further reduce potential impacts. For example, Land Use Element Policy LU-1.6 directs the City to ensure planning, maintenance, and enhancement of public facilities such as parks and recreational facilities. Public Facilities Element Policy PF-2.1 directs the City to support high quality community facilities and services for residents of all ages and abilities. Resource Management Element RM-1.1 encourages the preservation of open space for recreational purposes and overall community benefit. Resource Management Policy RM-2.1 directs the City to maintain the adopted standard for park space acreage at 3.0 acres for every 1,000 residents. Resource Management Policy RM-2.8 directs the City to collaborate with educational institutions on joint use agreements for enhanced public service opportunities.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

LAND USE ELEMENT

Policy LU-1.6: **Maintain and Expand Public Facilities.** Ensure the planning, maintenance, and enhancement of public facilities and services, including emergency and safety services, infrastructure, educational and library facilities, and recreational and public gathering areas. These resources support social engagement, cultural activities, and a high quality of life for residents.

PUBLIC FACILITIES ELEMENT

Policy PF-2.1: **Community Facilities and Services.** Support the provision of high-quality community facilities and diverse services for residents of all ages and abilities. This includes supporting the growing senior population and ensuring they have access to programs and resources that promote healthy living and community involvement.

Policy PF-2.2: **Capital Improvements.** Plan and fund the Capital Improvement Program to ensure the City's community centers continue to provide high-quality facilities and services to Laguna Niguel residents.

Policy PF-2.5: **Funding Opportunities for Recreation Facilities.** Monitor and seek alternative funding sources and grants to support community facilities and services.

RESOURCE MANAGEMENT ELEMENT

Policy RM-1.1: **Open Space Preservation.** Preserve open space lands for recreation, habitat protection and enhancement, resource conservation, flood hazard management, public safety, aesthetic visual appeal, and overall community benefit.

Policy RM-1.10: **Open Space Education.** Promote public awareness about the importance of conserving open spaces like the Aliso Creek Greenbelt, Aliso and Wood Canyons Regional Park, and the Salt Creek Corridor.

Policy RM-2.1: **Park Acreage.** Maintain the City adopted standard for park space acreage at 3.0 acres for every 1,000 residents.

Policy RM-2.2: **Diverse Recreation Opportunities.** Provide a broad range of public recreational lands, facilities, trails, and other amenities for community members of all ages, abilities, and interests.

Policy RM-2.3: **Outdoor Recreation Design Standards.** Ensure high-quality outdoor recreation opportunities by maintaining and updating design standards for City parks, open spaces, trails, and other public amenities. Incorporate best practices and innovative approaches to public safety, active transportation, and recreation planning to promote physical activity and community engagement.

Policy RM-2.4: **Outdoor Recreation Maintenance.** Regularly maintain parks, recreational facilities, open spaces, trails, and other public amenities to ensure accessibility and enhance community use and enjoyment.

Policy RM-2.5: **Scenic Viewing Areas.** Provide public trails, recreation areas, and viewing points that are designed to enhance the enjoyment of high value scenic views**.**

Policy RM-2.6: **Facility Programming.** Plan for and provide high-quality recreation and community service programs for community members of all ages and abilities.

Policy RM-2.8: **Joint-Use Agreements.** Collaborate with public, charter, and private schools on joint-use agreement for shared and enhanced educational, recreational, and/or other public service opportunities.

Policy RM-2.9: **Crime Prevention Through Environmental Design.** Consider Crime Prevention Through Environmental Design principles during the planning and design of new or renovated parks and recreational facilities to enhance safety and deter crime.

Policy RM-2.10: **Recreational Funding Opportunities.** Pursue funding opportunities from established sources and explore non-traditional funding options and innovative partnerships to support the development, improvement, and maintenance of City parks and recreational amenities.

Policy RM-2.11: **Parks and Recreation Public Engagement.** Encourage community participation in shaping outdoor recreation priorities and opportunities within the in the City's Park Master Plan.

Policy RM-2.12: **Recreation Types.** Provide a broad range of public recreational lands, facilities, trails, and other amenities for community members of different ages and abilities.

Policy RM-2.17: **Design Standards.** Maintain and update design standards for City parks and trails based on proven best practices and innovations in public safety, active transportation, and

recreation planning that promote quality of life benefits such as community health, physical activity, and social interaction.

4.13.6 CUMULATIVE IMPACTS

Section 3.0, *Basis of Cumulative Analysis*, identifies projected regional growth having the potential to interact with the proposed Project to the extent that a significant cumulative effect may occur. The geographic setting for public services and recreation considers the service areas for OCFA, OCSD, CUSD, OC County Libraries, and Orange County.

Would the Project, combined with other relevant cumulative projects, result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

FIRE PROTECTION

Impact Analysis: Development consistent with the General Plan Update Land Use Element may result in the need for additional OCFA resources (i.e., additional staffing, equipment, expanded/new facilities). Subsequent development is assumed to occur over time through 2045; thus, any increase in demand for fire protection services would occur gradually as additional development and associated population growth is added to the City. OCFA would continue to regularly monitor fire department resources to ensure that adequate facilities are available to serve existing and future development and population increases.

Any new development within the Planning Area would be required to comply with local, State, and federal regulatory standards, such as the State Building and Fire Codes, as well as other applicable fire safety standards. New development projects would be required to comply with all applicable California Fire Code requirements for construction, access, water mains, fire flows, and hydrants. Individual project development plans would be reviewed by OCFA to determine specific fire requirements (e.g., fire flow capacities, emergency access, fuel modification plans) applicable to the specific development and to ensure compliance with these requirements.

If construction of new OCFA facilities or expansion of existing OCFA facilities are needed to maintain acceptable service ratios, response times or other performance objectives within the service area, the potential to result in substantial adverse physical impacts would be reviewed as part of the CEQA and development review process of the lead agency in which the facility is located. With adherence to the development review process and compliance with applicable regulations, impacts related to the provision of new fire facilities, or the construction or expansion of fire facilities would be less than significant.

Similarly, related cumulative development within the OCFA service area would assess any changes in service demand and the need for new or expanded facilities on a project-by-project basis. If new or expanded facilities are required, environmental review pursuant to CEQA would be required. Thus, the

General Plan Update's incremental effects involving the potential to result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection and emergency services would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan goals and policies cited above.

POLICE PROTECTION

Impact Analysis: Development consistent with the General Plan Update Land Use Element may result in the need for additional OCSD resources (i.e., additional staffing, equipment, expanded/new facilities). Subsequent development is assumed to occur over time through 2045; thus, any increase in demand for police protection services would similarly occur gradually as additional development and associated population growth is added to the City. OCSD would continue to regularly monitor resources to ensure that adequate facilities are available to serve existing and future development and population increases.

Any new development within the Planning Area would be required to adhere to local regulations pertaining to public service operations. As part of the development review process, the Community Development Department would review site-specific development plans in the Planning Area and applicants would be required to comply with any specific conditions related to safety and security specified by the OCSD. Project adoption would further allow OCSD to utilize the projected growth in population, dwelling units, and nonresidential development to effectively plan for increases in population and police protection service demand. If construction of new OCSD facilities or expansion of existing OCSD facilities are needed to maintain acceptable service ratios, response times or other performance objectives within the service area, the potential to result in substantial adverse physical impacts would be reviewed as part of the CEQA and development review process of the lead agency in which the facility is located. With adherence to the development review process and compliance with applicable regulations, impacts related to the provision of new police protection facilities, or the construction or expansion of police protection facilities would be less than significant.

Similarly, related cumulative development within the OCSD service area would assess any changes in service demand and the need for new or expanded facilities on a project-by-project basis. If new or expanded facilities are required, environmental review pursuant to CEQA would be required. Thus, the General Plan Update's incremental effects involving the potential to result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection services would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance That Minimize Potential Impacts: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies: Refer to the General Plan goals and policies cited above.

PARKS

Impact Analysis: The Project would bring new residents to the City of Laguna Niguel. This additional population may result in the need to construct or expand park facilities, which might have an adverse physical effect on the environment. Any new development would be required to adhere to local regulations pertaining to parks and recreational facilities. Subsequent development within the Planning Area would be required to adhere to Municipal Code Title 9, Article 5, *Local Park Code*, which establishes specific regulations for subdivisions to provide park land, the payment of park fees, or a combination of both. Compliance with established local regulations would ensure park facilities would be provided as required to maintain the City adopted parkland standard of 3.0 acres of parkland for every 1,000 residents as well as Laguna Niguel Municipal Code requirements.

Related cumulative projects would typically be served by park facilities within the jurisdiction in with the project site is located. Similar to the Project, individual projects would be reviewed on a project-by-project basis to determine potential impacts on park facilities and if new or expanded facilities would be required. If construction of park facilities are needed, the potential to result in substantial adverse physical impacts would be reviewed as part of the CEQA and development review process of the lead agency in which the facility is located. Therefore, the General Plan Update's incremental effects involving the potential to result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact

SCHOOLS

Impact Analysis: Based on enrollment projections and projected student generation association with buildout of the General Plan Update Land Use Element, adequate capacity would be available in the CUSD. Subsequent development is assumed to occur over time through 2045; thus, any increase in demand for schools and educational resources would similarly occur gradually as additional development and associated population growth is added to the City. The CUSD and other schools would continue to regularly monitor school facilities to ensure that adequate facilities are available to serve existing and future development and population increases. If future enrollment conditions change and it is determined that additional resources (i.e., additional staffing, equipment, expanded/new facilities) are needed, the potential to result in substantial adverse physical impacts would be reviewed as part of the CEQA review process.

Any new development within the Planning Area would be required to adhere to local regulations pertaining to public service operations. Per California Government Code Section 65995, developer fees paid to CUSD would address any potential effects to schools. Pursuant to SB 50, payment of fees to the applicable school district is considered full mitigation for project impacts, including impacts related to the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, or other performance objectives for schools. Individual development projects would be required to pay the statutory fees, if necessary, to accommodate students.

Similar to the Project, related cumulative projects resulting in students within the CUSD would be reviewed on a project-by-project basis to determine if adequate school capacity is available for the new students that would be generated. If construction of new school facilities or expansion of existing facilities are needed, the potential to result in substantial adverse physical impacts would be reviewed as part of the CEQA review process. With adherence to the development review process and compliance with applicable regulations, impacts related to the provision of new school facilities, or the construction or expansion of school facilities would be less than significant. Additionally, related cumulative projects would be required to pay applicable fees to the school district pursuant to SB 50. Thus, the General Plan Update's incremental effects involving the potential to result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for schools would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan goals and policies cited above.

OTHER PUBLIC FACILITIES

Impact Analysis: Development consistent with the General Plan Update Land Use Element may result in the need for additional public facilities resources, such as Orange County Public Library resources (i.e., additional staffing, equipment, expanded/new facilities). Subsequent development is assumed to occur over time through 2045; thus, any increase in demand for libraries and other public facilities would similarly occur gradually, as additional development and associated population growth is added to the City. However, as discussed, construction of a new library is planned to replace the existing Laguna Niguel Library. Therefore, it is likely that new library facilities would not be needed in the near future. Additionally, residents of Laguna Niguel have access to all libraries within the Orange County Public Library system. The Orange County Public Library system would continue to regularly monitor resources to ensure that adequate facilities are available to serve existing and future development and population increases.

Any new development within the Orange County Public Library service area would be subject to project-specific CEQA review and be required to comply with all federal, State, and local laws and regulations. If

construction of libraries or other public facilities are needed, the potential to result in substantial adverse physical impacts would be reviewed as part of the CEQA and development review process of the lead agency in which the facility is located.

Similar to the Project, related cumulative projects would be reviewed on a project-by-project basis to determine if adequate public facilities would be available to serve the proposed development. If construction of new public facilities or expansion of existing facilities are needed, the potential to result in substantial adverse physical impacts would be reviewed as part of the CEQA review process. Thus, the General Plan Update's incremental effects involving the potential to result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for other public facilities would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan goals and policies cited above.

Would the project, combined with other relevant cumulative projects, 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?

Impact Analysis: The Project would bring new residents to the City of Laguna Niguel. These new residents are expected to use existing park and recreational facilities, and this additional use may result in greater demands on parks and recreational facilities in the Planning Area such that deterioration of these facilities could occur or be accelerated. Additionally, the additional demand on existing parks and recreational facilities would increase the need for maintenance and improvements. These improvements could have potential environmental impacts, although the exact impacts cannot be determined since the potential improvements are currently unknown. Future development resulting from buildout of the General Plan Update Land Use Element would generally 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, indicating that additional park and recreation resources may be needed.

Any new development would be required to adhere to local regulations pertaining to parks and recreational facilities. Subsequent development within the Planning Area would be required to adhere to Municipal Code Title 9, Article 5, *Local Park Code*, which establishes specific regulations for subdivisions to provide park land, the payment of park fees, or a combination of both. Compliance with established local regulations would ensure parks and recreational facilities would not be overused to the point of substantial deterioration.

Related cumulative projects would typically be served by parks and recreational facilities within the jurisdiction in with the project site is located. Similar to the Project, individual projects would be reviewed on a project-by-project basis to determine potential impacts on parks and recreational facilities and if new

or expanded facilities would be required. If construction of parks or recreational facilities are needed, the potential to result in substantial adverse physical impacts would be reviewed as part of the CEQA and development review process of the lead agency in which the facility is located. Therefore, the General Plan Update's incremental effects associated with the increase in 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 would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan goals and policies cited above.

Would the project, combined with other relevant cumulative projects, include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Impact Analysis: Development consistent with the General Plan Update Land Use Element would bring new residents to the City. These new residents are expected to use existing recreational facilities; this additional population may result in the need to construct or expand recreational facilities, which might have an adverse physical effect on the environment.

At the time future recreational facilities are proposed, they would require project-specific environmental review and compliance with existing regulations that address potential environmental impacts related to the construction and operation of new parks. Additionally, new or expansion projects would be required to adhere to standards established by the City and be subject to CEQA review, further ensuring construction activities would not have an adverse physical effect on the environment.

Related cumulative projects would typically be served by recreational facilities within the jurisdiction in with the project site is located. Similar to the Project, individual projects would be reviewed on a project-by-project basis to determine potential impacts on recreational facilities and if new or expanded facilities would be required. If construction of recreational facilities are needed, the potential to result in substantial adverse physical impacts would be reviewed as part of the CEQA and development review process of the lead agency in which the facility is located. Therefore, the General Plan Update's incremental effects related to the provision of recreational facilities or requiring the construction or expansion of recreational facilities which might have an adverse physical effect on the environment would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan goals and policies cited above.

4.13.7 SIGNIFICANT UNAVOIDABLE IMPACTS

Public services and recreation impacts associated with the implementation of the General Plan Update would be less than significant; no significant unavoidable public service and recreation impacts would occur as a result of the General Plan Update.

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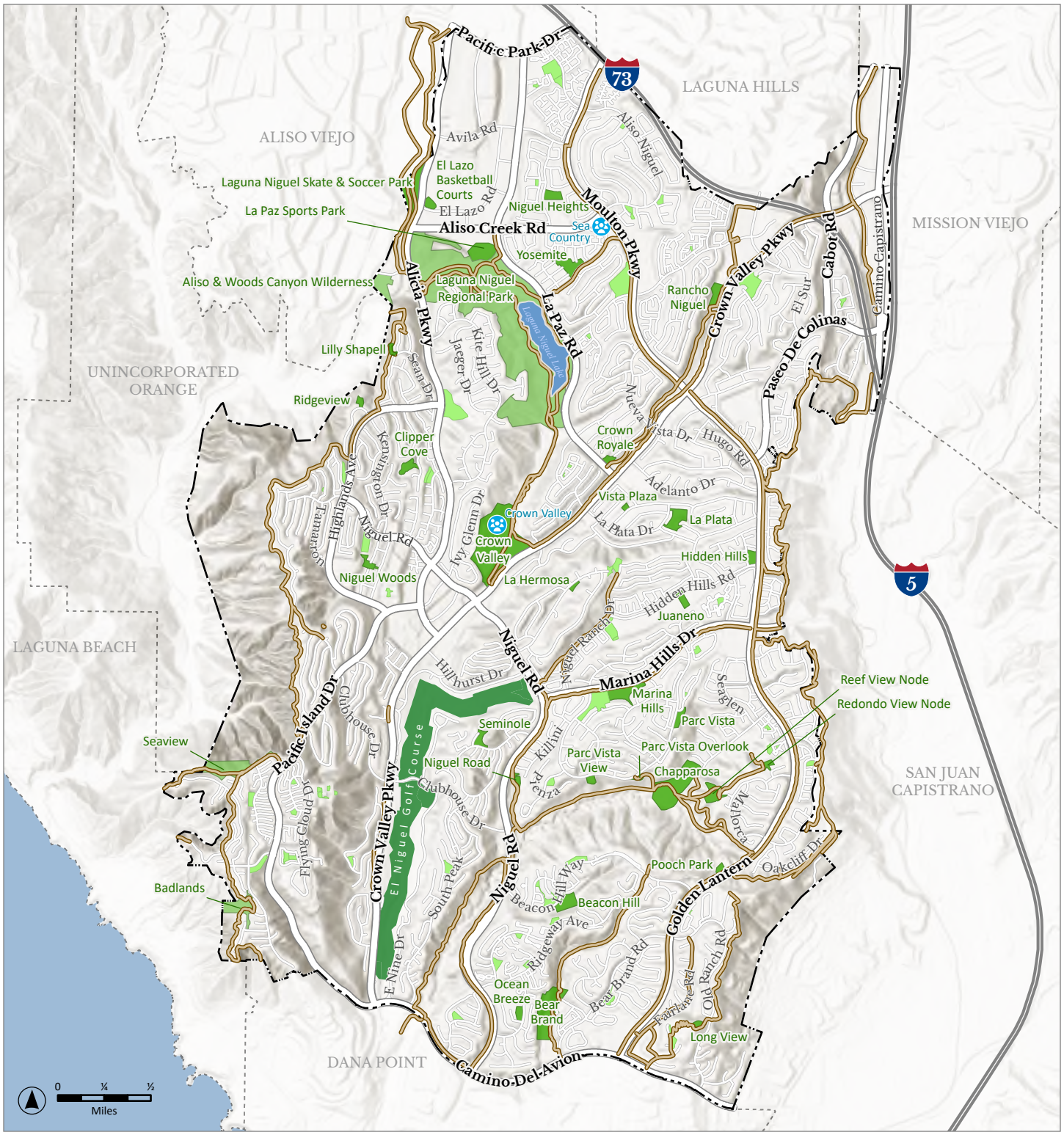

Data sources: City of Laguna Niguel; Orange County GIS.

Prepared for the City of Laguna Niguel by De Novo Planning Group
June 7, 2024.

LEGEND

- Laguna Niguel City Boundary
- Other Jurisdictions
- Community/Senior Center
- Trail
- City Park
- County Park
- Private Community Park
- El Niguel Country Club Golf Course

Figure 4.13-1.

Parks and Recreation Facilities

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4.14 TRANSPORTATION

4.14.1 PURPOSE

This section describes the existing physical and operational conditions for the transportation system and provides an analysis of potential transportation impacts associated with adoption and implementation of the General Plan Update. This section is based in part on the *City of Laguna Niguel General Plan Update Vehicle Miles Traveled (VMT) Analysis Report*, and *Laguna Niguel General Plan Update Traffic Study*, both prepared by Linscott, Law & Greenspan, Engineers (LLG), dated January 7, 2025, and included as Appendix F, *Transportation Analysis*.

Under Senate Bill 743, as of July 1, 2020, local agencies may no longer rely on roadway/intersection delay and capacity-based analyses for CEQA purposes, but rather, agencies must analyze transportation impacts utilizing vehicle miles traveled (VMT), which measures the number of vehicle trips generated by a project and their average distance of travel to and from a project. These are calculated and assessed as rates (e.g., per capita for residential projects or per employee for commercial projects). This is a change from the prior method of analyzing transportation impacts, which measured travel time delay at intersections and roadway segments, assessed with a Level-of-Service (LOS) grade from LOS A to LOS F. Travel delay as measured by LOS is no longer a CEQA-related topic and is not discussed in this EIR.

4.14.2 ENVIRONMENTAL SETTING

EXISTING ROADWAY NETWORK

Freeways

Interstate 5

Interstate 5 (I-5) runs alongside Laguna Niguel's northeastern city limits and provides regional connectivity to the Greater Los Angeles Metropolitan Area and San Diego Metropolitan Area. The major interchanges on I-5 that serve the City are Crown Valley Parkway and Paseo de Colinas/Avery Parkway.

State Route 73

State Route 73 (SR-73) runs through and alongside the northern portion of the City, connecting to I-5 south of the Greenfield Drive interchange. It provides a tolled connection between North and South Orange County. The major interchanges on SR-73 that serve the City are Alicia Parkway, Moulton Parkway, and Greenfield Drive.

Local Roadways

The City of Laguna Niguel's local roadway network consists of arterial, collector, and local streets. Table 4.14-1, *Roadway Classifications*, provides an overview of these roadway classifications. Arterial streets serve as the major connections that traverse the City and provide access to collector and local streets in residential and non-residential areas.

Table 4.14-1
Roadway Classifications

Street Type	Description	Key Characteristics	Examples
Arterial Streets:			
Augmented Major	8-lane divided roadways	Appx 120' typical curb-to-curb width No on-street parking May include Class II bike lanes	Crown Valley Parkway (I-5 to Cabot Road)
Major	6-lane divided roadways	Appx 102' typical curb-to-curb width No on-street parking May include Class II bike lanes	Crown Valley Parkway (Cabot Road to Camino Los Padres), Alicia Parkway, Moulton Parkway.
Primary	4-lane divided or partially-divided roadways	Appx 84' typical curb-to-curb width No on-street parking May include Class II bike lanes	Marina Hills Drive, Niguel Road (south of Alicia Parkway), Pacific Island Drive, Camino Del Avion, Cabot Road.
Secondary	2-lane (divided) or 4-lane (undivided) roadways	Appx 64' typical curb-to-curb width No on-street parking May include Class II bike lanes	Highlands Avenue, La Paz Road (Aliso Creek to Crown Valley Parkway)
Commuter Streets	2-lane undivided roadways	Appx 40' typical curb-to-curb width May include Class II bike lanes or on-street parking	Beacon Hill Way, Club House Drive, Niguel Road (north of Alicia Parkway)
Local Streets	Low-traffic roads within neighborhoods	Appx 28'- 40' typical curb-to-curb width Typically include on-street parking, but not designated bike lanes	Residential streets throughout the City
Source: Linscott, Law & Greenspan, Engineers (LLG), *Laguna Niguel General Plan Update Traffic Study*, January 7, 2025.			

BICYCLE FACILITIES

Laguna Niguel boasts a comprehensive bikeway system for recreation and transportation that connect residences, jobs, shopping, transit, recreation uses, and schools. The City follows Caltrans' standards to classify its bikeways, as summarized in Table 4.14-2, *Bikeway Classifications*. The City's existing system of bike lanes and paths provide internal community links as well as access to many of the surrounding communities.

The existing bicycle network in Laguna Niguel is currently comprised of 4.6-miles of Class I multiuse paths, 3-miles of Class II bike lanes, and 0.5-miles of Class IV cycletrack.[1]

[1] Mark Thomas. *City of Laguna Niguel Active Transportation Plan Draft*. June 2025.

Table 4.14-2
Bikeway Classifications

Bikeway Type	Description	Examples
Class I	Provides a completely separated right-of-way for the exclusive use of bicycles and pedestrians with cross flow minimized	Niguel Road from Club House Drive to Ridgeway Avenue, Marina Hills Drive, La Paz Road
Class II	Provides a striped lane for one-way bike travel on a street or highway.	Crown Valley Parkway, Moulton Parkway, Pacific Island Drive
Class III	Provides for shared use with pedestrian or motor vehicle traffic.	None
Class IV	Provides a separated bikeway within existing roadway right of way by use of physical devices or landscaping.	Aliso Creek Road (pilot)

Source: Mark Thomas. *City of Laguna Niguel Active Transportation Plan* Draft. June 2025.

Class I multi-use paths are facilities that are off of roadways and provide a shared space for both bicyclists and pedestrians. The Salt Creek Trail is the only existing Class I facilities within the City.[2] A detailed description of the Salt Creek Trail is below.

Class II bike lanes are on-street dedicated lanes for bicyclists. These classes typically contain striping and markings that identify them as bike lanes but may also be identified through a striped shoulder. Class II bike lanes can also have striped buffers that can increase the amount of space between vehicles and bicyclists. Class II bike lanes are largely located on the City's main arterial roadways, which include Crown Valley Parkway, Moulton Parkway, Golden Lantern Street, Niguel Road, Alicia Parkway, Aliso Creek Road, Pacific Park Drive, and Pacific Island Drive.[3]

Class III bike routes are lower-speed roadways where motorists and bicyclists share travel lanes. Bike routes typically include "share the road" signage and have identifiable roadway markings called sharrows. Currently there are no Class III bike routes designated within the City limits.

Class IV cycletracks, also known as "separated bikeways," are on-street dedicated bicycle facilities that are separated from automobile traffic through a protective vertical barrier such as a curb, median, bollards, parked vehicles, or other materials. Cycletracks can be designed as either one- or two- way in direction. The Aliso Creek Road Bike Lane is a Class IV Bike Lane on Aliso Creek Road. The Aliso Creek Road Class IV Bike Lane is located along Aliso Creek Road between Alicia Parkway and La Paz Road. The Class IV bike lane features several bike safety enhancements in both the eastbound and westbound directions. Safety enhancement on the one-way Class IV Separated Bikeway includes several vertical elements

[2] Mark Thomas. *City of Laguna Niguel Active Transportation Plan Draft*. June 2025.
[3] Mark Thomas. *City of Laguna Niguel Active Transportation Plan Draft*. June 2025.

including K71 plastic bollards, flexible bollards, and rubber parking stops installed along the length of the bike lane.[4]

PEDESTRIAN FACILITIES

The City's continuous sidewalks along major roadways provide a strong foundation for pedestrian movement, complemented by the network of multi-use trails that link to neighborhoods, regional parks, and neighboring beach communities. Pedestrian facilities in Laguna Niguel most commonly include sidewalks, Class I multi-use paths, and roadway crossing enhancements such as crosswalks and leading pedestrian intervals (LPIs). While most roadways have sidewalk facilities, segments of missing sidewalks, also known as sidewalk gaps, exist within the pedestrian transportation network.[5] According to OC Active Report, Laguna Niguel has 3.8 miles of missing sidewalks, located primarily on sections of Crown Valley Parkway, south of Niguel Road. The missing sidewalks identified in the report are mostly limited to one side of the road.[6]

Crosswalks support pedestrian crossings at intersections by designating the right-of-way where pedestrians can cross. Crosswalks may be striped in various ways, including transverse striping and high-visibility striping at different locations in Laguna Niguel. LPIs are a traffic signal timing feature that gives pedestrians a 3 to 7 second head start to enter a crosswalk before vehicles are given a green light, allowing pedestrians to have greater visibility of turning motorists. LPIs are currently installed at Alicia Parkway and Crown Valley Parkway and Niguel Road and Alicia Parkway.[7]

The City of Laguna Niguel maintains and operates approximately 80 miles of trails which include the Aliso Summit Trail, Colinas Bluff Trail, Laguna Ridge Trail, Long View Trail, Niguel Trail, Oso Creek Trail, and Salt Creek Trail.

Aliso Summit Trail

The trail connects Seaview Park and Pacific Island Drive with Lilly Shapell Park in the Hillcrest residential neighborhood. The trail is located adjacent to Drakes Bay, which is off of Highlands. The trail is primarily composed of decomposed granite surface. The continuity of this trail is provided by sidewalk connections.

Colinas Bluff Trail

This trail is characterized by very steep slopes. Much of the trail exists within the boundaries of the City of San Juan Capistrano and equestrians from several stables in San Juan Capistrano often use portions of this trail.

[4] City of Laguna Niguel. "What is the Aliso Creek Road Bike Lane." https://www.cityoflagunaniguel.org/Faq.aspx?QID=157. Accessed on June 23, 2025.
[5] Mark Thomas. *City of Laguna Niguel Active Transportation Plan Draft*. June 2025.
[6] Orange County Transportation Authority (OCTA). *OC Active Orange County's Bike + Ped Plan.* December 2019.
[7] Mark Thomas. *City of Laguna Niguel Active Transportation Plan Draft*. June 2025.

Laguna Ridge Trail

The central portion of the trail traverses through Badlands Park, owned/maintained by the County of Orange. The northern portion of the trail connects through the gated entrance at the west end of Ocean Way, then follows sidewalks, private streets, and a walkway within the Laguna Sur community.

Long View Trail

This trail begins along the street of Park Paseo within the gated community of Bear Brand Ridge. Public access is available during daylight hours from a pedestrian gate at Pacific Crest along Camino del Avion.

Niguel Trail

Part of the County's regional trail system, the Niguel Trail provides access to the Salt Creek Trail in the Laguna Niguel Regional Park and to Crown Valley Community Park. This trail system also provides access to the Nellie Gail equestrian trails in Laguna Hills.

Oso Creek Trail

This urban trail is located in the northwestern portion of the City of Laguna Niguel. The trail begins at the Laguna Niguel Metrolink Station parking lot and runs north along the eastern edge of Oso Creek. At the Galivan Basin, the trail crosses the creek and heads west before turning north to run along Cabot Road connecting to the Laguna Hills Trail.

Salt Creek Trail

This trail connects two major public parks including Crown Valley Community Park and Laguna Niguel Regional Park. This is the longest trail segment in the City. This trail connects to Dana Point trails ending at Salt Creek Beach and runs north through the City of Aliso Viejo all the way to Cooks Corner. Much of the trail surfaces consist of asphalt, combined with concrete and decomposed granite. Salt Creek Trail is a Class I multi-use path that is used for both pedestrians and bicyclists.

TRANSIT SERVICE

Public transit in Laguna Niguel includes Orange County Transportation Agency's (OCTA's) fixed-route bus service, Americans with Disability Act (ADA) paratransit service, and the OC Flex microtransit program. City-operated services include the Summer Trolley and the Senior Wheels programs. Additionally, the Laguna Niguel/Mission Viejo Metrolink station provides commuter rail service.

OCTA Services

OCTA services include fixed-route buses and paratransit. It provides approximately 60 fixed bus routes, including local, community, express (Bravo!), and StationLink services. OCTA provides connections to other municipalities and the rest of the region through transit nodes and other intermodal hubs such as Park & Rides. OCTA currently operates four bus routes within the City (Routes 85, 87, 90, and 91) that connect with other destinations in Orange County. OCTA periodically updates its service levels and route configurations based on ridership.

In compliance with the ADA, all public transit operators like OCTA are required to provide paratransit service to persons whose disabilities prevent them from using accessible fixed-route public transit. In Laguna Niguel, OCTA operates Access Service, a shared-ride paratransit service for qualified individuals.

City Transit Services

The City operates the Laguna Niguel Summer Trolley, a free trolly service that operates from Laguna Niguel/Mission Viejo Metrolink Station to Salt Creek Beach in Dana Point. The service is available from Memorial Day to Labor Day each summer. The City also operates the Senior Wheels program, which is a curb-to-curb weekday transportation service offered to seniors, residents 60 and older.

Metrolink Rail Service

The Laguna Niguel/Mission Viejo Metrolink Station is located in the northeast corner of the City with access on Forbes Road and Camino Capistrano. Currently, Metrolink provides service to two lines from the station, the Orange County Line and the Inland Empire-Orange County Line. The station features public parking, restrooms, and bicycle amenities, including racks and lockers.

FREIGHT AND GOODS MOVEMENT

Truck routes are designated on City arterials to facilitate the movement of goods throughout the City boundaries. Truck routes in the City of Laguna Niguel include:

- Alicia Parkway
- Beacon Hill Way
- Clubhouse Drive
- Golden Lantern
- La Paz Road
- Moulton Parkway
- Pacific Park Drive
- Aliso Creek Road
- Camino Del Avion
- Crown Valley Parkway
- Highlands Avenue
- Marina Hills Drive
- Niguel Road
- Cabot Road

EXISTING VEHICLE MILES TRAVELED

VMT was estimated for the Laguna Niguel General Plan Update using the local travel demand forecasting model. In Orange County, that model is the Orange County Traffic Analysis Model (OCTAM) which reflects the most recent 2024-2050 Southern California Association of Governments (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) program. The OCTAM model was used to calculate citywide VMT in Laguna Niguel in three ways: VMT per Capita, VMT per Employee, and VMT per Service Population. VMT per capita represents the average number of miles driven by each resident and is calculated by dividing the total vehicles traveled in the City by the total population in the City. VMT per employee represents the average number of miles driven for work-related trips per employee for businesses associated with the Planning Area. VMT per service population presents all the vehicle miles generated normalized by all residents and employed persons in the City. The Existing VMT is summarized in Table 4.14-3, *Existing VMT*.

Table 4.14-3
Existing VMT

General Plan Scenario	VMT per Capita	VMT per Employee	VMT per Service Pop.
Existing	23.61	20.83	34.99
Source: Linscott, Law & Greenspan, Engineers (LLG), *City of Laguna Niguel General Plan Update Vehicle Miles Traveled (VMT) Analysis Report,* January 7, 2025.			

4.14.3 REGULATORY SETTING

FEDERAL

Americans With Disabilities Act

The Americans with Disabilities Act of 1990 (ADA) provides comprehensive rights and protections to individuals with disabilities. The goal of the ADA is to assure equality of opportunity, full participation, independent living, and economic self-sufficiency. To implement this goal, the United States Access Board has created accessibility guidelines for public rights-of-way. The guidelines address various issues, including roadway design practices, slope and terrain issues, pedestrian access to streets, sidewalks, curb ramps, street furnishings, pedestrian signals, parking, and other components of public rights-of-way.

The City of Laguna Niguel is committed to ensuring that people with disabilities have access to City programs, services, activities, and facilities. In all of its services, programs, events, activities, facilities, and public meetings, the City strives to eliminate any barriers that prohibit people with disabilities from full access to facilities.

Federal Highway Administration

The Federal Highway Administration (FHWA) is a federal agency that focuses on national highway programs. FHWA administers and manages Federal highway programs and establishes national standards. The FHWA publishes the Manual on Uniform Traffic Control Devices (MUTCD) which specifies the standards for street markings, traffic signals, and street signs in the United States. The California Department of Transportation (Caltrans) developed the 2014 California MUTCD (Rev. 6) based on the FHWA MUTCD.

STATE

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.

The proposed update to the Laguna Niguel General Plan incorporates Complete Streets principles into the policies and goals of the mobility element.

Assembly Bill 32, Senate Bill 32, and Senate Bill 375

Assembly Bill ("AB") 32, also known as the Global Warming Solutions Act of 2006, committed California to reducing greenhouse gas ("GHG") emissions to 1990 levels by 2020. In 2016, Senate Bill ("SB") 32 added a new target: reducing statewide emissions to 40 percent below 1990 levels by 2030.

The California Air Resources Board ("CARB") adopted its first *Climate Change Scoping Plan* ("Scoping Plan") in 2008, which functions as a roadmap of CARB's plans to achieve GHG reductions in California required by AB 32 through subsequently enacted regulations. Updates to the Scoping Plan occurred in 2013, 2017, and 2022. Adopted by the CARB on December 15, 2022, the 2022 Scoping Plan Update assesses progress towards the SB 32 GHG reduction target of at least 40 percent below 1990 emissions by 2030, while laying out a path to achieving carbon neutrality no later than 2045 and a reduction in anthropogenic emissions by 85 percent below 1990 levels.

SB 375 provides guidance for curbing emissions from cars and light trucks to help California comply with AB 32. There are five major components to SB 375:

- CARB will guide the adoption of GHG emission targets to be met by each Metropolitan Planning Organization ("MPO") in the State.
- MPOs are required to create a Sustainable Communities Strategy ("SCS") that provides a plan for meeting these regional targets. The SCS must be consistent with the Regional Transportation Plan ("RTP").
- Regional housing elements and transportation plans must be synchronized on eight-year schedules. Also, the SCS and Regional Housing Needs Assessment ("RHNA") must be consistent with each other.
- CEQA is streamlined for preferred development types such as mixed-use projects and transit-oriented developments ("TODs") if they meet specific requirements.
- MPOs must use transportation and air emission modeling methodologies consistent with California Transportation Commission ("CTC") guidelines.

Assembly Bill 98 (AB 98)

Assembly Bill 98 (AB 98) was approved on September 29, 2024, with the goal of minimizing air quality effects from warehousing and logistics facilities. The policy sets new requirements for the zoning, site requirements, and operations of new warehousing and logistics facilities that facility operators must meet prior to jurisdictions issuing certificates of occupancy. AB 98 requires cities to publish truck route maps that minimize exposure to "sensitive receptors", including but not limited to residential, schools, parks, and nursing homes.

Senate Bill 743 (SB 743)

Senate Bill 743 (SB 743) was signed into law on September 27, 2013, and has fundamentally changed 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 or LOS. Instead, CEQA uses VMT to measure transportation 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.

The City of Laguna Niguel adopted citywide VMT thresholds on November 17, 2020, through Resolution No. 2020-1345, which are memorialized in the City's Transportation Assessment Guidelines.

Senate Bill 932 (SB 932)

Senate Bill 932 (SB 932) was issued on September 22, 2022, and integrates the Federal Highway Administration's Safe Systems Approach. This includes developing bicycle, pedestrian, and traffic calming plans that align with the City's goals and safety conditions. It additionally requires prioritization of projects and goals to be initiated and completed within two years from the adoption of a new circulation element.

REGIONAL

SCAG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)

SCAG is a federally designated MPO and consists of six counties and 191 cities. SCAG develops long-range regional transportation plans including sustainable communities' strategies and growth forecast components, regional transportation improvement programs, regional housing needs allocations, and a portion of the South Coast Air Quality Management Plans.

SCAG's 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy (2024-2050 RTP/SCS) was adopted in April 2024. The 2024-2050 RTP/SCS outlines a vision for a more resilient and equitable future, with investment, policies, and strategies for achieving the region's shared goals through 2050, including the regional transportation system. The 2024-2050 RTP/SCS is a long-term plan for the southern California region that details investment in the transportation system and development in communities. It identifies future transportation infrastructure needs and defines planned multimodal transportation improvements for the region, including freeways, high-occupancy vehicle facilities, bus and rail transit, freight movement, and aviation. SCAG worked closely with local jurisdictions to develop the 2024-2050 RTP/SCS, which incorporates current demographics and anticipated future population, household, and employment growth patterns based, in part, upon local growth forecasts, projects and programs, and includes complementary regional policies and initiatives. The Plan outlines a forecasted development pattern that demonstrates how the region can sustainably accommodate needed housing. In addition, the 2024-2050 RTP/SCS is supported by a combination of transportation and land use strategies that

outline how the region can achieve California's GHG-emission-reduction goals and federal Clean Air Act requirements.

The 2024-2050 RTP/SCS provides Regional Planning Policies to provide guidance for integrating land use and transportation planning to realize the vision of the 2024-2050 RTP/SCS. The policies are within the following categories:

- Mobility
- Communities
- Environment
- Economy

Orange County Congestion Management Program (CMP)

The passage of Proposition 111 in June 1990 established a process for each metropolitan county in California, including Orange County to prepare a Congestion Management Plan (CMP). Last updated by the Orange County Transportation Authority (OCTA) in 2023, the CMP is an effort to align land use, transportation, and air quality management efforts to promote reasonable growth management programs.

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-5
- La Paz Road
- Marina Hills Drive
- Highland Avenue
- Cabot Road
- Alicia Parkway
- Beacon Hill
- SR-73
- Niguel Road
- Crown Valley Parkway/Moulton Parkway/Golden Lantern
- Pacific Island Drive/Camino Del Avion
- Aliso Creek Road
- Paseo de Colinas
- Club House Drive

Master Plan of Arterial Highways

The Master Plan of Arterial Highways (MPAH) is a countywide transportation plan for Orange County, designed to manage and improve the arterial highway network. OCTA administers the MPAH, including the review and approval of amendments requested by local agencies. The primary goal of the MPAH is to outline a regional arterial highway system that supports existing and future land uses, ensuring that roads are designed to accommodate projected traffic volumes. It aims to provide a circulation system that complements the County's freeway network, focusing on the efficient movement of people and goods.

OC Go (Measure M2) 2011-2041

First approved in 1991 and extended in 2006 by the voters, Measure M2 is the half-cent sales tax collected throughout Orange County for transportation improvements. Administered by OCTA, Measure M2 has most recently funded City programs and projects through its Regional Capacity Program (Project O), the Regional Traffic Signal Synchronization Program (Project P), the Local Fair Share Program (Project Q), Community Based Transit/Circulators, and the Environmental Cleanup Program (Project X).

Measure M2 funds the City's Residential Resurfacing Program (under Project Q) to extend the life of its roads and its Summer Circulator (under Project V), along with other MPAH related improvements. It also has funded programs that empower senior-aged and disabled residents with mobility options such as reduced fare, house-to-healthcare transit services, and affordable door-to-door cab services within Laguna Niguel.

Orange County Long-Range Transportation Plan

OCTA develops a Long-Range Transportation Plan (LRTP) every four years to define a vision for Orange County that aims to address future mobility needs. This vision considers a forecast of available revenues, changing demographics, and any other significant trends. The 2022 LRTP (Directions 2045) includes goals, strategies, and a short-term action plan to address Orange County's transportation needs through 2045. The 2022 LRTP also identifies transportation projects to support the LRTP goals.

Currently, the OCTA is developing the 2024 OC Transit Vision Master Plan to unify and build upon existing transit services, and to identify future transit opportunities within Orange County.

OC Active Report

Orange County's first Active Transportation Plan (ATP) was completed in 2019 as the "Orange County Bike + Ped Plan". Supplemented by local jurisdiction inventory data, the plan identifies both regional and city-level opportunities to enhance bike and pedestrian facilities. OC Active provides a pedestrian heat map showing the highest need areas for improvement of pedestrian facilities. The following roadways in the City were identified:

- Crown Valley Parkway (south of Alicia Parkway)
- Niguel Road (south of Crown Valley Parkway)
- Golden Lantern (south of Marina Hills Drive)
- Moulton Parkway (between Aliso Creek Road and Crown Valley Parkway)
- Alicia Parkway (between Aliso Creek Road and Crown Valley Parkway)

LOCAL

City of Laguna Niguel Municipal Code

The Municipal Code includes regulations and standards that govern traffic, parking and loading, and development in the City of Laguna Niguel.

Title 9, Division 1, Article 2, Subarticle 10, *Transportation Demand Management*, requires applicable commercial, industrial, and mixed-use developments to prepare a trip reduction/TDM strategy plan prior to the issuance of permits for the project which identify programs and strategies designed to attain the goal of an average vehicle ridership (AVR) of 1.5 AVR.

Title 9, Division 1, Article 2, Subarticle 6, *Parking*, provides parking regulations, including minimum off-street parking requirements, and parking facility design standards.

Title 7, *Highways, Rights-of-Way and Vehicles*, contains road standards, provisions related to improvements, construction, and repair of streets, and the City's traffic ordinances.

Title 7, Division 4, *Traffic Ordinances*, serves as the traffic ordinance for the City. To guide the application of the laws contained in this traffic ordinance not in the state Vehicle Code, the City Council has adopted the City traffic manual, which defines engineering policies, procedures, and interpretations of traffic engineering practice.

Title 7, Division 4, Article 9, *Temporary Street Closure*, provides regulations related to the closure of public streets. In accordance with Section 7-4-900, *Generally*, a street closure permit issued by the Public Works Department is required prior to temporary closure of a public street. Any closed street is required to maintain a 15-foot-wide emergency vehicle lane at all times and to be kept clear of all obstructions to provide emergency vehicular access.

Section 9-1-289, *Fire Protection*, requires appropriate fire protection for any subdivision proposed to be located in a high fire hazard area, including through firebreaks, fuel modification programs, access roads, sufficient water supply, landscaping and open spaces, and such other methods that the fire chief has determined will ensure the public health, safety and welfare of the future occupants of the subdivision and the adjacent area.

City of Laguna Niguel Local Hazard Mitigation Plan

The Laguna Niguel Local Hazard Mitigation Plan (LHMP) was last updated in 2023 in accordance with the Disaster Mitigation Act (DMA) of 2000.[8] The LHMP provides the City with a blueprint for hazard mitigation action planning to reduce hazard risks and disaster impacts. The LHMP conducts a risk assessment that identifies the location of hazards; the value of existing land and property in hazard locations; and an analysis of risk to life, property, and the environment that may result from natural hazard events. The LHMP also includes mitigation strategies aimed at reducing risk from natural hazards by identifying resources, information, and strategies for risk reduction, while helping to guide and coordinate mitigation activities throughout the City. The LHMP analyzes potential impacts to roadways by each hazard and identifies potential mitigation actions, as appropriate, including roadway improvements and traffic signal synchronization.

City of Laguna Niguel Local Roadway Safety Plan

The City of Laguna Niguel developed a Local Roadway Safety Plan (LRSP) in 2022 to proactively enhance safety for the City's roadway users. The LRSP considered feedback from key stakeholders, community engagement, and citywide collision data to identify actionable safety opportunities. The LRSP aims to reduce injuries and fatalities along Laguna Niguel roadways by developing proactive strategies that address the most prominent roadway safety concerns based on local crash data. The plan highlights active transportation safety improvements that have been previously implemented within the City including buffered bicycle lanes, high-visibility crosswalks, and Accessible Pedestrian Signals (APS). The plan outlines a set of goals aimed at creating a culture of safe travel behaviors, educating the community, reducing

[8] City of Laguna Niguel, Local Hazard Mitigation Plan, 2023. Available at: https://www.cityoflagunaniguel.org/DocumentCenter/View/27301/City-of-Laguna-Niguel-LHMP-2023. Accessed February 2025.

severe and fatal crashes, and maintaining a well-managed roadway network. The plan outlines seven key safety priorities, one being to improve safety for active transportation users.

City of Laguna Niguel Transportation Assessment Guidelines

The Laguna Niguel Transportation Assessment Guidelines, adopted in November 2020, establish procedures and significance criteria for Vehicle Miles Traveled (VMT) and Level of Service (LOS) analyses. Projects subject to these guidelines must include VMT and LOS studies prepared by a qualified traffic or transportation engineer.

The Guidelines outline the City's methodology and thresholds for evaluating VMT impacts. While LOS standards are included in the Guidelines and related policies remain in the General Plan Update to support acceptable traffic conditions across roadways and intersections, consistency with LOS alone is not considered a significant environmental impact under CEQA. However, if achieving LOS standards or policies would require improvements that may cause environmental impacts or create safety or hazard concerns, those impacts must be evaluated.

City of Laguna Niguel Active Transportation Plan

The City of Laguna Niguel is currently preparing an Active Transportation Plan (ATP) to identify infrastructure and non-infrastructure programs, policies, and strategies to enhance the safety of people walking, biking, and using other forms of active transportation on City roadways and trails. The ATP will evaluate existing conditions and identify key challenges and opportunities within the City's active transportation network.

City of Laguna Niguel CEQA Manual

The City of Laguna Niguel CEQA Manual provides the City and project applicants with local guidelines, procedures, requirements, and thresholds of significance for the environmental review process within the City of Laguna Niguel consistent with the California Environmental Quality Act (Public Resources Code [PRC] Section 21000 et seq.), referred to as "CEQA" or "CEQA Statutes," and the State CEQA Guidelines (Title 14, California Code of Regulations (CCR), Division 6, Chapter 3, Section 15000 et seq.). The City's CEQA Manual applies to all public and private projects under the jurisdiction of the City of Laguna Niguel that constitute a "project" and therefore subject to CEQA review.

4.14.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

CEQA Guidelines Appendix G contains the Initial Study Environmental Checklist, which includes questions related to transportation. The City relies on the questions included in Appendix G as the thresholds of significance for assessing impacts related to transportation (City of Laguna Niguel CEQA Manual, Revised February 24, 2023). A significant impact will occur if implementation of the Project will:

- Conflict with an applicable plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities (refer to Impact Statement TR-1);
- Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b) (refer to Impact Statement TR-2);

- Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) (refer to Impact Statement TR-3); and/or
- Result in inadequate emergency access (refer to Impact Statement TR-4).

VEHICLE MILES TRAVELED THRESHOLDS

As stated in the *City of Laguna Niguel Transportation Assessment Guidelines* (dated November 2020), projects will be analyzed for the entire VMT of their trips, including outside of the City. The *City of Laguna Niguel Transportation Assessment Guidelines* includes screening criteria for land use projects to determine whether a project's VMT would be expected to cause a less than significant CEQA transportation impact. Screening thresholds for land use projects include:

- *Small projects* – Projects that would generate less than 500 vehicle trips per day based on the latest Institute of Transportation Engineers Trip Generation Manual are presumed to be less than significant.
- *Redevelopment projects* - For redevelopment projects, the metric looks only at the net trips generated by the redevelopment project (project trips generated by the new development minus trips generated by the previous development). If the net trips generated by the redevelopment is less than the Small Project trip threshold of 500 daily trips (as discussed in the prior section) then no additional analysis is required.
- *Project located in a low VMT area* - The map-based screening of areas that display VMT below the City's threshold indicate where new development would be presumed to be less than significant. They represent areas of the City currently located near a diversity of land uses or multimodal transportation where additional development would further decrease VMT per capita or employee. The three low VMT areas of the City are:
    - The Gateway Specific Plan area around the Metrolink Station.
    - The northwest portion of the City bounded by Aliso Creek Road and La Paz Road, an employment center.
    - The central portion of the City bounded by Alicia Parkway, Crown Valley Parkway, Clubhouse Drive, Golden Lantern, Marina Hills Drive, Niguel Road, the central part of the City.
- *Projects located in transit priority areas* - The City has one Transit Priority Area (TPA): the Laguna Niguel/Mission Viejo Metrolink Station. A TPA is a half-mile surrounding a major transit stop. A project with any portion of its limits inside the TPA is considered within the TPA.
- *Locally serving land use project* - Locally serving land uses provide goods and services to the local community. These types of land uses offer more opportunities for residents and employees to shop, dine, and obtain services closer to home and work. Locally serving uses can also include community resources that may otherwise be located outside of the local area. By improving destination proximity, local serving uses lead to shortened trip lengths and reduced VMT.

- *Affordable housing projects* - Adding affordable housing to infill locations generally improves jobs-housing match, in turn shortening commutes and reducing VMT.

Projects that do not meet at least one of the above screening criteria must provide additional analysis and mitigation of potential VMT impacts. A project's change in VMT will be analyzed through the Orange County Transportation Analysis Model (OCTAM) to determine the VMT per capita (for residential projects or residential components of a mixed-use development) and/or VMT per employee (for non-residential projects or non-residential components of a mixed-use development) for the "with project" City averages. These are compared to a base year "without project" Citywide average value to determine a potential significant transportation impact.

A project's cumulative impacts are based on an assessment of whether the "incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." The assessment of cumulative impacts is based on the inclusion of future foreseeable projects, as represented in the OCTA future year model scenario. However, a project that falls below the threshold(s) of significance aligns with long-term environmental goals and relevant plans and would have no cumulative impact distinct from the project impact. Accordingly, a finding of a less than significant project impact would imply a less than significant cumulative impact, and vice versa.

As discussed in the *City of Laguna Niguel General Plan Update Vehicle Miles Traveled (VMT) Analysis Report*, the proposed General Plan Update would be considered to result in a significant VMT impact if the following is met:

- Residential Projects: A significant transportation impact would occur if the Proposed General Plan Buildout home-based VMT per Capita exceeds the Existing VMT per Capita or Current General Plan Buildout VMT per Capita.
- Non-Residential Projects: A significant transportation impact occurs if the Proposed General Plan Buildout employment VMT per Employee exceeds the Existing VMT per Employee or Current General Plan Buildout VMT per Employee.
- Other Projects: A significant transportation impact occurs if the Proposed General Plan Buildout total daily VMT per Service Population exceeds the Existing VMT per Service Population or Current General Plan Buildout VMT per Service Population.

Residential VMT per capita is the calculation of home-based production VMT divided by the residential population. Employment VMT per employee is the calculation of home-based work attraction VMT and work-based projection. In order to develop the VMT component of the metrics, travel demand model outputs by trip purpose and productions and attractions must be considered. The delineation of productions and attractions include both ends of an origin and destination trip. For example, production VMT for home-based work trips represents the total VMT of all commute trips for people living in the City to and from wherever they work. The attraction VMT represents the VMT of all people commuting to and from the City for work no matter where they live. Per service population VMT is the VMT generated by the population actively using the service or development and includes residents and employees.

4.14.5 IMPACTS AND MITIGATION MEASURES

TR-1: Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle, and pedestrian facilities?

Impact Analysis:

CIRCULATION PLAN/ROADWAYS

While no specific development projects are proposed as part of the General Plan Update, subsequent development with buildout consistent with the General Plan Update Land Use Element could result in new development and intensification of existing development within the Planning Area. The Project proposes adoption of a new Circulation Plan designed to accommodate future growth while maintaining an efficient roadway network at acceptable levels of service; refer to Figure 2-8, *Proposed Circulation Plan*, in Section 2.0, *Project Description*. The MPAH is a countywide transportation plan for Orange County, designed to manage and improve the arterial highway network. OCTA administers the MPAH, including the review and approval of amendments requested by local agencies. The MPAH aims to provide a circulation system that complements the County's freeway network, focusing on the efficient movement of people and goods. Table 2-16, *Planned Transportation Improvements*, in Section 2.0, *Project Description*, identifies proposed changes to existing roadways and intersections. The proposed Circulation Plan includes the following three changes to the existing MPAH:

1) Maintain existing conditions on Camino Los Padres, which consists of the removal of the previously contemplated Camino Los Padres extension from its current terminus to Camino Capistrano, which extends beyond the City limits.
2) Reduce the number of travel lanes on La Paz Road between Aliso Creek Road and Crown Valley Parkway from two lanes in each direction to one lane in each direction.
3) Maintain existing travel lane conditions on Golden Lantern between Sweet Meadow Lane and Sardina Lane, which consists of the removal of the previously contemplated roadway widening.

The proposed Circulation Plan would require amendments to the MPAH. The City has engaged with OCTA to initiate the process to pursue MPAH amendments. Mitigation Measure TRA-1 requires the City coordinate with OCTA amendments to the MPAH for consistency with the proposed Circulation Plan. Following amendments of the MPAH, there would be no inconsistencies between the proposed General Plan Update and the MPAH. Therefore, with implementation of Mitigation Measure TRA-1, implementation of the General Plan Update would not conflict with applicable plans, polices, or ordinances related to vehicle circulation, and impacts would be less than significant.

Further, the Mobility Element contains goals and policies that support access to and performance of the circulation system, further addressing potential conflicts. For instance, Goal M-1 and related policies aim to support a well-planned and comprehensive multimodal transportation system that connects neighborhoods, jobs, shopping, recreation, and transit hubs. Goal M-4 and related policies aim to enhance vehicular, pedestrian, and bike safety through integrated strategies encompassing design, technology, education, and enforcement. The implementation of the goals and policies contained in the General Plan Update would complement existing plans programs, ordinances, and policies addressing circulation.

BICYCLE AND PEDESTRIAN CIRCULATION

The Project proposes adoption of a Trails Plan and Bikeways Plan that would continue to provide active transportation opportunities within and beyond the City; refer to Figure 2-9, *Proposed Trails Plan* and Figure 2-10, *Proposed Bikeways Plan,* in Section 2.0, *Project Description*. The proposed Trails Plan and Bikeways Plan would not remove or modify existing bike lanes and paths and would continue to provide internal community links and access to surrounding communities. Additionally, the Proposed Bikeways Plan is consistent with the Bikeways Prioritization for the City in the OC Active Report.

The General Plan Update contains goals and policies that support access to and the performance of bicycle and pedestrian facilities, further reducing potential conflicts, and are consistent with the goals of the City's Draft ATP, which is being prepared concurrently with the City's General Plan. The City's Draft ATP recommends feasible projects, policies, and programs to create safer, more equitable streets that reduce bicyclist and pedestrian injuries while increasing mobility for all ages and abilities. The Mobility Element supports the goals of the Draft ATP with Policy M-2.1 which directs the City to maintain and enhance the City's pedestrian and bicycle networks and that new development projects should make positive contributions towards these active transportation efforts. Policy M-2.4 directs the City to implement design standards and traffic calming measures that prioritize pedestrian and bicyclist safety. Policy M-2.7 directs the City to monitor pedestrian, bicycle, transit, and trail networks to identify connectivity gaps and prioritize projects to address these gaps. The implementation of policies contained in the General Plan Update would complement existing plans programs, ordinances, and policies addressing pedestrian and bicycle facilities. Thus, the Project would not conflict with a program, plan, ordinance, or policy addressing the bicycle and pedestrian circulation system and impacts would be less than significant.

PUBLIC TRANSIT SYSTEM

The City does not have defined measures of effectiveness for public transit service. There is the potential that subsequent growth and development consistent with the proposed General Plan Update Land Use Element would incrementally increase demand for travel via public transit given the potential development and expected increase in residents and employees. The Planning Area's population and jobs growth could increase the demand for public transit. However, the Project would not preclude implementation of, or conflict with OCTA's LRTP. Thus, the Project would not conflict with a program, plan, ordinance, or policy addressing the public transit system and impacts would be less than significant.

The General Plan Update includes complimentary policies to support and enhance transit service and address potential conflicts with the public transit system. For instance, Goal M-1 and related policies aim to support a well-planned and comprehensive multimodal transportation system that connects neighborhoods, jobs, shopping, recreation, and transit hubs. Goal M-3 and related policies are aimed at maintaining a safe, efficient, and accessible public transit system that enhances connectivity, reduces traffic congestion, supports environmental sustainability, and meets the diverse needs of the community. The implementation of policies contained in the General Plan Update would complement existing plans programs, ordinances, and policies addressing the public transit system.

Mitigation Measures:

TRA-1 Upon approval of the City's General Plan Update Mobility Element that includes modifications to any Master Plan of Arterial Highways facilities on the Circulation Plan (Figure M-1), the Laguna Niguel Public Works Department shall coordinate with Orange County Transportation Authority (OCTA) to initiate an amendment to the countywide transportation system plan, the Master Plan of Arterial Highways (MPAH).

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

LAND USE ELEMENT

Policy LU-1.11: **Mobility and Connectivity.** Prioritize transportation planning and infrastructure that connects residential, commercial, and employment areas efficiently, with a focus on improving transportation options, including pedestrian paths and bicycle lanes to promote sustainable and non-motorized transportation options when evaluating land use options and development projects.

MOBILITY ELEMENT

Goal M-1: **Transportation Network.** A well-planned and comprehensive multimodal transportation system that connects neighborhoods, jobs, shopping, recreation, and transit hubs.

Policy M-1.1: **Balanced Circulation Network.** Support the design, management, maintenance, and enhancement of a multimodal roadway network that accommodates the City's current and future development as outlined in the Land Use Element. This includes maintaining and adapting the Laguna Niguel's Circulation Plan Figure M-1 and related infrastructure to ensure safe, efficient, and well-connected links between neighborhoods, workplaces, shopping, recreation, and transit hubs.

Policy M-1.2: **Multimodal Transportation.** Support an integrated transportation network as a system that accommodates and promotes various modes of travel, such as walking, bicycling, public transit, enhancing multimodal connectivity throughout the City and contributing to environmental sustainability.

Policy M-1.3: **Mobility Hubs.** Support the development and enhancement of mobility hubs Figure M-8 to serve as centralized, convenient points linking a variety of transportation options.

Policy M-1.4: **Complete Streets.** Apply context-sensitive "complete streets" principles into the planning, design, construction, and maintenance of City roadways. This includes industry best practices focusing on safe, functional, and attractive access and travel for motorists, pedestrians, bicyclists, and transit users.

Policy M-1.5: **Land Use Planning.** Align transportation planning with land use decisions to support a multimodal system that minimizes traffic congestion and reduces environmental impacts from future developments.

Policy M-1.6: **Level of Service.** Ensure the roadway network supports existing and planned developments while maintaining acceptable vehicle Levels of Service across roadways and intersections. For qualifying development projects, ensure the preparation of a Traffic Impact Study, including Level of Service analyses, in accordance with the City's Transportation Assessment Guidelines. Projects determined to adversely affect the transportation system may require adjacent infrastructure improvements and/or fair-share payment contributions for system-wide improvements.

Policy M-1.7: **Vehicle Miles Traveled.** For qualifying development projects, ensure the preparation of a Vehicle Miles Traveled analysis in accordance with the City's Transportation Assessment Guidelines and compliance with applicable state law(s) aimed at reducing vehicle travel distances from and within the City.

Policy M-1.8: **Travel Demand Management.** Encourage the development and implementation of travel demand management programs to reduce peak-hour traffic congestion and help reduce vehicles miles traveled within the community.

Policy M-5.4: **Master Plan of Arterial Highways.** Coordinate with Orange County Transportation Authority on any proposed modifications to the City's Circulation Plan Figure M-1 that may affect their countywide transportation system plan, the Master Plan of Arterial Highways.

Goal M-2: **Active Transportation.** A balanced transportation network that supports walking, bicycling, and other non-motorized modes of travel, fostering active lifestyles, environmental sustainability, and enhancing the overall quality of life for the Laguna Niguel community.

Policy M-2.1: **Active Transportation.** Maintain and enhance the City's pedestrian, bicycle, and multi-use trail networks to support safe, convenient, well-connected, and efficient non-motorized travel for both recreational and commuting purposes. New development projects should make positive contributions towards these active transportation efforts with connected street systems and dedicated pedestrian friendly paths.

Policy M-2.2: **Connectivity and Accessibility.** Prioritize infrastructure improvements that enhance connectivity between neighborhoods, workplaces, schools, recreation, shopping areas, and transit hubs, ensuring safe and accessible routes for all users.

Policy M-2.3: **Active Lifestyles and Environmental Sustainability.** Support active transportation to reduce automobile reliance, promote environmental sustainability, and encourage active lifestyles throughout the community.

Policy M-2.4: **Traffic Calming and Design.** Implement design standards and traffic calming measures that prioritize pedestrian and bicyclist safety, such as wayfinding, clearly marked crosswalks, and separated bike lanes.

Policy M-2.5: **Multi-Use Trail Network.** Provide multi-use trails that support active transportation within and beyond the City. In addition to new trail segments, prioritize sustaining a high-quality existing trail network through regular maintenance and enhancements to ensure they remain safe, accessible, and well-connected for all users.

Policy M-2.10 **Transportation and Development Projects.** Integrate active transportation planning considerations into the transportation and development project decision-making process to prioritize pedestrian and bicyclist connectivity and safety.

Goal M-3: **Public Transit.** A safe, efficient, and accessible public transit system that enhances connectivity, reduces traffic congestion, supports environmental sustainability, and meets the diverse needs of the community.

Policy M-3.1: **Transit Collaboration.** Collaborate with Orange County Transportation Authority, Metrolink, Southern California Association of Governments, and other regional agencies to expand and enhance public transit service in Laguna Niguel.

Policy M-3.2: **Bus and Paratransit Services.** Support Orange County Transportation Authority in enhancing bus, paratransit, and other transit services to provide efficient access for Laguna Niguel residents, including seniors, low-income households, and individuals with disabilities.

Goal M-4: **Transportation Safety.** Vehicular, pedestrian, and bike safety through integrated strategies encompassing design, technology, education, and enforcement.

Policy M-4.1: **Enhanced Safety.** Identify priority roadway corridors for enhanced traffic safety and prioritize multifaceted solutions at these locations, such as traffic calming best practices, pedestrian buffers, protected bike lanes, infrastructure improvements, and technology innovations.

Policy M-4.2: **Safe Systems Approach.** Promote plans and programs designed to improve roadway safety with a focus on reducing severe and fatal collisions consistent with the requirements of Government Code Section 65302(b)(2)(B)(i).

Policy M-4.3: **School Safety.** Collaborate with Capistrano Unified School District (CUSD) to improve safety and reduce traffic congestion in school zones to promote walking and bicycling to schools. This may include reduced speeds limits, enhanced signage, bikeway and crosswalk improvements, and other traffic calming measures for the safety of children and families walking or biking to school.

Goal M-5: **Regional Collaboration.** An integrated regional circulation system strengthened by strong partnerships with transportation organizations, other agencies, and neighboring jurisdictions.

Policy M-5.1: **Roadway Improvement Collaboration.** Coordinate roadway improvements with applicable county, state, and federal transportation plans and proposals.

Policy M-5.2: **Development and Infrastructure Projects.** Collaborate with neighboring cities and transportation and regional agencies, such as Orange County Transportation Authority, California Department of Transportation, and Transportation Corridor Agencies, on major new development or transportation infrastructure projects.

Policy M-5.3: **Regional Coordination.** Collaborate with regional transportation agencies, such as the Orange County Transportation Authority, Southern California Association of Governments, California Department of Transportation, Transportation Corridor Agency, Metropolitan Planning Organizations, Regional Transportation Planning Agencies and neighboring cities, to jointly plan, secure funding, and implement multi-agency transportation projects that improve regional mobility and address regional transportation challenges.

Policy M-5.4: **Master Plan of Arterial Highways.** Coordinate with Orange County Transportation Authority on any proposed modifications to the City's Circulation Plan Figure M-1 that may affect their countywide transportation system plan, the Master Plan of Arterial Highways.

TR-2: Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

Impact Analysis: The VMT analysis presented in this section is summarized from the *City of Laguna Niguel General Plan Update Vehicle Miles Traveled (VMT) Analysis Report*, prepared by Linscott, Law & Greenspan, Engineers (LLG), dated January 7, 2025, and included as Appendix F, *Transportation Analysis*.

A VMT impact is measured by evaluating all VMT that starts or ends in the City of Laguna Niguel. To evaluate a VMT impact, the VMT analysis includes VMT per capita, VMT per employee, and VMT per service population metrics for the General Plan Update under the following scenarios:

- Existing Conditions
- Current General Plan Buildout Conditions
- Proposed General Plan Update Buildout Conditions

The General Plan Update Land Use Element identifies opportunities for new growth and development within the City. The majority of the potential growth opportunities are located within specific areas of the City. These areas include the Laguna Niguel Gateway Specific Plan (Gateway Specific Plan), the Opportunity Areas (e.g., Marketplace at Laguna Niguel, Chet Holifield Federal Building [CHFB] site, and Town Center), and Hospitality Overlay sites. Table 3-1 of the Transportation Analysis presents the Traffic Analysis Zones (TAZs) in the Planning Area that are in Low VMT areas and TPAs (see Appendix F). The Opportunity Areas and Gateway Specific Plan area are located in Low VMT Areas in the City, and it is presumed that new development in these areas would have a less than significant impact on VMT. They represent areas of the City currently located near a diversity of land uses or multimodal transportation where additional development would further decrease VMT per capita or employee. The Gateway Specific Plan is also located in a TPA and land use development projects in the TPA and consistent with the Gateway Specific Plan would have a less than significant impact on VMT, assuming they meet the criteria

for projects in a TPA, or one of the other screening criteria for VMT impacts, as determined by the City's Transportation Assessment Guidelines. Potential transportation impacts associated with implementation of the Gateway Specific Plan have been analyzed within the Laguna Niguel Gateway Specific Plan Program EIR (Gateway Specific Plan EIR). The General Plan Update would not provide for new sensitive land uses or development potential beyond what is currently allowed by the Gateway Specific Plan and analyzed in the Gateway Specific Plan EIR.

Table 4.14-4, *VMT Comparison*, provides the VMT per capita, VMT per employee, and VMT per service population for each of the scenarios identified above.

Table 4.14-4
VMT Comparison

General Plan Scenario	VMT per Capita	VMT per Employee	VMT per Service Population
Existing	23.61	20.83	34.99
Current General Plan	22.69	21.60	36.07
Proposed General Plan Update	23.39	21.46	35.43
% Difference Existing vs. Proposed	0.93% Lower	**2.94% Higher**	**1.24% Higher**
% Difference Current vs. Proposed	**2.99% Higher**	0.65% Lower	1.77% Lower
Exceeds Threshold?	**Yes**	**Yes**	**Yes**

Source: Linscott, Law & Greenspan, Engineers (LLG), *City of Laguna Niguel General Plan Update Vehicle Miles Traveled (VMT) Analysis Report,* January 7, 2025.
Notes: Bolded percentages indicate scenarios that do not satisfy the VMT threshold.

As summarized in Table 4.14-4, the proposed General Plan Update would have a lower VMT per capita and a higher VMT per employee and VMT per service population when compared to existing conditions. The proposed General Plan Update would also have a lower VMT per employee and VMT per service population and a higher VMT per capita when compared to the current General Plan.

The Proposed General Plan Update Buildout City VMT per Capita is 0.93 percent lower than the Existing VMT per Capita and would be below the threshold of significance. In comparison, the Proposed General Plan Update Buildout VMT per Capita is 2.99 percent higher than the Current General Plan Buildout VMT per Capita and is above the threshold of significance.

The Proposed General Plan Update Buildout VMT per Employee is 0.65 percent lower than the Existing VMT per Employee and would be below the threshold of significance. The Proposed General Plan Update Buildout VMT per Employee is 2.94 percent higher when compared to the Current General Plan Buildout VMT per Employee and is above the threshold of significance.

The Proposed General Plan Update Buildout VMT per Service Population is 1.24 percent higher when compared to the Existing VMT per Service Population and is above the threshold of significance. The Proposed General Plan Update Buildout VMT per Service Population is 1.77 percent lower than the

Current General Plan Buildout VMT per Service Population and would be below the threshold of significance.

Buildout consistent with the General Plan Update Land Use Element would result in a lower VMT per capita when compared to existing conditions but would result in a higher VMT per employee and VMT per service population. However, when compared to buildout of the current General Plan, total VMT at buildout would be less with implementation of the General Plan Update. That is, General Plan Update VMT at buildout would be approximately 3,850,543, while existing General Plan VMT at buildout would be approximately 4,035,359 VMT.[9] Since the proposed General Plan Update VMT per employee and VMT per service population would be greater than existing conditions and the proposed General Plan Update VMT per capita would be greater than the current General Plan, the proposed General Plan Update would conflict with CEQA Guidelines Section 15064.3, subdivision (b) and would result in a significant Project VMT impact.

Mitigation of VMT impacts requires reduction of vehicle trips per capita and per employee through increased use of travel modes other than driving alone, and/or shortening of trip lengths through providing a critical mass of complementary land uses near each other. Additional TDM measures (such as funding for supplemental transit services to increase frequency and speed, considering carpooling or vanpooling (ride-matching services), encouraging telecommuting and alternative work schedules, increasing mix of land uses within the project or within the project's surroundings, and providing pedestrian network and low-stress bicycle network improvements) may be applicable for additional mitigation. For subsequent development projects, Mitigation Measure TRA-2 requires qualifying projects to prepare VMT analysis in accordance with the City's Transportation Assessment Guidelines. Qualifying projects are projects that are not exempt from CEQA and that do not meet at least one VMT screening criteria, as determined in the City's Transportation Assessment Guidelines. The VMT analysis is required to include the application of VMT reducing strategies. Additionally, subsequent development projects under the General Plan Update would also be required to incorporate TDM measures designed to reduce VMT, consistent with Title 9, Division 1, Article 2, Subarticle 10 of the City's Municipal Code.

While compliance with the City's Municipal Code and implementation of Mitigation Measure TRA-2, are likely to result in less than significant VMT impacts when considered at an individual project level, they cannot be guaranteed and it is not possible to fully quantify or mitigate at a citywide level as part of this programmatic analysis. Hence, it cannot be demonstrated that additional TDM measures and implementation of Mitigation Measure TRA-2 at the individual project level would reduce VMT per capita or per employee by the amounts needed to meet the impact thresholds. Therefore, the proposed General Plan Update would result in a significant and unavoidable Project VMT impact.

The General Plan Update Land Use and Mobility elements includes policies that would address impacts related to VMT associated with subsequent development projects and encourage a mix of land uses and multi-modal transportation opportunities to support an overall reduction of VMT. The General Plan Update Land Use Element envisions redevelopment and intensification of uses within specified growth areas, with the potential to integrate a mix of complementary land uses that would encourage reduced

[9] Correspondence with Zawwar Saiyed, P.E., M.S. of LLG, on June 12, 2025.

vehicle trips, VMT, and associated transportation-related GHG emissions. The General Plan Update proposes goals and policies that are relevant to the reduction of VMT, including encouraging land use patterns that reduce mobile energy consumption within the Planning Area. For example, proposed General Plan Update Land Use Element Goal LU-1 and related policies are aimed at implementing a balanced land use pattern with a mix of uses and focus on connectivity. The proposed Mobility Element goals and policies are aimed at promoting a multimodal transportation system, which would reduce VMT.

Mitigation Measures:

TRA-2 As part of the development review process for qualifying projects, the Laguna Niguel Community Development Department shall determine if a Vehicle Miles Traveled (VMT) analysis is required, based on the screening criteria provided in the City's Transportation Assessment Guidelines, which are incorporated in the City of Laguna Niguel CEQA Manual and include provisions intended to reduce vehicle travel distances from and within the City.

Qualifying projects are those that are not exempt from CEQA and do not meet at least one VMT screening criteria in the City's Transportation Assessment Guidelines. For projects not exempt, a VMT analysis shall be prepared in accordance with the City's Transportation Assessment Guidelines, including application of VMT reducing strategies.

Level of Significance: Significant and Unavoidable Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

LAND USE ELEMENT

Policy LU-1.1: **Promote Mixed-Use Development.** Encourage mixed-use zoning in strategic locations to combine residential, commercial, and employment uses. This approach aims to create vibrant, walkable neighborhoods that enhance community engagement and drive economic activity.

Policy LU-1.11: **Mobility and Connectivity.** Prioritize transportation planning and infrastructure that connects residential, commercial, and employment areas efficiently, with a focus on improving transportation options, including pedestrian paths and bicycle lanes to promote sustainable and non-motorized transportation options when evaluating land use options and development projects.

Policy LU-3.4: **Pedestrian Circulation.** Prioritize pedestrian-friendly settings that emphasize walkable, active environments featuring well-scaled buildings, interconnected open spaces (e.g., plazas, courtyards, sidewalk cafés), and inviting street frontages for residents and visitors.

MOBILITY ELEMENT

Policy M-1.7: **Vehicle Miles Traveled.** For qualifying development projects, ensure the preparation of a Vehicle Miles Traveled analysis in accordance with the City's Transportation Assessment Guidelines and compliance with applicable state law(s) aimed at reducing vehicle travel distances from and within the City.

Policy M-1.8: **Travel Demand Management.** Encourage the development and implementation of travel demand management programs to reduce peak-hour traffic congestion and help reduce vehicles miles traveled within the community.

Policy M-1.13: **Multimodal Funding Opportunities**. Pursue diverse funding sources, leveraging federal, state, regional, and local opportunities, to support a financially sustainable multimodal transportation system while exploring innovative funding mechanisms.

Goal M-2: **Active Transportation.** A balanced transportation network that supports walking, bicycling, and other non-motorized modes of travel, fostering active lifestyles, environmental sustainability, and enhancing the overall quality of life for the Laguna Niguel community.

Policy M-2.1: **Active Transportation.** Maintain and enhance the City's pedestrian, bicycle, and multi-use trail networks to support safe, convenient, well-connected, and efficient non-motorized travel for both recreational and commuting purposes. New development projects should make positive contributions towards these active transportation efforts with connected street systems and dedicated pedestrian friendly paths.

Policy M-2.2: **Connectivity and Accessibility**. Prioritize infrastructure improvements that enhance connectivity between neighborhoods, workplaces, schools, recreation, shopping areas, and transit hubs, ensuring safe and accessible routes for pedestrians and cyclists of all ages and abilities.

Policy M-2.7: **Close Network Gaps.** Monitor the City's pedestrian, bicycle, transit, and trail networks to identify connectivity gaps and prioritize projects to address these gaps, improving overall mobility across the City.

Policy M-2.10: **Transportation and Development Projects.** Integrate active transportation planning considerations into the transportation and development project decision-making process to prioritize pedestrian and bicyclist connectivity and safety.

Policy M-2.11: **Active Transportation Funding Opportunities.** Monitor and seek funding for active transportation maintenance and enhanced interconnections from all available sources.

Policy M-2.12: **Active Transportation Technology.** Evaluate new mobility technologies and the potential effects on non-vehicular travel and mode choice in Laguna Niguel and the region.

Policy M-3.1: **Transit Collaboration.** Collaborate with Orange County Transportation Authority, Metrolink, Southern California Association of Governments, and other regional agencies to expand and enhance public transit service in Laguna Niguel.

Policy M-3.2: **Bus and Paratransit Services.** Support Orange County Transportation Authority in enhancing bus, paratransit, and other transit services to provide efficient access for Laguna Niguel residents, including seniors, low-income households, and individuals with disabilities.

TR-3: Would the project substantially increase hazards due to geometric design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Impact Analysis: The General Plan Update is a policy document that does not include any site-specific designs or proposals, except for the assumption that the CHFB site will be demolished as part of a future redevelopment effort. Demolition of the CHFB site would not alter the existing site, access, or adjacent roadways and would not involve the introduction of any new uses.

Subsequent projects associated with buildout of the General Plan Update Land Use Element could result in new development and intensification of existing development within the Planning Area. As demonstrated in Table 2-17, *General Plan Update Growth Assumptions Compared to Existing Conditions*, the General Plan Update Land Use Element identifies opportunities for new growth and development within the City. The majority of the potential growth opportunities are located within specific areas of the City. These areas include the Gateway Specific Plan, the Opportunity Areas (e.g., Marketplace at Laguna Niguel, CHFB site, and Town Center), and Hospitality Overlay sites. Hazards due to geometric design features are typically assessed at the individual project level when site-specific development or an actual design and construction of a circulation facility is proposed. Specific development projects and the details of subsequent development activities that may occur with buildout of the General Plan Update Land Use Element, including site access and circulation, are not known at this time. The City's development review process provides the mechanism in which site-specific development proposals, including review of the site plans for compliance with the City's General Plan and Zoning regulations are conducted. Site-specific development review would include a review of the proposed development's land use compatibility and review of all on- and off-site improvements to ensure site design, ingress and egress, and site distance standards have been implemented and that no hazardous conditions associated with a geometric design feature or incompatible use occur. Further, development would occur consistent with the proposed General Plan Update Land Use Element, which addresses and plans for compatible land use development within the City.

The General Plan Update also includes an update to the Circulation Plan, as detailed in Figure 2-8 and Table 2-16 in Section 2.0, *Project Description*. The Circulation Plan is designed to accommodate future growth outlined in the proposed General Plan Update Land Use Element while maintaining an efficient roadway network. The City's design and construction standards and specifications provide for coordinated and standardized development of City facilities, including roadways. The standards apply to, regulate, and guide the design and preparation of plans, and the construction of streets, traffic signals, site access, and related public improvements. As individual projects would undergo review by the City for approval and construction and would have to meet engineering design guidelines, potential safety design hazards associated with subsequent roadway improvements and land development projects would be addressed.

Prior to implementation, any improvements would be subject to detailed review and future consideration by the City's Public Works engineering staff and other relevant City departments. An evaluation of the roadway alignments, intersection geometrics, and traffic control features would be conducted at the project design level. Roadway improvements would occur in accordance with the City's roadway design guidelines and meet design guidelines in the MUTCD. Additionally, roadway improvements would be consistent with the Laguna Niguel Municipal Code, including Title 7, Division 4, *Traffic Ordinances*, which

adopts the City traffic manual; the manual defines engineering policies, procedures, and interpretations of traffic engineering practice.

The types of land uses included as part of the General Plan Update are generally similar to existing and surrounding uses and are intended to be compatible with the existing land uses in the Planning Area and in the surrounding area. The General Plan Update would not introduce incompatible land uses with the potential to substantially increase hazards associated with the specific use (e.g., farm equipment). As discussed above, the majority of the potential growth opportunities are located within specific areas of the City. These areas include the Gateway Specific Plan, the Opportunity Areas (e.g., Marketplace at Laguna Niguel, CHFB site, and Town Center), and Hospitality Overlay sites. Implementation of the proposed General Plan Update Land Use Element would provide for consistent and compatible development within the City and would not substantially increase hazards due to incompatible uses.

A potential increase in hazards due to geometric design features or incompatible uses associated with implementation of the Gateway Specific Plan have been analyzed within the Laguna Niguel Gateway Specific Plan Program EIR (Gateway Specific Plan EIR). The General Plan Update would not provide for new sensitive land uses or development potential beyond what is currently allowed by the Gateway Specific Plan and analyzed in the Gateway Specific Plan EIR.

Therefore, as demonstrated above, implementation of the General Plan Update would not substantially increase hazards due to geometric design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) and impacts would be less than significant.

In addition, the General Plan Update contains policies in support of roadway network safety and addressing design hazards. This includes proposed Mobility Element Policy M-2.4, which directs the City to implement design standards and traffic calming measures that prioritize pedestrian and bicyclist safety, such as well-lit pathways, clearly marked crosswalks, and separated bike lanes. Policy M-4.1 directs the City to identify priority roadway corridors for enhanced traffic safety and prioritize multifaceted solutions at these locations, such as traffic calming best practices, pedestrian buffers, protected bike lanes, infrastructure improvements, and technology innovations. Policy M-4.2 directs the City to promote plans and programs designed to improve roadway safety with a focus on reducing severe and fatal collisions consistent with the requirements of Government Code Section 65302(b)(2)(B)(i).

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

MOBILITY ELEMENT

Policy M-2.4: **Traffic Calming and Design.** Implement design standards and traffic calming measures that prioritize pedestrian and bicyclist safety, such as well-lit pathways, clearly marked crosswalks, and separated bike lanes.

Policy M-4.1 **Enhanced Safety.** Identify priority roadway corridors for enhanced traffic safety and prioritize multifaceted solutions at these locations, such as traffic calming best practices,

pedestrian buffers, protected bike lanes, infrastructure improvements, and technology innovations.

Policy M-4.2: **Safe Systems Approach.** Promote plans and programs designed to improve roadway safety with a focus on reducing severe and fatal collisions consistent with the requirements of Government Code Section 65302(b)(2)(B)(i).

TR-4: Would the project result in inadequate emergency access?

Impact Analysis: Project implementation would allow for increased development in the City. There is the potential that activities associated with subsequent site-specific development projects, including demolition of the CHFB site, could involve traffic lanes located immediately adjacent to a development site to be temporarily closed or controlled by construction personnel during construction activities. However, any temporary construction activity would be required to adhere to applicable City standards, including Municipal Code 7, Article 9, *Temporary Street Closure*, which requires an application for the closure or partial closure of roads in the City to be reviewed by the Public Works Department, as well as police services and the Orange County Fire Authority (OCFA). Approval of the closure by the Director of Public Works requires a finding: (1) That the proposed activity or use of the street will not unreasonably interfere with traffic circulation in the area; (2) That the proposed activity and use will not be detrimental to the public health, welfare, safety and recreation; and (3) That the proposed activity or use will not entail extraordinary or burdensome expense to the emergency services of the City. Therefore, impacts during subsequent site-specific construction activities, including demolition of the CHFB site would be less than significant.

Additionally, the General Plan Update proposed Circulation Plan would maintain existing conditions on Camino Los Padres, which consists of the removal of the previously contemplated Camino Los Padres extension from its current terminus to Camino Capistrano, beyond the City limits. The current terminus is located at the easternmost City boundary and is currently planned to extend east outside of the City through undeveloped land. The roadway does not occur under existing conditions and is therefore not included within an adopted emergency response plan or emergency evacuation plan. This portion of the Planning Area (Community Profile Area 11) is not within the primary growth opportunity areas identified by the General Plan Update Land Use Element. As indicated in Table 2-17, minimal non-residential growth could occur within the Community Profile Area; however, no new residential growth would occur. Therefore, removal of this planned extension would not impair emergency evacuation within the area. This area is currently served by existing roadways, including Golden Lantern, which would continue to provide access to evacuation routes within and outside of the Planning Area.

The General Plan Update proposed Circulation Plan would reduce the number of travel lanes on La Paz between Aliso Creek Road and Crown Valley Parkway from two lanes in each direction to one lane in each direction. This portion of the Planning Area (Community Profile Areas 5 and 6) is not within the primary growth opportunity areas identified by the General Plan Update Land Use Element. As indicated in Table 2-17, minimal residential growth could occur within these Community Profile Areas. Additionally, existing residential neighborhoods east of La Paz are currently served by major roadways which would continue to be used for emergency access and evacuation routes, including Aliso Creek Road, Crown Valley

Parkway, and Moulton Parkway. Therefore, the reduction of lanes would not impair emergency evacuation within the area.

The General Plan proposed Circulation Plan would maintain existing travel lane conditions on Golden Lantern between Sweet Meadow Lane and Sardina Lane, which consists of the removal of the previously contemplated roadway widening. This segment of Golden Lantern would continue as a Primary Arterial, consistent with existing conditions and would not impact an adopted emergency response plan or emergency evacuation plan. As discussed above, this portion of the Planning Area (Community Profile Area 11) is not within the primary growth opportunity areas identified by the General Plan Update Land Use Element and although minimal non-residential growth could occur within the Community Profile Area, no new residential growth would occur. Therefore, removal of this planned widening would not impair emergency evacuation within the area. Any subsequent development projects with buildout of the General Plan Update Land Use Element would be subject to all applicable City regulations, reviews, and requirements pertaining to emergency response, emergency access, and maintaining emergency evacuation routes, as well as further CEQA analysis of project-specific impacts.

As described in Table 2-16, the General Plan Circulation Plan includes proposed changes to existing roadways and intersections to accommodate the future growth outlined in the proposed General Plan Update Land Use Element. As previously discussed, implementation of the proposed improvements would be designed and conducted to comply with standard engineering practices under the purview of the City's Public Works Department. The improvements would be implemented to accommodate future growth with the General Plan Update and would not result in inadequate emergency access. It is noted that the Project does not propose site-specific development, except for the assumption that the CHFB site will be demolished as part of a future redevelopment effort, as discussed above. Emergency accessibility is typically assessed at the project level. Although the Planning Area is highly urbanized and existing infrastructure, including roads, are generally in place, subsequent roadway and infrastructure improvements may occur to accommodate new development. These modifications would typically occur adjacent to or within proximity to the specific site being developed; citywide roadway improvements proposed by the General Plan Update are discussed above. The applicant for any subsequent development would be required to submit plans for review to ensure compliance with zoning, building, and fire codes prior to the issuance of a building permit. The proposed development would be required to comply with all applicable building and fire code requirements and would submit construction plans to OCFA Planning and Development Services for review and approval prior to issuance of any building permit. The OCFA Planning and Development Services would review proposed developments for access requirements, minimum driveway widths, fire apparatus access roads, fire lanes, signage, access devices and gates, access walkways, among other requirements to ensure adequate emergency access would be provided to and within the site. Compliance with existing regulatory requirements and approval by the City and OCFA would ensure that construction and operation of subsequent projects associated with implementation of the General Plan Update would not result in inadequate emergency access. Impacts would be less than significant in this regard.

The General Plan Update includes policies in support of emergency preparedness and emergency access along local roads, which would further minimize potential impacts related to emergency access. Public Safety Element Policy PS-4.3 directs the City to ensure OCFA review of applicable development projects

for fire-safe design, proximity to adequate emergency services, sufficient water supply and fire flow, and emergency vehicle access, in accordance with current California Building and Fire Codes, including local amendments adopted by the City. Policy PS-5.3 directs the City to assess emergency response and evacuation capabilities to address potential disruptions from current and future hazards that may affect the community. Policy PS-5.4 directs the City to maintain a transportation network that supports effective emergency response and evacuation operations.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

MOBILITY ELEMENT

Policy M-1.6: **Level of Service**. Ensure the roadway network supports existing and planned developments while maintaining acceptable vehicle Levels of Service across roadways and intersections. For qualifying development projects, ensure the preparation of a Traffic Impact Study, including Level of Service analyses, in accordance with the City's Transportation Assessment Guidelines. Projects determined to adversely affect the transportation system may require infrastructure improvements and/or fair-share payment contributions.

PUBLIC SAFETY ELEMENT

Policy PS-4.1: **Fire Authority Staffing and Resources.** Ensure Orange County Fire Authority staffing levels, equipment and facilities, programs, and practices align with the City's high safety standards, including timely emergency responses and effectively address the community's evolving needs**.**

Policy PS-4.3: **Fire-Safe Design.** Ensure Orange County Fire Authority review of applicable development projects for fire-safe design, proximity to adequate emergency services, sufficient water supply and fire flow, and emergency vehicle access, in accordance with current California Building and Fire Codes, including local amendments adopted by the City.

Policy PS-4.6: **Critical Facilities (Fire Hazard Zones).** When feasible, locate new essential public facilities and infrastructure (e.g., hospitals, emergency shelters, fire and police stations, emergency command centers, communication facilities, and utilities) outside of Very High Fire Hazard Severity Zones. If located within these zones, utilize construction methods or other measures to minimize risk.

Policy PS-5.2: **Emergency Preparedness.** Ensure the City's adopted emergency plans, policies and procedures, including both the City's Local Hazard Mitigation Plan and Emergency Operations Plan, are maintained and updated as necessary. This involves making sure they stay consistent with the City's current hazards and issues, and comply with Assembly Bill 2140, Senate Bill 379, and any relevant subsequent federal or state legislation.

Policy PS-5.3: **Emergency Response and Evacuation**. Assess emergency response and evacuation capabilities to address potential disruptions from current and future hazards that may affect the community.

Policy PS-5.4: **Emergency Transportation Routes.** Maintain a transportation network that supports effective emergency response and evacuation operations. This includes maintaining both a primary and alternative mobile Emergency Operations Center.

4.14.6 CUMULATIVE IMPACTS

Section 3.0, *Basis of Cumulative Analysis*, identifies projected regional growth having the potential to interact with the proposed Project to the extent that a significant cumulative effect may occur. The geographic setting for transportation considers development within Orange County.

Would the project, combined with other related cumulative projects, conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Impact Analysis: A significant cumulative impact would occur if the Project combines with related cumulative projects resulting in a conflict with a program, plan, ordinance, or policy addressing the regional circulation system, including transit, roadway, bicycle, and pedestrian facilities. Overall, the Project is a programmatic land use plan that includes three proposed changes to the existing MPAH, which require amending OCTA's plan. The MPAH is the countywide transportation plan for Orange County, therefore, inconsistency with the MPAH would result in cumulatively significant impacts. The City has engaged with OCTA and initiated the process to pursue MPAH amendments. Mitigation Measure TRA-1 requires the City coordinate with MPAH to ensure consistency between the City's proposed Circulation Plan and the MPAH. Once the MPAH amendment process is complete, there would be no inconsistencies between the proposed General Plan Update and the MPAH. OC Active is the countywide active transportation plan for Orange County therefore, inconsistency with OC Active would result in cumulatively significant impacts. As discussed above, the Project is consistent with OC Active and therefore, the Project's less than significant impact would not combine with other related cumulative projects to result in a conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Therefore, the General Plan Update's incremental effect associated with the potential to conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities would not be cumulatively considerable.

Mitigation Measures: Refer to Mitigation Measure TRA-1.

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan goals and policies cited above.

Would the project, combined with other related cumulative projects, conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

Impact Analysis: The City has identified that a significant cumulative transportation impact occurs if the citywide Proposed General Plan VMT per Service Population is greater than the citywide Current General Plan VMT per Service Population. The cumulative effect on VMT is measured by evaluating all the VMT within the boundary of the City of Laguna Niguel, including all VMT that starts or ends throughout the SCAG region.

As summarized in Table 4.14-5, *Cumulative VMT Comparison*, the proposed General Plan Update would exceed Current General Plan VMT per Service Population. This indicates that the proposed General Plan Update would not improve the efficiency of travel compared to existing General Plan conditions. Implementation of the Project would, therefore, result in a cumulatively considerable impact relative to VMT.

Table 4.14-5
Cumulative VMT Comparison

General Plan Scenario	VMT per Service Pop.
Current General Plan	8.43
Proposed General Plan	8.73
% Difference Current vs. Proposed	**3.46% Higher**
Source: Linscott, Law & Greenspan, Engineers (LLG), *City of Laguna Niguel General Plan Update Vehicle Miles Traveled (VMT) Analysis Report,* January 7, 2025.	

As discussed previously, mitigation of VMT impacts requires reduction of vehicle trips per capita and per employee through increased use of travel modes other than driving alone, and/or shortening of trip lengths through providing a critical mass of complementary land uses near each other. Additional TDM measures (such as funding for supplemental transit services to increase frequency and speed, considering carpooling or vanpooling (ride-matching services), encouraging telecommuting and alternative work schedules, increasing mix of land uses within the project or within the project's surroundings, and providing pedestrian network and low-stress bicycle network improvements) may be applicable for additional mitigation. Additionally, Mitigation Measures TRA-2 requires qualifying development projects within the City to prepare VMT analysis in accordance with the City's Transportation Assessment Guidelines. Qualifying projects are projects that are not exempt from CEQA and that do not meet at least one VMT screen criteria, as determined in the City's Transportation Assessment Guidelines. The VMT analysis is required to include the application of VMT reducing strategies.

While compliance with the City's Municipal Code and implementation of Mitigation Measure TRA-2, are likely to result in less than significant VMT impacts when considered at an individual project level, they cannot be guaranteed, and it is not possible to fully quantify or mitigate as part of this programmatic analysis. In addition, the cumulative VMT impacts extend beyond the City's boundaries, meaning that

mitigation measures that would reduce regional VMT outside the Laguna Niguel cannot be determined or confirmed. Therefore, the Project's cumulative VMT impacts would be cumulatively considerable.

Mitigation Measures: Refer to Mitigation Measure TRA-2.

Level of Significance: Significant and Unavoidable Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan goals and policies cited above.

Would the project, combined with other related cumulative projects, substantially increase hazards due to geometric design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Impact Analysis: The types of land uses included as part of the General Plan Update are generally similar to existing and surrounding uses and are intended to be compatible with the existing uses in the Planning Area and in the surrounding area. As discussed above, the majority of the potential growth opportunities are located within specific areas of the City. These areas include the Gateway Specific Plan, the Opportunity Areas (e.g., Marketplace at Laguna Niguel, CHFB site, and Town Center), and Hospitality Overlay sites. Implementation of the proposed General Plan Update Land Use Element would provide for consistent and compatible development within the City and would not substantially increase hazards due to incompatible uses. Therefore, as demonstrated above, implementation of the General Plan Update would not substantially increase hazards due to geometric design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) and impacts would be less than significant.

Related cumulative projects within the region could involve development with the potential to substantially increase hazards due to geometric design features or incompatible uses. However, similar to the Project, related cumulative projects within the County would undergo site-specific review on a project-by-project basis to evaluate potential increased hazards due to geometric design features or the introduction of incompatible uses. Similar to subsequent development projects within the City, related cumulative projects within the County would be reviewed by the local agency in which the project is located to ensure adequate ingress and egress would be provided, site distance standards would be implemented, and roadway conditions would be adequate to serve the development. Any proposed roadway modifications or new roadways would be required to comply with engineering design standards and agency-specific requirements. Thus, the Project's less than significant effects relative to increased hazards due to a geometric design feature or incompatible uses would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan goals and policies cited above.

Would the project, combined with other related cumulative projects, result in inadequate emergency access?

Impact Analysis: Although the Planning Area is highly urbanized and existing infrastructure, including roads, are generally in place, subsequent roadway and infrastructure improvements may occur to accommodate new development. These modifications would typically occur adjacent to or within proximity to the specific site being developed; citywide roadway improvements proposed by the General Plan Update are discussed above. The applicant for any subsequent development would be required to submit plans for review to ensure compliance with zoning, building, and fire codes prior to the issuance of a building permit. The proposed development would be required to comply with all applicable building and fire code requirements and would submit construction plans to OCFA Planning and Development Services for review and approval prior to issuance of any building permit. The OCFA Planning and Development Services would review proposed developments for access requirements, minimum driveway widths, fire apparatus access roads, fire lanes, signage, access devices and gates, access walkways, among other requirements to ensure adequate emergency access would be provided to and within the site. Compliance with existing regulatory requirements and approval by the City and OCFA would ensure that construction and operation of subsequent projects associated with implementation of the General Plan Update would not result in inadequate emergency access. Impacts would be less than significant in this regard.

Similar to the Project, cumulative development projects could result in temporary closure or control of traffic lanes located immediately adjacent to a development site during construction activities. However, as discussed above, any temporary closure within the City would be required to comply with the Laguna Niguel Municipal Code which would ensure adequate emergency access is maintained during any construction activities. Similarly, any temporary closure associated with adjacent development within a neighboring jurisdiction would be required to comply with the specific regulations of that agency to continue to provide emergency access within the area of construction. The General Plan Update's incremental effect associated with the potential to result in inadequate emergency access during construction activities would not be cumulatively considerable.

The General Plan Update proposed Circulation Plan would maintain existing conditions on Camino Los Padres, which consists of the removal of the previously contemplated Camino Los Padres extension from its current terminus to Camino Capistrano, which extends beyond the City limits; reduce the number of travel lanes on La Paz Road between Aliso Creek Road and Crown Valley Parkway from two lanes in each direction to one lane in each direction; and maintain existing travel lane conditions on Golden Lantern between Sweet Meadow Lane and Sardina Lane, which consists of the removal of the previously contemplated roadway widening. As discussed in Impact TRA-4, these changes to the existing MPAH would not occur within the primary growth areas identified by the General Plan Update Land Use Element and would not impair emergency evacuation within the areas.

Further, the General Plan Circulation Plan includes proposed changes to existing roadways and intersections to accommodate the future growth outlined in the proposed General Plan Update Land Use Element. Some of these proposed changes are located at facilities in proximity to neighboring jurisdictions. Implementation of the proposed improvements would be designed and conducted to

comply with standard engineering practices under the purview of the City's Public Works Department. Any improvements located within proximity to neighboring jurisdictions would be coordinated to ensure potential improvements or modifications within and outside of the City are coordinated. Since the improvements would be implemented to accommodate future growth with the General Plan Update, which considers cumulative traffic conditions, the Project would not result in inadequate emergency access. Therefore, the General Plan Update's incremental effect associated with the potential to result in inadequate emergency access due to changes to the MPAH and changes to existing roadways and intersections would not be cumulatively considerable.

Emergency accessibility is typically assessed at the project level. At the site level, it is not likely that subsequent site-specific development projects within the City would combine with related cumulative projects outside of the City, unless the site is located adjacent to another jurisdiction. Similar to subsequent development within the City, the applicant of any related cumulative development projects within the region would be required to submit appropriate plans for plan review to ensure compliance with zoning, building, and fire codes prior to the issuance of a building permit. The OCFA or relevant fire authority would review development projects for access requirements, minimum driveway widths, fire apparatus access roads, fire lanes, signage, access devices and gates, access walkways, among other requirements to ensure adequate emergency access would be provided to and within the site. Additionally, cumulative projects would undergo environmental review on a project-by-project basis pursuant to CEQA to evaluate potential increased hazards due to geometric design features. Similar to subsequent development projects within the City, related cumulative projects would be subject to compliance with the established State and local regulatory framework in which the site is located concerning the adequate emergency access for the project. Therefore, the General Plan Update's incremental effects associated with the potential to result in inadequate emergency access would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan goals and policies cited above.

4.14.7 SIGNIFICANT UNAVOIDABLE IMPACTS

The General Plan Update would result in a significant and unavoidable impact in the following areas:

- General Plan implementation would conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b) at the Project level.
- General Plan implementation combined with other related cumulative projects would conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).

All other transportation impacts associated with implementation of the General Plan Update would be less than significant.

If the City of Laguna Niguel approves the General Plan Update, the City will be required to make findings in accordance with CEQA Guidelines Section 15091 and prepare a Statement of Overriding Considerations for consideration by the city's decision makers in accordance with CEQA Guidelines Section 15093.

4.14.8 REFERENCES

City of Laguna Niguel, Local Hazard Mitigation Plan, 2023. Available at: https://www.cityoflagunaniguel.org/DocumentCenter/View/27301/City-of-Laguna-Niguel-LHMP-2023. Accessed February 2025.

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Linscott, Law & Greenspan, Engineers (LLG), *City of Laguna Niguel General Plan Update Vehicle Miles Traveled (VMT) Analysis Report*, January 7, 2025.

Linscott, Law & Greenspan, Engineers (LLG), *Laguna Niguel General Plan Update Traffic Study*, January 7, 2025.

Mark Thomas. *City of Laguna Niguel Active Transportation Plan Draft*. June 2025.

Orange County Transportation Authority (OCTA). *OC Active Orange County's Bike + Ped Plan.* December 2019.

4.15 TRIBAL CULTURAL RESOURCES

4.15.1 PURPOSE

This section identifies existing tribal cultural resources within the Planning Area and provides an analysis of potential impacts associated with implementation of the General Plan Update.

This section is primarily based upon the *Cultural and Paleontological Resources Assessment for the Laguna Niguel General Plan Update Project* (Cultural Resources Study), prepared by Cogstone Resource Management, and revised August 2025; refer to Appendix D, *Cultural and Paleontological Resources Study*. Cultural resources, specifically historic and archeological resources, are discussed in Section 4.4, *Cultural Resources*. Tribal consultation correspondence under AB 52 is included in Appendix G, Tribal Consultation.

4.15.2 ENVIRONMENTAL SETTING

ETHNOGRAPHIC OVERVIEW

Juaneño Acjachemen

About 1,300 years ago the Acjachemen (Juaneño), who were hunters and gatherers of the San Luis Rey Cultural Pattern, moved into southern Orange County. The Acjachemen speak a language that is part of the Takic language family. Their traditional tribal territory was situated partly in northern San Diego County and partly in southern Orange County. The boundaries were Las Pulgas Creek (south), Aliso Creek (north), the Pacific Ocean (west), and the Santa Ana Mountains (east). Villages were mostly along San Juan Creek, Trabuco Creek, and San Mateo Creek.

In prehistory, the Acjachemen had a patrilineal society and lived in groups with other relatives. These groups had established claims to places including the sites of their villages and resource areas. Marriages were usually arranged from outside villages establishing a social network of related peoples in the region. There was a well-developed political system including a hereditary chief. Religion was an important aspect of their society. Religious ceremonies included rites of passage at puberty and mourning rituals.

Houses were typically conical in shape and thatched with locally available plant materials. Work areas were often shaded by rectangular brush-covered roofs (ramada). Each village had a ceremonial structure in the center enclosed by a circular fence where all religious activities were performed.

Women are known to have been the primary gatherers of plant foods but also gathered shellfish and trapped small game animals. Men hunted large game, most small game, fished, and assisted with plant food gathering, especially of acorns. Adults were actively involved in making tools including nets, arrows, bows, traps, food preparation items, pottery, and ornaments. Tribal elders had important political and religious responsibilities and were involved in the education of younger members.

CULTURAL RESOURCES

As discussed in Section 4.4, *Cultural Resources*, a search of the California Historic Resources Inventory System (CHRIS) at the South Central Coastal Information Center (SSCIC) located at California State University, Fullerton was conducted on August 14, 2023. The records search covered the entire Planning Area. Approximately 36 cultural resources have been recorded within Laguna Niguel. Of these, 27 are prehistoric archaeological sites, four are prehistoric archaeology isolates, and five are historic-aged built environment resources. The prehistoric archaeology resources range from habitation sites, lithic scatters, middens, and bedrock milling sites. None of the archaeology sites have been evaluated for National Register of Historic Places (NRHP)/California Register of Historical Resources (CRHR) listing.

In addition, a variety of other sources were consulted, including the California State Historic Property Data File (which includes the National Register of Historic Places, California Register of Historical Resources, California Historical Landmarks, and California Points of Historical Interest), the Built Environment Resource Directory (BERD), California Office of Historic Preservation's Historic Resources Inventory (HRI) directory, as well as a review of known cultural resource surveys, excavation reports, and historic aerial photos and maps. No resources were identified in the Planning Area in the NRHP, CRHR, CHL, or Caltrans Historic Bridge Inventory.

NATIVE AMERICAN CONSULTATION

Senate Bill 18

Cogstone Resource Management conducted Native American consultations under Senate Bill (SB) 18 (Chapter 905, Statutes of 2004), which requires local governments to consult with tribes prior to making certain planning decisions and requires consultation and notice for a general and specific plan adoption or amendments in order to preserve, or mitigate impacts to, cultural places that may be affected.

As part of the General Plan Update, a Tribal Consultation List Request and Sacred Lands File search request was submitted to the Native American Heritage Commission (NAHC). The NAHC responded on September 11, 2023, indicating that the search was positive for sacred lands or resources known within the same USGS Quadrangle, Township, Range, and Section as the Planning Area. The NAHC recommended that the Juaneño Band of Mission Indians Acjachemen Nation – Belardes be contacted for more information and also provided a list of 18 Native American individuals or tribal organizations that may have knowledge of cultural resources within or near the Planning Area. On November 14, 2023, a formal scoping letter was sent via certified mail to the Juaneño Band of Mission Indians Acjachemen Nation – Belardes requesting information about tribal cultural resources within the City. On November 21, 2023, formal letters were sent via certified mail to the Native American individuals or tribal organizations identified by the NAHC in compliance with SB 18; refer to Appendix D. The letters included contact information for Cogstone Resource Management and for the City.

Under Government Code § 65352.3(a)(2), tribes have 90 days from receipt of the City's notice to respond, indicating whether they wish to engage in consultation. Based on the November 21, 2023 notice date, the 90-day deadline for tribal responses was February 19, 2024. However, due to the Presidents' Day holiday, the response deadline was February 20, 2024.

Follow-up communications occurred via electronic mail on December 8, 2023, and via telephone call on January 8, 2024; refer to Appendix D.

Four verbal responses were received during the follow-up telephone calls. The responses to the consultation outreach are summarized below:

- Christina Conley, Cultural Resource Administrator for the Gabrielino Tongva Indians of California Tribal Council, indicated that she has been in contact with the City Planner. It is noted that the City's contact has not received any written or verbal correspondence.
- Sam Dunlap, Cultural Resource Director for the Gabrielino-Tongva Tribe, responded they should be consulted when monitoring services are needed.
- A representative of Lovina Redner, Tribal Chair Santa Rosa Band of Cahuilla Indians, indicated that the Chair would be contacting the City Planner. At this time, no contact has been received.
- Jessica Valdez, Cultural Resource Specialist for the Soboba Band of Luiseno Indians, said that the Tribe defers to the San Luis Rey Band. The San Luis Rey Band was not identified by the NAHC as a tribal organization that may have knowledge of cultural resources within or near the Planning Area and no contact was provided.

On August 6, 2025, letters were sent via certified mail to the Native American individuals or tribal organizations identified by the NAHC in compliance with SB 18 to confirm the conclusion of tribal consultation under SB 18.

On August 12, 2025, a letter was received from the Pala Band of Mission Indians confirming receipt of the letter and that the project is not within the boundaries of the recognized Pala Indian Reservation and is beyond the boundaries of the territory that the tribe considers its Traditional Use Area. They requested as a courtesy to be kept informed as the project progresses and being maintained on the receiving list for project updates, and to be notified if the project boundaries are modified. They also noted that they defer to the wishes of the Tribes who are closer in proximity to the project area.

Although no response or request for consultation was received from the Juaneño Band of Mission Indians Acjachemen Nation – Belardes during the 90-day tribal response deadline for SB 18, in response to the Notice of Preparation issued for the Project, a request for consultation was received from the Juaneño Band of Mission Indians Acjachemen Nation – Belardes, on June 10, 2025. In response to the request for consultation, the City engaged with the Juaneño Band of Mission Indians Acjachemen Nation – Belardes, which included email correspondence on August 11, 2025, a follow-up telephone call on August 13, 2025, and a follow-up email on August 15, 2025. The email correspondence provided a link to the Draft General Plan Update and provided the draft mitigation measure anticipated to be included within the Draft EIR for their review. The City also extended an invitation to schedule a consultation meeting. On August 19, 2025, the Juaneño Band of Mission Indians Acjachemen Nation – Belardes responded via email requesting revisions to the draft mitigation measure. The revisions were incorporated along with additional generalized language to provide for the inclusion of other tribes.

Assembly Bill 52

Public Resources Code section 21080.3.1 subdivisions (b), (d) and (e), also known as Assembly Bill (AB) 52, requires that prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report for a project, the lead agency shall begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project if: (1) the California Native American tribe requested to the lead agency, in writing, to be informed by the lead agency through formal notification of proposed projects in the geographic area that is traditionally and culturally affiliated with the tribe, and (2) the California Native American tribe responds, in writing, within 30 days of receipt of the formal notification, and requests the consultation.

In compliance with AB 52, the City of Laguna Niguel provided formal notification via email and hardcopy mailing via the United States Postal Service (USPS) to those California Native American Tribal representatives requesting notification in accordance with AB 52; refer to Appendix G, *Tribal Consultation Communications*. Tribes appearing on a Native American Contact List dated September 11, 2023 and provided by the Native American Heritage Commission (NAHC) were also contacted. The consultation letters provided information regarding the proposed Project and contact information for the Project Planner. Under AB 52, Native American tribes have 30 days to respond and request further Project information and formal consultation. The 30-day consultation was initiated on August 6, 2025.

- On August 13, 2025, a letter was received from the Pala Band of Mission Indians confirming receipt of the letter and declining AB 52 consultation at this time.

At the time of the publication of this Draft EIR, no further response has been received.

4.15.3 REGULATORY SETTING

FEDERAL

National Historic Preservation Act

Enacted in 1966 and amended in 2000, the National Historic Preservation Act (NHPA) declared a national policy of historic preservation and instituted a multifaceted program, administered by the Secretary of the Interior, to encourage the achievement of preservation goals at federal, state, and local levels. The NHPA authorized the expansion and maintenance of the NRHP, established the position of State Historic Preservation Officer (SHPO) and provided for the designation of State Review Boards, set up a mechanism to certify local governments to carry out the purposes of the NHPA, assisted Native American tribes to preserve their cultural heritage, and created the Advisory Council on Historic Preservation (ACHP).

NHPA Section 106 requires federal agencies to consider the effects of their actions on historic properties. The goal of the NHPA Section 106 process is to identify historic properties potentially affected by the action in question, assess the effects, and provide ways to avoid, minimize, or mitigate any adverse effect that may occur to a historic property.

National Register of Historic Places

The National Register of Historic Places (NRHP) is overseen by the National Park Service and requires that a resource eligible for listing on the register meet one of several criteria at the national, state, or local

level and also retain sufficient physical integrity of those features necessary to convey historic significance. It should be noted that the listing of a private property on the NRHP does not prohibit any actions which may otherwise be taken by the property owner with respect to the property. All NRHP listings for sites in California are also automatically added to the California Register of Historical Resources (CRHR) by the State of California. The listing of a site on the NRHP does not generally result in any specific physical protection. Among other things, however, it does create an additional level of CEQA (and National Environmental Protection Act) review to be satisfied prior to the approval of any discretionary action occurring that might adversely affect the resource.

American Indian Religious Freedom Act

The American Indian Religious Freedom Act became law in 1978 (Public Law 95-341, 42 USC 1996), in order to protect and preserve the inherent right of Native Americans to exercise their traditional religions by ensuring access to sites, use and possession of sacred objects, and the freedom to worship through ceremonials and traditional rites. Under this regulation, federal agencies and departments are charged with evaluating their policies and procedures in consultation with native traditional religious leaders in order to eliminate interference with the free exercise of native religion. Agencies must determine and make appropriate changes necessary to protect and preserve Native American religious cultural rights and practices, and to accommodate access to and use of religious sites "to the extent that the use is practicable and not inconsistent with an agency's essential functions." The intent is to protect Native Americans' First Amendment right to "free exercise" of religion.

Native American Graves Protection and Repatriation Act

Enacted in 1990 under Title 25 U.S. Section 3001, the Native American Graves Protection and Repatriation Act describes the rights of Native American lineal descendants, Indian Tribes, and Native Hawaiian organizations with respect to treatment, repatriation, and disposition of Native American cultural items for which they can show a relationship of lineal descent or cultural affiliation. The Native American Graves Protection and Repatriation Act requires federal agencies and museums receiving federal funds to inventory holdings of Native American human remains and funerary objects and provide written summaries of other cultural items. It also provides for greater protection of Native American burial sites and more careful control over the removal of Native American human remains, funerary objects, sacred objects, and items of cultural patrimony on federal and tribal lands.

STATE

California Register of Historical Resources (CRHR)

Created in 1992 and implemented in 1998, the CRHR is "an authoritative guide in California to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change." Certain properties, including those listed in or formally determined eligible for listing in the NRHP and California Historical Landmarks numbered 770 and higher, are automatically included in the CRHR. Other properties recognized under the California Points of Historical Interest program, identified as significant in historical resources surveys or designated by local landmarks programs, may be nominated for inclusion in the CRHR. A resource, either an individual property or a contributor to a historic district,

may be listed in the CRHR if the State Historical Resources Commission determines that it meets one or more of the criteria modeled on the NRHP criteria.

Native American Heritage Commission (NAHC)

The NAHC, created by statute in 1976 (AB 4239), is a nine-member body, appointed by the Governor of California to identify, catalog, and protect cultural resources (i.e., places of special religious or social significance to Native Americans, and known graves and cemeteries of Native Americans on private lands) in California. The NAHC is charged with the duty of preserving and ensuring accessibility of sacred sites and burials, the disposition of Native American human remains and burial items, maintaining an inventory of Native American sacred sites located on public lands (i.e., the Sacred Lands File), and reviewing current administrative and statutory protections related to these sacred sites.

Senate Bill 18

Signed into law in 2004, SB 18 requires that cities and counties notify and consult with California Native American Tribes about proposed local land use planning decisions for the purpose of protecting traditional tribal cultural sites. Cities and counties must provide general and specific plan amendment proposals to California Native American Tribes that have been identified by the NAHC as having traditional lands located within the city's boundaries. If requested by the Native American Tribes, the city must also conduct consultations with the tribes prior to adopting or amending their general and specific plans.

Assembly Bill 52 (AB 52)

AB 52 of 2014 incorporates tribal consultation and analysis of impacts to tribal cultural resources into the CEQA process. AB 52 requires a lead agency to determine whether a project may have a significant effect on tribal cultural resources (Public Resources Code [PRC] Section 21084.2). If a lead agency determines that a project may cause a substantial adverse change to a tribal cultural resource, the lead agency must consider measures to mitigate that impact, as feasible (PRC Section 21084.3). Tribal cultural resources are defined as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe" that are either included or determined to be eligible for inclusion in the CRHR or included in a local register of historical resources, or a resource that is determined to be a tribal cultural resource by a lead agency, in its discretion and supported by substantial evidence (PRC Section 21074(a)).

AB 52 establishes a tribal consultation procedure designed to incorporate tribal knowledge into the CEQA environmental review and decision-making processes. Under AB 52, California tribes have the ability to establish, through a formal notice letter, a standing request to consult with a lead agency regarding any proposed project subject to CEQA in the geographic area with which the tribe is traditionally and culturally affiliated. Within 14 days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency must provide formal notification to the designated contact or tribal representative of traditionally and culturally affiliated California Native American Tribes that have requested notice. Notice to the tribes must include a brief project description, the project location, and the lead agency's contact information. A tribe then has 30 days to request consultation. If the tribe does not respond in that period or writes to decline consultation, the lead agency has no further obligation. If the tribe requests consultation, the lead agency must begin the consultation within 30 days

and prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report for that proposed project.

Public Resources Code Section 5097 (Related to Cultural Resources)

California PRC Section 5097 addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project; and establishes the California NAHC to resolve disputes regarding the disposition of such remains. It has been incorporated into CEQA Guidelines Section 15064.5(e).

PRC Sections 5097.9 through 5097.991 establish that no public agency or private party using or occupying public property (or operating on under a public license, permit, grant, lease or contract made after July 1, 1977) shall in any manner interfere with the free expression or exercise of Native American religion as provided in the U.S. Constitution and the California Constitution. It also prohibits such agencies and parties from causing severe or irreparable damage to any Native American sanctified cemetery, place of worship, religious or ceremonial site or sacred shrine located on public property, except on a clear and convincing showing that the public interest and necessity so require it.

These sections also establish the state's NAHC, which is tasked with working to ensure the preservation and protection of Native American human remains, associated grave goods and cultural resources. Towards this end, the NAHC has a strategic plan for assisting the public, development communities, local and federal agencies, educational institutions, and California Native Americans to better understand problems relating to the protection and preservation of cultural resources and to serve as a tool to resolve these problems. In 2006, PRC Sections 5097.91 and 5097.98 were amended by AB 2641 to authorize the NAHC to bring legal action when necessary to prevent damage to Native American burial grounds or places of worship. It also established more specific procedures to be implemented in the event that Native American remains are discovered.

California Government Code Sections 6254(r)® and 6254.10

California Government Code Section 6254(r) explicitly authorizes public agencies to withhold information from the public relating to "Native American graves, cemeteries, and sacred places maintained by the Native American Heritage Commission." California Government Code Section 6254.10 specifically exempts from disclosure requests for "records that relate to archaeological site information and reports, maintained by, or in the possession of the Department of Parks and Recreation, the State Historic Resources Commission, the State Lands Commission, the NAHC, another state agency, or a local agency, including the records that the agency obtains through a consultation process between a Native American tribe and a state or local agency."

California Health and Safety Code (Sections 7050.5, 7051, and 7054)

California Health and Safety Code Sections 7050.5, 7051, and 7054 collectively address the illegality of interference with human burial remains (except as allowed under applicable sections of the PRC), as well as the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native

American skeletal remains are discovered during construction of a project, treatment of the remains prior to, during and after evaluation, and reburial procedures.

4.15.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

CEQA Guidelines Appendix G contains the Initial Study Environmental Checklist, which includes questions related to tribal cultural resources. The City relies on the questions included in Appendix G as the thresholds of significance for assessing impacts from tribal cultural resources (City of Laguna Niguel CEQA Manual, Revised February 24, 2023). A significant impact will occur if implementation of the proposed Project will:

- Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 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:
    - 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) (refer to Impact Statement TCR-1); or
    - 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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe (refer to Impact Statement TCR-1).

4.15.5 IMPACTS AND MITIGATION MEASURES

TCR-1: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 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:

- **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)?**
- **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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.**

Impact Analysis: Prehistoric archaeological sites and isolates are tribal cultural resources; additionally, plants and other natural resources, as well as geographic locations can also be tribal cultural resources. Grading of original in situ soils could expose buried tribal cultural resources and features including sacred sites. Redevelopment and development of previously undeveloped areas have the potential to impact known and unknown tribal cultural and archaeological resources. Surface-level and subsurface archaeological sites and deposits can be affected by ground-disturbing activities associated with construction activities.

As described above, approximately 36 cultural resources have been recorded within Laguna Niguel. Of these, 27 are prehistoric archaeological sites, four are prehistoric archaeology isolates, and five are historic-aged built environment resources. The prehistoric archaeology resources range from habitation sites, lithic scatters, middens, and bedrock milling sites. None of the archaeology sites have been evaluated for National Register of Historic Places (NRHP)/California Register of Historical Resources (CRHR) listing. In addition, a variety of other sources were consulted, including the California State Historic Property Data File (which includes the National Register of Historic Places, California Register of Historical Resources, California Historical Landmarks, and California Points of Historical Interest), the Built Environment Resource Directory (BERD), California Office of Historic Preservation's Historic Resources Inventory (HRI) directory, as well as a review of known cultural resource surveys, excavation reports, and historic aerial photos and maps. No resources were identified in the Planning Area in the NRHP, CRHR, CHL, or Caltrans Historic Bridge Inventory. Therefore, there would be no impact to tribal cultural resources that are 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).While most new development in the City would occur in areas that have been previously developed, subsequent development with buildout consistent with the General Plan Update Land Use Element could result in new development and intensification of existing development within areas with the potential to directly impact tribal cultural resources. As shown in Table 2-17, *General Plan Update Growth Assumptions Compared to Existing Conditions* and Figure 2-7, *General Plan Update Community Profile and Sub-Profile Areas*, buildout consistent with the General Plan Update Land Use Element would primarily accommodate new residential and non-residential development generally within the Gateway Specific Plan (Community Profile Area 4, located in the northeast portion of the City), the Marketplace at Laguna Niguel and the CHFB site (Community Profile Area 1, located in the northwest portion of the City), and the Town Center (Community Profile Area 14, located in the central portion of the City). In addition to the Gateway Specific Plan and the Opportunity Areas discussed above, the proposed Land Use Element identifies two sites for a Hospitality Overlay with the potential to accommodate future high-quality hotel uses.

As stated in Section 4.4, the archaeological sensitivity of the Planning Area was assessed based on the cultural records search results from the SCCIC, the documented history and geology of the Planning Area, water resources and the positive SLF search results. In order to support archaeological resources, sediments must have neither been deposited in the last 50 years nor pre-date human occupation. Areas proximate to water resources whether natural (affecting prehistoric and historic aged resources) or artificial (affecting historic aged resources) are more likely to have nearby archaeological resources. Based on these data sources, the Planning Area is assessed to have sensitivity for buried prehistoric and historic-aged archaeological resources that varies from very low to high. The Opportunity Areas, Gateway Specific

Plan, and Hospitality Overlay sites are all located in areas of the City with moderate to high sensitivity for buried prehistoric and historic-aged archaeological resources. As part of the development review process, Mitigation Measure CUL-5 would require the preparation of a cultural resources assessment for subsequent projects in areas assessed to have moderate or high sensitivity for archaeological resources, as determined by the City's Cultural Resources Sensitivity Maps (Appendix H of the Cultural and Paleontological Resources Assessment for the Laguna Niguel General Plan Update Project). If resources are known or reasonably anticipated to be present, the assessment would be required to provide a detailed mitigation plan to reduce potential impacts.

In response to the Notice of Preparation, a response requesting consultation was received from the Juaneño Band of Mission Indians Acjachemen Nation – Belardes, on June 10, 2025. In response to the request for consultation, the City engaged with the Juaneño Band of Mission Indians Acjachemen Nation – Belardes, which included email and telephone correspondence. The Juaneño Band of Mission Indians Acjachemen Nation – Belardes provided input on mitigation language which has been incorporated into Mitigation Measure TCR-1, discussed below.

As discussed, tribal organizations were contacted in compliance with SB 18 and AB 52 regarding the proposed General Plan Update. None of the tribal organizations who were notified of the General Plan Update pursuant to SB 18 responded requesting consultation, nor did any tribal organizations provide information specific to the potential for tribal cultural resources to occur in the Planning Area. As previously noted, confirmation of closure of the SB 18 consultation process was sent certified mail on August 6, 2025.

In response to the request for consultation pursuant to AB 52, and at the time of the Draft EIR publication, no tribal organizations have requested consultation.

While specific development projects have not been identified as part of the General Plan Update, except for the assumption that the Chet Holifield Federal Building (CHFB) will be demolished as part of a future redevelopment effort, activities associated with subsequent projects implemented under the General Plan Update could occur on sites with the potential for tribal cultural resources. Therefore, there is the potential that subsequent development could cause a substantial adverse change in the significance of a tribal cultural resource. Mitigation Measure TCR-1 would require prior to ground disturbing activities, for applicants of qualifying projects to coordinate with all interested tribes to determine if the potential exists for tribal cultural resources to be present. If it is determined that there is the potential for tribal cultural resources to be present, a qualified archaeologist or designated Native American Monitor (Tribal Monitor), shall be present on the project site during all ground-disturbing activities/earthwork to monitor grading activities. If tribal cultural resources are discovered during ground-disturbing activities/earthwork activities, all construction activities will cease around the vicinity of the find, and the qualified archaeologist or Tribal Monitor will perform data recovery and secure the item(s) until the Tribal Monitor determines the best course of action. Preservation in place (i.e., avoidance) is the preferred manner of treatment. If preservation in place is not feasible, treatment may include archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis as determined by the Tribal Monitor. If the find qualifies as a historic archaeological resource deemed significant by a qualified archaeologist as a "historical resource" or "unique archaeological resource"

instead of a Native American resource, the protocol established in Mitigation Measure CUL-5 will be implemented.

Additionally, subsequent discretionary projects implemented in accordance with the General Plan Update would be subject to the provisions of AB 52 and, if requested, would involve tribal consultation with California Native American tribes that are traditionally and culturally affiliated with the Planning Area. Future AB 52 consultation may identify tribal cultural resources not yet found and formally recorded that could have the potential to be impacted by subsequent projects. Project-specific mitigation measures would be determined in consultation with the California Native American tribes that are traditionally and culturally affiliated with the Planning Area in compliance with the AB 52 process. Through compliance with the applicable federal, State, and local regulations and implementation of Mitigation Measures TCR-1 and CUL-5, the General Plan Update would not cause a substantial adverse change in the significance of a tribal cultural resource, and impacts would be less than significant.

Mitigation Measures: Refer to Mitigation Measure CUL-5.

TCR-1 Prior to the commencement of any ground disturbing activities for qualifying development projects in which the potential exists for tribal cultural resources to be present, applicants shall coordinate with all interested tribes. If it is determined that the potential exists for tribal cultural resources to be present based on record searches or tribal knowledge, a qualified archaeologist and designated Native American Monitor (Tribal Monitor) representing the Juaneño Band of Mission Indians Acjachemen Nation – Belardes (and additional Tribal Monitors from other consulting tribes, if applicable), shall be present on the project site during all ground-disturbing activities/earthwork to monitor grading activities.

During initial monitoring, if the qualified archaeologist and/or Tribal Monitor determines that a reduced or discontinued level of monitoring is appropriate, or that continued monitoring is necessary, the scope of monitoring, in consultation with the Laguna Niguel Community Development Department, may be adjusted.

It shall only be necessary for the Tribal Monitor to be present during construction phases that involve ground-disturbing activities. Ground disturbing activities include, but are not limited to pavement removal, potholing or auguring, grubbing, tree removals, boring, grading, excavation, drilling, and trenching, in areas of previously undisturbed soil material.

The Tribal Monitor shall complete daily monitoring logs describing construction activities, locations, soil conditions, and any cultural materials identified. The monitoring shall end when all ground-disturbing activities are completed, or when the qualified archaeologist and/or Tribal Monitor determines that all remaining ground-disturbing activities have little to no potential for impacting Tribal Cultural Resources.

If Tribal Cultural Resources are discovered, construction activities shall cease in the immediate vicinity of the find (not less than the surrounding 50 feet) until the find can be assessed by the qualified archaeologist and/or Tribal Monitor. Construction activities may continue in other areas of the site while the resource is evaluated.

If the resource is determined to be Native American in origin, the qualified archaeologist or Tribal Monitor shall perform data recovery and secure the item(s) until the Tribal Monitor determines the best course of action. Preservation in place (i.e., avoidance) is the preferred manner of treatment. If preservation in place is not feasible, treatment may include archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis as determined by the Tribal Monitor.

If the find qualifies as a historic archaeological resource deemed significant by a qualified archaeologist as a "historical resource" or "unique archaeological resource" instead of a Native American resource, the protocol established in Mitigation Measure CUL-5 shall be implemented.

If human remains and/or grave goods are discovered or recognized at the project site, all ground disturbance shall immediately cease within 50 feet of discovery, and the County Coroner shall be notified per Public Resources Code Section 5097.98, and Health & Safety Code Section 7050.5. Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and (2).

Level of Significance: Less than Significant Impact with Mitigation Incorporated.

Proposed General Plan Update Goals and Policies:

RESOURCE MANAGEMENT ELEMENT

Policy RM-4.1: **Historic Resources.** For qualifying historic structures, evaluate their cultural relevance, physical condition, economic factors, feasibility, and other key considerations when reviewing proposals for major alterations, demolition, or relocation.

Policy RM-4.2: **Archaeological and Paleontological Resources.** If significant archaeological or paleontological resources are discovered, evaluate their cultural relevance, physical condition, economic factors, feasibility, and other key aspects. Consider curation in a public location in Laguna Niguel or appropriate institution, as feasible and permitted by environmental regulations.

4.15.6 CUMULATIVE IMPACTS

Section 3.0, *Basis of Cumulative Analysis*, identifies projected regional growth having the potential to interact with the proposed Project to the extent that a significant cumulative effect relative may occur. The regional geologic setting and tribal cultural resource deposit sensitivity would be similar for the Project and cumulative projects; however, the local geologic setting and tribal cultural significance would vary according to the site location and specific conditions.

Would the project, combined with other related cumulative projects, cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 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:

- **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**
- **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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?**

Impact Analysis: Activities associated with subsequent projects implemented under the General Plan Update could occur on sites with the potential for tribal cultural resources. Therefore, there is the potential that subsequent development could cause a substantial adverse change in the significance of a tribal cultural resource. Subsequent discretionary projects implemented in accordance with the General Plan Update would be subject to the provisions of AB 52 and, if requested, would involve tribal consultation with California Native American tribes that are traditionally and culturally affiliated with the Planning Area. Future AB 52 consultation may identify tribal cultural resources not yet found and formally recorded that could have the potential to be impacted by subsequent projects. Project-specific mitigation measures would be determined in consultation with the California Native American tribes that are traditionally and culturally affiliated with the Planning Area in compliance with the AB 52 process. Through compliance with the applicable federal, State, and local regulations and implementation of Mitigation Measures TCR-1 and CUL-5, the General Plan Update would not cause a substantial adverse change in the significance of a tribal cultural resource, and impacts would be less than significant.

Tribal cultural resource impacts are site specific and generally do not combine to result in cumulative impacts. Construction activities associated with subsequent development and development associated with cumulative projects may result in the discovery of tribal cultural resources. Compliance with applicable federal, State, and local regulations would reduce the risk to tribal cultural resources in the region. As discussed above, implementation of Mitigation Measures TCR-1 and CUL-5, and compliance with site-specific mitigation measures developed in consultation with the California Native American

tribes that are traditionally and culturally affiliated with the Planning Area in compliance with the AB 52 process would reduce potential impacts to tribal cultural resources to less than significant. Therefore, the General Plan Update's incremental contribution to cumulative tribal cultural resource impacts would be less than cumulatively considerable.

Mitigation Measures: Refer to Mitigation Measures TCR-1 and CUL-5.

Level of Significance: Less than Significant Impact with Mitigation Incorporated.

Proposed General Plan Update Goals and Policies: Refer to the General Plan policies cited above.

4.15.7 SIGNIFICANT UNAVOIDABLE IMPACTS

Tribal cultural resources impacts associated with the implementation of the General Plan Update would be less than significant with the implementation of mitigation measures. No significant unavoidable tribal cultural impacts would occur as a result of the General Plan Update.

4.15.8 REFERENCES

Cogstone Resource Management, revised August 2025. *Cultural and Paleontological Resources Assessment for the Laguna Niguel General Plan Update Project, City of Laguna Niguel, Orange County, California*.

4.16 UTILITIES AND SERVICE SYSTEMS

4.16.1 PURPOSE

This section identifies existing water supply, water consumption, and distribution infrastructure; the nature and location of wastewater conveyance and treatment facilities and existing related infrastructure; stormwater discharge and drainage; solid waste services; electric power, natural gas, and telecommunications services within the Planning Area and provides an analysis of potential impacts associated with implementation of the General Plan Update.

This section is based in part on the *City of Laguna Niguel General Plan Update, Proposed Conditions Infrastructure Report for Water, Sewer, Storm Drainage, and Water Quality* (Infrastructure Analysis), prepared by Fuscoe Engineering, Inc., and dated July 7, 2025; refer to Appendix H, *Infrastructure Analysis*.

4.16.2 ENVIRONMENTAL SETTING

WATER SUPPLIES

Key Terms

Acre-feet (AF): The volume of one acre of water to a depth of one foot. Each acre-foot of water is equal to approximately 325,851.4 gallons.

BGS: Below ground surface.

GPD: Gallons per day.

GPM: Gallons per minute.

Groundwater: Water that is underground and below the water table, as opposed to surface water, which flows across the ground surface. Water beneath the earth's surface fills the spaces in soil, gravel, or rock formations. Pockets of groundwater are often called "aquifers" and are the source of drinking water for a large percentage of the population in the United States. Groundwater is often extracted using wells which pump the water out of the ground and up to the surface. Groundwater is naturally replenished by surface water from precipitation, streams, and rivers when this recharge reaches the water table.

MG: Million gallons

MGD: Million gallons per day

Surface water: Water collected on the ground or from a stream, river, lake, wetland, or ocean. Surface water is replenished naturally through precipitation but is lost naturally through evaporation and seepage into soil.

Water Distribution System

The Moulton Niguel Water District (MNWD) is the regional water purveyor for the Planning Area as well as the cities of Aliso Viejo, Mission Viejo, Laguna Hills, Dana Point, and San Juan Capistrano. MNWD's services include the provision of potable water, recycled water, and wastewater. MNWD's existing water infrastructure system within the Planning Area boundaries consists of approximately 1,529,222 feet (290 miles) of distribution and transmission pipelines ranging in diameter from 3 inches to 54 inches.[1] The City of Laguna Niguel Public Works Department coordinates with MNWD on water system upgrades and issues encroachment permits when improvements are needed.

Water Infrastructure

MNWD's infrastructure for potable water storage, transmission, and distribution were specifically designed to meet fire flow requirements across the Planning Area. This includes numerous pump stations, reservoirs, and interconnections between pressure zones to ensure a reliable water supply and system redundancy. Within the Planning Area, MNWD manages eight potable pressure zones, 10 pump stations, and 12 storage reservoirs. MNWD's service area includes a total of 28 reservoirs serving customers both everyday water uses and firefighting needs.[2] See Figure 4.16-1, *Existing Water Infrastructure*, for more detail.

Water Supply

MNWD's water supply is derived from imported potable water and locally sourced recycled water. For the past five years, approximately 79 percent of the total water supply has come from the Metropolitan Water District of Southern California (MWD) through the Municipal Water District of Orange County (MWDOC), with the majority of it being treated at MWD's Robert B. Diemer Water Treatment Plant (WTP) located north of Yorba Linda. The remaining 21 percent of the water supply is recycled water, which is treated either at Diemer WTP or the Baker WTP, the backup facility in Lake Forest. If necessary, MNWD can also purchase recycled water from the South Coast Water District (SCWD). See Table 4.16-1, *Existing (2019-2020) Water Supply Resources*, for the list of existing (as of Fiscal Year 2019-2020) water supply resources available to MNWD.[3]

[1] Fuscoe Engineering, Inc. July 7, 2025. *City of Laguna Niguel General Plan Update, Proposed Conditions Infrastructure Report for Water, Sewer, Storm Drainage, and Water Quality*.
[2] Moulton Niguel Water District (MNWD), 2023. *Popular Annual Financial Report*. Available at: https://www.mnwd.com/wp-content/uploads/FYE23-PAFR-Final-Draft.pdf. Accessed September 2024
[3] Existing water supply resources per MNWD's 2020 Urban Water Management Plan (UWMP) for Fiscal Year beginning July 1, 2019 and ending June 30, 2020.

Table 4.16-1
Existing (2019-2020) Water Supply Resources

Water Supply	Actual Volume (AF)
Purchased or Imported Water - Drinking water purchased from MWDOC	23,083
Recycled Water - Recycled water produced locally	5,013
Total	**28,096**
Source: Moulton Niguel Water District (MNWD), 2021. *2020 Urban Water Management Plan*, Table 4-3.	

Projected Water Demands and Supply

Table 4.16-2, *Water Supplies – Projected (AFY)*, provides MNWD's estimated imported and recycled water projections under normal or average years from 2025 to 2045.

Table 4.16-2
Water Supplies – Projected (AFY)

Water Supply	Projected Water Supply				
	2025	2030	2035	2040	2045
Purchased or Imported Water	25,695	25,436	25,286	25,161	24,992
Recycled Water	6,398	6,346	6,326	6,312	6,288
Total	**32,093**	**31,782**	**31,612**	**31,473**	**31,280**
Source: Moulton Niguel Water District (MNWD), 2021. *2020 Urban Water Management Plan*, Table 6-9.					

Table 4.16-3, *Retail: Use for Potable and Non-Potable Water – Projected (AF)*, presents the data from the 2020 UWMP for the projected potable and non-potable water demands for the use types in the MNWD service area, including the Planning Area, through the year 2045.

Table 4.16-3
Retail: Use for Potable and Non-Potable Water – Projected (AF)

Use Type	Additional Description	Projected Water Use				
		2025	2030	2035	2040	2045
Single Family	-	15,634	15,506	15,455	15,422	15,363
Multi-Family	-	1,988	1,972	1,965	1,960	1,954
Commercial	Includes Institutional	2,803	2,780	2,772	2,766	2,755
Landscape	-	3,350	3,323	3,312	3,305	3,292
Losses	-	1,906	1,841	1,768	1,694	1,614
Other Potable	Hydrant Use	14	14	14	14	14
Total		**25,695**	**25,436**	**25,286**	**25,161**	**24,992**
Source: Moulton Niguel Water District (MNWD), 2021. *2020 Urban Water Management Plan*, Table 4-2. Notes: Projections reflect the General Plans of each city within the Moulton Niguel Water District.						

Table 4.16-4, *Multiple Dry Year Supply and Demand Comparison (AFY)*, presents a comparison of projected multiple dry year water supply availability to the multiple dry year water demand. As discussed in the 2020 UWMP, the multiple year drought analysis increases projected average water demand to reflect actual increased demands of 4.2 percent the first year and 4.3 percent the second year applied to a hypothetical five-year drought. Under these conditions, the MNWD would purchase additional water so that supply meets demand. The UWMP concludes that based on the reliability of MWD's supply, the MNWD can provide reliable water supplies under all years of the multiple dry year hydrology.

Table 4.16-4
Multiple Dry Year Supply and Demand Comparison (AFY)

Demand and Supply Projections (in acre-feet)	2025	2030	2035	2040	2045
First Year					
Supply Totals	33,435	33,111	32,934	32,790	32,588
Demand Totals	33,435	33,111	32,934	32,790	32,588
Difference	0	0	0	0	0
Second Year					
Supply Totals	33,419	33,124	32,953	32,797	32,636
Demand Totals	33,419	33,124	32,953	32,797	32,636
Difference	0	0	0	0	0
Third Year					
Supply Totals	31,969	31,714	31,556	31,396	31,280
Demand Totals	31,969	31,714	31,556	31,396	31,280
Difference	0	0	0	0	0
Fourth Year					
Supply Totals	31,906	31,680	31,529	31,357	31,280
Demand Totals	31,906	31,680	31,529	31,357	31,280
Difference	0	0	0	0	0
Fifth Year					
Supply Totals	31,844	31,646	31,501	31,319	31,280
Demand Totals	31,844	31,646	31,501	31,319	31,280
Difference	0	0	0	0	0

Source: Moulton Niguel Water District (MNWD), 2021. *2020 Urban Water Management Plan*, Table 7-4.

WASTEWATER

Key Terms

Effluent: Effluent is an outflowing of water from a natural body of water, or from a man-made structure. Effluent in the man-made sense is generally considered to be water pollution, such as the outflow from a sewage treatment facility or the wastewater discharge from industrial facilities. In the context of waste water treatment plants, effluent that has been treated is sometimes called secondary effluent or treated effluent.

WWTP: Wastewater treatment plant. Treatment of wastewater may include the following processes: screening to remove large waste items; grit removal to allow sand, gravel, and sediment to settle out; primary sedimentation where sludge can settle out of the wastewater; secondary treatment to substantially degrade the biological content of the sewage; tertiary treatment to raise the quality of the effluent before it is discharged; and discharge.

Existing Wastewater (Sewer) System

MNWD and SCWD are responsible for the local wastewater facilities in Laguna Niguel. MNWD and SCWD collect wastewater through a network of collectors, gravity lines, lift stations, and force mains; refer to Figure 4.16-2, *Existing Sewer Infrastructure*.

Moulton Niguel Water District (MNWD)

Within the Planning Area, the MNWD maintains approximately 1,166,372 feet (221 miles) of sewers lines and service laterals, ranging in size from four inches to 48 inches. Over half of the sewer lines throughout the Planning Area were constructed in the 1980s (54 percent) and are constructed from polyvinyl chloride (PVC) (54 percent) and vitrified clay pipe (VCP) (43 percent). The entire gravity sewer system includes manholes that facilitate cleaning and maintenance of the local sewer infrastructure.

MNWD has decreased wastewater flows over the years through active and passive conservation measures. MNWD operates and maintains Plant 3A and the Advanced Wastewater Treatment (AWT) facility at the Regional Treatment Plan (RTP) and prioritizes the protection of public health, the environment, and compliance with regulatory and public health agencies by performing regular sampling, monitoring, and testing of wastewater treatment.[4]

MNWD is a member of the South Orange County Wastewater Authority (SOCWA) and contributes wastewater flows to three regional treatment plants and two ocean outfalls. Facilities owned and operated by MNWD are described below:

- **Advanced Wastewater Treatment Facility (AWT) –** MNWD owns and operates the AWT facilities located at the RTP in Laguna Niguel. The AWT facility treats water to produce disinfected tertiary recycled water used for irrigation at a local golf course and other landscape areas. The AWT has a recycled water capacity of 9.4 MGD.
- **Wastewater Treatment Plant 3A –** Located in the City of Mission Viejo, Plant 3A has a maximum capacity of six MGD and treats water from MNWD and Santa Margarita Water District (SMWD). On average Plant 3A treats approximately 1.8 MGD. MNWD owns 72 percent of the treatment capacity and actively collaborates with SMWD. Effluent undergoes secondary or tertiary treatment depending on the disposal method, ocean outfall or recycled water.

South Orange County Wastewater Authority (SOCWA)

SOCWA was established in the 1970s and consists of ten governmental agencies, including the City of Laguna Niguel. The management of treatment and disposal of wastewater involves proportionate cost-

[4] Fuscoe Engineering, Inc. July 7, 2025. *City of Laguna Niguel General Plan Update, Proposed Conditions Infrastructure Report for Water, Sewer, Storm Drainage, and Water Quality*.

sharing among member agencies based on deliveries and ownership of the plants. Some of SOCWA's regional facilities include the following:

- **Coastal Treatment Plant (CTP) –** Located in the City of Laguna Niguel and constructed in 1983, the CTP has a capacity of 6.7 MGD. Currently, CTP has an average daily use of 2.9 MGD with a production of 1.5 MGD of recycled water. The treatment processes at the plant include screening, grit removal, primary clarification, secondary treatment, secondary clarification, anaerobic digestion, and thickening. MNWD does not currently use capacity at CTP but owns 29 percent of the treatment capacity. MNWD's participation and funding obligations for CTP will end in 2030.
- **JB Latham Treatment Plant (JBLTP) –** Located in the City of Dana Point and constructed in 1964, the JBLTP operates as a conventional activated sludge treatment facility with a total capacity of 13 MGD and currently utilizing six MGD. The treatment processes at the facility include screening, grit removal, primary clarification, secondary treatment, secondary clarification, anaerobic digestion, and solids dewatering. MNWD owns 23 percent of the liquid treatment capacity and 22 percent of the solid's treatment capacity.
- **Regional Treatment Plant (RTP) –** Located in the City of Laguna Niguel and constructed in 1982, the RTP is a key facility with a total liquid waste capacity of 12 MGD and 20 MGD in solid waste. Currently RTP is operating at an average of 7.3 MGD and generates up to 7.3 MGD of recycled water. The treatment processes at the facility include screening, grit removal, primary clarification, secondary treatment, secondary clarification, anaerobic digestion, and solids dewatering. MNWD owns 100 percent of the liquid treatment capacity, 100 percent of the recycled water treatment facilities, and nearly 60 percent of solids treatment capacity.
- **Aliso Creek Ocean Outfall –** The Aliso Creek Ocean Outfall was constructed in 1979 and extends 1.5 miles from Aliso Creek Beach. The outfall discharges highly treated wastewater into the Pacific Ocean and handles a capacity of 9.3 MGD. Water quality testing is conducted monthly at 21 ocean and 12 beach monitoring sites.
- **San Juan Creek Ocean Outfall –** The San Juan Creek Ocean Outfall was constructed in 1978 and extends 2.2 miles from the Doheny State Beach. The outfall discharges highly treated wastewater into the Pacific Ocean and handles a capacity of 10.5 MGD. Water Quality testing is conducted monthly at 21 ocean and 9 beach monitoring sites.

South Coast Water District (SCWD)

SCWD's involvement in the City's sewer distribution primarily revolves around wastewater conveyance. SCWD has several connections with MNWD to support wastewater conveyance from the City. Due to local topography, SCWD extends its sewer service beyond its boundaries to certain customers, thus avoiding the need for constructing and operating sewer lift stations in neighboring districts, such as MNWD. The SCWD provides service to approximately 650 customers within the MNWD service boundary.

One area with approximately 650 customers is within MNWD's service area boundary, but sewer by gravity drains to SCWD wastewater system. SCWD also has a contractual obligation to provide up to 1.44 MGD to MNWD at the Joint Reservoir. However, MNWD only accepts flow from SCWD during emergencies

or routine maintenance periods. Historically, MNWD's intake from the Joint Reservoir during the summer months has not exceeded approximately 1.0 MGD.[5]

Orange County Sanitation District (OCSD)

Orange County Sanitation District (OCSD) is a regional agency with trunklines throughout Orange County. OCSD shares overlapping operational authority throughout the cities and sewer agency districts within the County, including the City of Laguna Niguel. In general, OCSD owns and maintains the larger trunklines while the cities and agencies that form OCSD own and maintain the smaller laterals. OCSD relies on the cooperation and resources of the 27 satellite cities and agencies to maintain the smaller laterals and to implement Fats, Oils, and Grease control programs for the food service establishments that discharge directly to the local collection systems.[6]

Existing Sewer Flows

MNWD's 2020 UWMP estimates that 11,590 AF of wastewater was treated within the MNWD service area in 2020, with 6,101 AF of that amount being discharged and 5,489 AF being recycled. Flows were discharged into Aliso Creek Channel and San Juan Ocean Outfalls. Table 4.16-5, *Existing Sewer Flows – Regional*, provides a summary of existing sewer flows throughout the MNWD service area.

Table 4.16-5
Existing Sewer Flows – Regional

MNWD Wastewater Collection	Treatment Plant	Treated Wastewater (AF)	Treated Discharge (AF)	Recycled Wastewater (AF)
Metered - Wastewater received by SOCWA	RTP	8,680	3,995	4,685
Metered - Wastewater received by MNWD	3A Treatment Plant	1,761	957	804
Estimated - Wastewater received by SOCWA	JBLTP	1,149	1,149	0
	Total	**11,590**	**6,101**	**5,489**

Source: Moulton Niguel Water District (MNWD), 2021. *2020 Urban Water Management Plan*, Table 6-3.
Note: RTP = Regional Treatment Plant; JBLTP = JB Latham Treatment Plant

Existing Sewer Capacity Assessment

The sewer system management responsibilities within the City are shared between MNWD, SCWD, and the City's Public Works Department.[7] Larger sewer facilities are regionally overseen by MNWD in collaboration with SCWD. Locally, the City's Public Works Department issues encroachment permits to MNWD or SCWD for sewer improvement projects including inspection of backfill above the pipe and

[5] Fuscoe Engineering, Inc. July 7, 2025. *City of Laguna Niguel General Plan Update, Proposed Conditions Infrastructure Report for Water, Sewer, Storm Drainage, and Water Quality*.
[6] Orange County Sanitation District, 2024. *Sewer System Management Plan*. Available at: https://www.ocsan.gov/home/showpublisheddocument/29880/638622493219500000. Accessed September 2024.
[7] Fuscoe Engineering, Inc. July 7, 2025. *City of Laguna Niguel General Plan Update, Proposed Conditions Infrastructure Report for Water, Sewer, Storm Drainage, and Water Quality.*

surface restoration. For private properties, the City's Building Department oversees permitting and inspecting private sewer improvements. This collaborative approach between regional and local agencies ensures comprehensive management, covering both public and private aspects of sewer and wastewater infrastructure within the City.

MNWD's Sewer System Management Plan (SSMP) describes the following capacity assessment and planning processes it has in place:

- Collection System Cleaning and Maintenance. MNWD routinely inspects the entire sewer system on an eight year cycle to proactively identify and address any problems. All 6-inch to 12-inch residential sewer system lines are cleaned on an annual basis, and the larger trunklines undergo annual inspections and cleaning, as necessary. Additional maintenance and checks occur for the 16 active lift stations and MNWD conducts daily checks and more frequent inspections for six of the larger lift stations.
- Refurbishment and Replacement Plan. Through the SSMP's refurbishment and replacement plan, MNWD incorporates sewer line rehabilitation and replacement projects into the 10-year Capital Improvement Plan (CIP) on an annual basis. The CIP also includes planned equipment replacements for sewer lift stations that are scheduled and outlined in MNWD's 10-year CIP, ensuring that infrastructure maintenance is prioritized.
- Sewer Hydraulic Model. MNWD maintains a sewer hydraulic model to assist with capacity evaluations, changes in land use, and project applications. When evaluating a redevelopment project or new construction project, MNWD evaluates the existing and proposed wastewater system capacity to ensure that all future peak wastewater flows would be adequately conveyed. This system also identifies when upgrades in the existing system are necessary. Through this process, the system is protected, and safeguards are provided that ensure that proper tracking of future upgrades to the sewer system will be installed as needed to accommodate future development and redevelopment.

STORMWATER AND DRAINAGE

The information in this section focuses on the potential for the General Plan Update to result in the demand for new or expanded stormwater drainage facilities. Section 4.9, *Hydrology and Water Quality*, includes an expanded analysis of water quality, flooding, and other stormwater related issues.

Stormwater and Flood Control Facilities

The Planning Area has a storm drain system composed of catch basins and storm drains which convey stormwater runoff through roadways and underground infrastructure. Storm drain pipelines, channels, and facilities within the City range from 18 to 192 inches in diameter with a total length of approximately 389,498 ft (74 miles). The majority of the pipelines are owned by the City and are made from reinforced concrete pipe (RCP). The City's Public Works Department and Orange County Flood Control District (OCFCD) work together to monitor and maintain their respective storm drainage infrastructure to ensure the system functions effectively. Most storm flows are conveyed in the City's roadways, to City-owned catch basins and storm drain systems. From there, the flows are discharged into OCFCD channels and are

ultimately discharged into the Pacific Ocean. Figure 4.16-3, *Existing Stormwater and Flood Control Facilities,* shows stormwater infrastructure within the Planning Area.

SOLID WASTE

Key Terms

Class I landfill: A landfill that accepts 20 tons or more of municipal solid waste daily (based on an annual average); or one that does not qualify as a Class II or Class III municipal solid waste landfill.

Class II landfill: A landfill that (1) accepts less than 20 tons daily of municipal solid waste (based on an annual average); (2) is located on a site where there is no evidence of groundwater pollution caused or contributed by the landfill; (3) is not connected by road to a Class I municipal solid waste landfill, or, if connected by road, is located more than 50 miles from a Class I municipal solid waste landfill; and (4) serves a community that experiences (for at least three months each year) an interruption in access to surface transportation, preventing access to a Class I landfill, or a community with no practicable waste management alternative.

Class III landfill: A landfill that is not connected by road to a Class I landfill or a landfill that is located at least 50 miles from a Class I landfill. Class III landfills can accept no more than an average of one ton daily of ash from incinerated municipal solid waste or less than five tons daily of municipal solid waste.

Transfer station: A facility for the temporary deposit of some wastes. Transfer stations are often used as places where local waste collection vehicles will deposit their waste cargo prior to loading into larger vehicles. These larger vehicles will transport the waste to the end point of disposal or treatment.

Waste Management Plan: A Waste Management Plan (WMP) is a completed WMP form, approved by the city, submitted by the applicant for any covered project. Prior to project start, the WMP shall identify the types of construction and demolition (C&D) debris materials that will be generated for disposal and recycling. A completed WMP contains actual weight or volume of the material disposed of by recycled receipts.

Waste Disposal Facilities

CR&R Environmental Services, Inc., is a private franchise hauler that provides solid waste disposal and recycling services for the Planning Area.[8] In 2024, the City disposed of a total of 49,546.33 tons of solid waste, the vast majority (38,612.82 tons, or approximately 78 percent of the total waste generated in the Planning Area) of which was disposed of at the Prima Deshecha Landfill.[9] Other landfills that received a relatively small amount of waste from the Planning Area in 2024 include:

[8] City of Laguna Niguel. *Trash Collection and Recycling Services*. Available at: https://www.cityoflagunaniguel.org/1169/Trash-Collection-and-Recycling-Services. Accessed February 2025.
[9] California Department of Resources Recycling and Recovery (CalRecycle), *RDRS Report 2: Jurisdiction Disposal and Beneficial Reuse by Destination*. Available at: https://www2.calrecycle.ca.gov/RecyclingDisposalReporting/Reports/JurisdictionDisposalAndBeneficial. Accessed May 2025.

- Frank R. Bowerman Landfill (6,044.93 tons, or approximately 12 percent of total waste);
- Olinda Alpha Landfill (4,328.34 tons, or approximately 9 percent of total waste);
- Simi Valley Landfill & Recycling Center (475.68 tons, or approximately one percent of total waste);
- Mid-Valley Sanitary Landfill (33.96 tons, or less than one percent of total waste);
- Azusa Land Reclamation Co. Landfill (30.45 tons, or less than one percent of total waste);
- El Sobrante Landfill (18.03 tons, or less than one percent of total waste); and
- Chiquita Canyon Landfill (2.12 tons, or less than one percent of total waste).

Prima Deshecha Landfill

The Prima Deshecha Landfill is a Class III solid waste landfill located in San Juan Capistrano, California. Opened in 1976, the Prima Deshecha Landfill features 1,530 total acres, with 697 acres for waste disposal. The Prima Deshecha site has a projected capacity to serve residents and businesses until approximately 2102.[10] The Prima Deshecha Landfill has a daily permitted maximum of 4,000 tons per day (TPD) and a remaining capacity of 128,800,000 cubic yards as of 2023.[11]

Frank R. Bowerman Landfill

The Frank R. Bowerman Landfill is a Class III solid waste landfill located near Irvine, California. Opened in 1990, the Frank R. Bowerman Landfill features 725 total acres, with 534 acres for waste disposal. It is permitted for 11,500 TPD maximum with an 8,500 TPD annual average. The site has a projected capacity to serve residents and businesses until approximately 2053.[12]

Olinda Alpha Landfill

The Olinda Alpha Landfill is a Class III solid waste landfill located near Brea, California. Opened in 1960, the Olinda Alpha Landfill features 565 total acres, with 453 acres for waste disposal. It is permitted for 8,000 TPD maximum with a 7,000 TPD average.[13] The Olinda Alpha Landfill has a closure permit date of 2036; however, the County projects that the site will fill up permitted capacity earlier than the closure permit date and is expected to begin the closure process in 2026-2027.[14]

[10] County of Orange, n.d. *Prima Deshecha Landfill*. Available at: https://oclandfills.com/landfills/prima-deshecha-landfill. Accessed March 2025.
[11] California Department of Resources Recycling and Recovery (CalRecycle), *SWIS Facility/Site Activity Details Prima Deshecha Landfill (30-AB-0019)*. Available at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2750?siteID=2085. Accessed May 2025.
[12] County of Orange, n.d. *Frank R. Bowerman Landfill*. Available at: https://oclandfills.com/landfills/frank-r-bowerman-landfill. Accessed May 2025.
[13] Orange County Waste and Recycling, n.d. *Olinda Alpha Landfill*. Available at: https://oclandfills.com/landfills/olinda-landfill. Accessed May 2025.
[14] County of Orange, *FY 2024-25 Annual Budget*, August 2024. Available at: https://cfo.ocgov.com/budget/fiscal-year-2024-2025/oc-annual-budget-fy-2024-25.

Solid Waste Generation Rates and Volumes

The California Integrated Waste Management Act of 1989 (Assembly Bill (AB) 939), requires each city or county's source reduction and recycling element to include an implementation schedule showing that a city or county must divert 50 percent of solid waste from landfill disposal or transformation on and after January 1, 2000. Senate Bill (SB) 1016, passed in 2008, required the 50 percent diversion requirement to be calculated in a per capita disposal rate equivalent. AB 341, passed in 2012, requires that California increase its diversion rate to 75 percent by 2020.

The California Department of Resources Recycling and Recovery (CalRecycle) tracks and monitors solid waste generation rates on a per capita basis. Per capita solid waste generation rates and total annual solid waste disposal volumes for the City of Laguna Niguel between 2017 and 2023 are shown in Table 4.16-6, *Solid Waste Generation Rates in the City of Laguna Niguel*.

Table 4.16-6
Solid Waste Generation Rates in the City of Laguna Niguel

Year	Waste Generation Rate (pounds/person/day)		Total Disposal Tonnage (tons/year)
	Per Resident	Per Employee	
2017	3.5	14.8	41,668
2018	3.3	13.6	39,094
2019	3.7	15.1	45,161
2020	3.9	15.4	45,997
2021	4	16.3	47,268
2022	3.8	14.8	45,149
2023	4.2	17	48,795
Cal Recycle Target Rate	<6.6	<29.8	--

Source: California Department of Resources Recycling and Recovery (CalRecycle), *Jurisdiction Per Capita Disposal Trends*. Available at: https://www2.calrecycle.ca.gov/LGCentral/AnnualReporting/ReviewReports. Accessed March 2025.

The City has complied with State requirements to reduce the volume of solid waste through recycling and reuse of solid waste. As shown in Table 4.16-6, the City's per capita disposal rates have consistently satisfied the target rate established by California's Department of Resources Recycling and Recovery CalRecycle of 6.6 pounds per person per day for residents and 29.8 pounds per person per day for employees. The per capita disposal rate is used as one of several factors that CalRecycle considers in determining a jurisdiction's compliance with the intent of AB 939. It allows CalRecycle and jurisdictions to focus on successful implementation of diversion programs. CalRecycle data also shows that the City of Laguna Niguel has increased landfill diversion programs for solid waste, from 35 diversion programs in 2007 to 44 in 2023.[15]

[15] California Department of Resources Recycling and Recovery (CalRecycle*). Jurisdiction Diversion/Disposal Rate Summary*. Available at: https://www2.calrecycle.ca.gov/LGCentral/DiversionProgram/JurisdictionDiversionPost2006. Accessed March 2025.

Hazardous Waste Disposal

Household hazardous waste (HHW) is any hazardous waste generated incidental to owning or maintaining a residence, including paints, solvents, varnishes, acids, flammables, acrylics, and resins. E-waste such as televisions, tablets, cell phones and computers can also be taken to a HHW Collection Center. Orange County operates several HHW Collection Centers to ensure HHW goes through the proper disposal process. Orange County residents, including residents of Laguna Niguel, can dispose of their HHW items for free at any of the County's four HHW Collection Centers, with the closest location to the City is available at the Prima Deshecha Landfill in San Juan Capistrano.[16]

ELECTRIC POWER, NATURAL GAS, AND TELECOMMUNICATIONS

The infrastructure to deliver electricity and natural gas service throughout the Planning Area is currently in place and can generally provide these services to new development on request.

Electric Power

Electricity service in the Planning Area is provided by two utility companies: Southern California Edison (SCE) and San Diego Gas & Electric (SDG&E).[17] SCE provides electricity service to the western portion of the City. SCE is a regulated public utility that provides energy service to 15 million people across a 50,000 square mile service area covering portions of Orange and Los Angeles counties. SCE obtains electricity from a variety of sources, including SCE-owned facilities and other private and publicly owned facilities that provide electricity through contracts and agreements. Electricity is generated from a variety of energy sources, including coal, natural gas, hydroelectric, and a mix of other renewable resources.

SDG&E provides electricity service to the eastern portion of the City. SDG&E is one of the primary providers of electricity and natural gas to the region of Southern California. SDG&E supplies power to a population of 1.4 million business and residential accounts in a 4,100 square-mile service area spanning two counties and 25 communities.

Local electrical infrastructure is generally undergrounded within the City and connects to regional transmission lines. Smaller voltage overhead transmission lines (less than 110 kV) within Aliso Viejo cross Alicia Parkway in the northwestern portion of the City to connect to the SCE substation north of Avila Road.[18] Overhead transmission lines (above 110 kV) run along the rail line in the northeastern portion of the City.

[16] County of Orange Waste & Recycling. *Household Hazardous Waste*. Available at: https://oclandfills.com/hazardous-waste. Accessed February 2025.
[17] City of Laguna Niguel, 1992. *General Plan Environmental Impact Report.*
[18] California Energy Commission. 2023. *California Electric Infrastructure App*. https://cecgis-caenergy.opendata.arcgis.com/app/ad8323410d9b47c1b1a9f751d62fe495, accessed August 16, 2023.

Natural Gas

The Southern California Gas company (SoCalGas) provides natural gas services for the Planning Area.19 SoCalGas is the nation's largest natural gas distribution utility. They deliver energy to 21.1 million consumers through 5.9 million meters in more than 500 communities. Their service territory encompasses approximately 24,000 square miles throughout Central and Southern California, from Visalia to the Mexican border.[20] A network of local distribution mains and service lines connect to Gas Transmission Pipelines and High Pressure (greater than 60 pounds per square inch) Gas Distribution Mains owned and operated by SoCalGas, which are located along the eastern boundary of the City.[21]

Telecommunications

The Planning Area is served by multiple telecommunications providers. Telecommunication providers serving the Planning Area include, but not limited to, AT&T and Cox Communications.[22]

4.16.3 REGULATORY SETTING

WATER

Federal

Federal Safe Drinking Water Act of 1974

The Safe Drinking Water Act authorizes the U.S. Environmental Protection Agency (USEPA) to set national health-based standards for drinking water to protect against both naturally-occurring and man-made contaminants that may be found in drinking water. The USEPA, states, and public water systems (or agencies) then work together to make sure that these standards are met. Originally, Safe Drinking Water Act focused primarily on treatment as the means of providing safe drinking water at the tap. The 1996 amendments greatly enhanced the existing law by recognizing source water protection, operator training, funding for water system improvements, and public information as important components of safe drinking water. This approach ensures the quality of drinking water by protecting it from source to tap. The Safe Drinking Water Act applies to every public water system in the United States.

[19] City of Laguna Niguel, n.d. *Utility Companies*. Available at: https://www.cityoflagunaniguel.org/296/Utilities. Accessed March 2025.
[20] Southern California Gas Company. *Company Profile.* Available at: https://www.socalgas.com/about-us/company-profile. Accessed March 2025.
[21] Southern California Gas Company. *Gas Transmission Pipeline Interactive Map*. Available at: https://socalgas.maps.arcgis.com/apps/webappviewer/index.html?id=53da2bbb31574e0ab0f14f9bc2618d89, Accessed March 2025.
[22] City of Laguna Niguel, n.d. *Utility Companies*. Available at: https://www.cityoflagunaniguel.org/296/Utilities. Accessed February 2025.

State

State of California Water Recycling Act

Enacted in 1991, the Water Recycling Act established water recycling as a State priority. The Water Recycling Act encourages municipal wastewater treatment districts to implement recycling programs to reduce local water demands.

California Code of Regulations, Title 22, Division 4, Chapter 3 Water Recycling Criteria

California regulates the wastewater treatment process and use of recycled water pursuant to California Code of Regulations (CCR) Title 22, Division 4, Chapter 3, Water Recycling Criteria. According to these regulations, recycled water to be used for irrigation of public areas must be filtered and disinfected to tertiary standards.

California Code of Regulations, Title 22, Chapter 15, Article 20, Consumer Confidence Report

California requires all public water systems to prepare a Consumer Confidence Report for distribution to its customers and to the Department of Health Services. The Consumer Confidence Report provides information regarding the quality of potable water provided by the water system. It includes information on the sources of the water, any detected contaminants in the water, the maximum contaminants levels set by regulation, violations and actions taken to correct them, and opportunities for public participation in decisions that may affect the quality of the water provided.

California Department of Health Services

The Department of Health Services, Division of Drinking Water and Environmental Management, oversees the Drinking Water Program. The Drinking Water Program regulates public water systems and certifies drinking water treatment and distribution operators. It provides support for small water systems and for improving their technical, managerial, and financial capacity. It provides subsidized funding for water system improvements under the State Revolving Fund (SRF) and Proposition 50 programs. The Drinking Water Program also oversees water recycling projects, permits water treatment devices, supports and promotes water system security, and oversees the Drinking Water Treatment and Research Fund for MTBE and other oxygenates.

California Urban Water Management Planning Act

The California Urban Water Management Planning Act (California Water Code [CWC] Division 6, Part 2.6, Sections 10610-10656) addresses several State policies regarding water conservation and the development of water management plans to ensure the efficient use of available supplies. The California Urban Water Management Planning Act also requires water suppliers to prepare an Urban Water Management Plan (UWMP) every five years to identify short-term and long-term water demand management measures to meet growing water demands during normal, dry, and multiple-dry years. Specifically, municipal water suppliers that serve more than 3,000 customers or provide more than 3,000 acre-feet per year (AFY) of water must adopt a UWMP.

Senate Bill 610 and Assembly Bill 901

The California State Legislature passed SB 610 and AB 901 in 2001. Both measures modified the Urban Water Management Planning Act.

SB 610 requires additional information in a UWMP if groundwater is identified as a source of water available to an urban water supplier. It also requires that the UWMP include a description of all water supply projects and programs that may be undertaken to meet total projected water use. SB 610 requires a city or county that determines a project is subject to CEQA to identify any public water system that may supply water to a project and to request identified public water systems to prepare a specified water supply assessment. The assessment must include, among other information, an identification of existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the proposed project, and water received in prior years pursuant to these entitlements, rights, and contracts.

AB 901 requires a UWMP to include information, to the extent practicable, relating to the quality of existing sources of water available to an urban water supplier over given time periods. AB 901 also requires information on the manner in which water quality affects water management strategies and supply reliability. AB 901 requires a plan to describe plans to supplement a water source that may not be available at a consistent level of use, to the extent practicable, and requiring additional findings and declarations relating to water quality.

Senate Bill 221

SB 221 includes additional measures to Government Code Section 66455.3, requiring that the local water agency be sent a copy of any proposed residential subdivision of more than 500 dwelling units within five days of the subdivision application being accepted as complete for processing by the city or county. It also includes additional measures Government Code Section 66473.7, establishing detailed requirements for establishing whether a “sufficient water supply” exists to support any proposed residential subdivisions of more than 500 dwellings, including any such subdivision involving a development agreement. When approving a qualifying subdivision tentative map, the city or county must include a condition requiring availability of a sufficient water supply. The applicable public water system must provide proof of availability. If there is no public water system, the city or county must undertake the analysis described in Government Code Section 66473.7. The analysis must include consideration of effects on other users of water and groundwater.

Water Efficiency Standards

The California Plumbing Code (Part 5 of CCR Title 24) promotes water conservation. In addition, a number of California laws listed below require water-efficient plumbing fixtures in structures:

- CCR Title 20 Section 1604(g) establishes efficiency standards that give the maximum flow rate of all new showerheads, lavatory faucets, sink faucets, and tub spout diverters.
- CCR Title 20 Section 1606 prohibits the sale of fixtures that do not comply with established efficiency regulations.

- CCR Title 24 Sections 25352(i) and (j) address pipe insulation requirements, which can reduce water used before hot water reaches equipment or fixtures. Insulation of water- heating systems is also required.
- Health and Safety Code Section 17921.3 requires low-flush toilets and urinals in virtually all buildings.

California Green Building Standards Code

The 2022 California Green Building Standards (CALGreen) Code sets standards for new buildings and development projects with the purpose of improving public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices in several categories, including but not limited to, water efficiency and conservation. The 2022 CALGreen Code includes several amendments to the 2019 CALGreen Code, including new voluntary prerequisites for builders to choose from, such as battery storage system controls and heat pump space, and water heating, to encourage building electrification. Local jurisdictions also retain the administrative authority to exceed the CALGreen standards. The 2022 CALGreen Code went into effect Statewide on January 1, 2023.

Local

Municipal Water District of Orange County Urban Water Management Plan (2020)

MWDOC's 2020 UWMP provides an assessment of the present and future water supply sources and demands within MWDOCs service area. It presents an update to the 2015 UWMP and identifies water resource needs, water use efficiency programs, water reliability assessment and strategies to mitigate water shortage conditions. It also presents a new 2020 Water Shortage Contingency Plan (WSCP) designed to prepare for and respond to water shortages. The 2020 UWMP contains all elements to comply with the new requirements of the UWMP Act as amended since 2015.

Moulton Niguel Water District Urban Water Management Plan (2020)

MNWD's 2020 UWMP presents a description of MNWD's service area and water and wastewater infrastructure; historical and projected water use; conservation targets; water supply sources; a comparison of water supplies and water demands during normal, single dry, and multiple dry years; water use efficiency activities to optimize the beneficial use of water; water resources contingency planning for water shortages; and UWMP coordination and adoption details. The 2020 UWMP indicates MNWD is well prepared to meet the existing and projected demands for the 25-year planning horizon as set forth in this 2020 UWMP.

Moulton Niguel Water District Water Shortage Contingency Plan

Pursuant to State law, MNWD adopted a Water Shortage Contingency Plan (WSCP) in 2021 to address specific stages of action to be undertaken in response to water supply shortages. The WSCP was developed to manage supply and demand during times of drought and emergencies and provides a detailed plan for actions MNWD may implement in the case of an actual water shortage condition.

City of Laguna Niguel Municipal Code

The City of Laguna Niguel Municipal Code Title 6, Division 5, Article 3, *Water Efficient Landscaping Regulations*, contains the City's water efficient landscaping regulations, which are at least as effective as the State Model Water Efficient Landscape Ordinance.

Municipal Code Title 8, *Building Regulations*, adopts various uniform building and construction codes. Municipal Code Title 5, Division 1, Article 10, *California Green Building Standards Code*, adopts the 2022 California Green Building Standards Code, also referred to as CALGreen. CALGreen includes regulations to improve water efficiency and conservation.

City of Laguna Niguel CEQA Manual

The City of Laguna Niguel CEQA Manual provides the City and project applicants with local guidelines, procedures, requirements, and thresholds of significance for the environmental review process within the City of Laguna Niguel consistent with the California Environmental Quality Act (Public Resources Code [PRC] Section 21000 et seq.), referred to as "CEQA" or "CEQA Statutes," and the State CEQA Guidelines (Title 14, California Code of Regulations (CCR), Division 6, Chapter 3, Section 15000 et seq.). The City's CEQA Manual applies to all public and private projects under the jurisdiction of the City of Laguna Niguel that constitute a "project" and therefore subject to CEQA review.

WASTEWATER

Federal

Federal Clean Water Act (33 USC Sections 1251, Et Seq.)

The Clean Water Act's (CWA) primary goals are to restore and maintain the chemical, physical, and biological integrity of the nation's waters and to make all surface waters fishable and swimmable. The CWA forms the basic national framework for the management of water quality and the control of pollution discharges; it provides the legal framework for several water quality regulations, including the National Pollutant Discharge Elimination System (NPDES), effluent limitations, water quality standards, pretreatment standards, antidegradation policy, nonpoint-source discharge programs, and wetlands protection. The USEPA has delegated the responsibility for administration of CWA portions to state and regional agencies. In California, the State Water Resources Control Board (SWRCB) administers the NPDES permitting program and is responsible for developing NPDES permitting requirements. The SWRCB works in coordination with the Regional Water Quality Control Boards (RWQCB) to preserve, protect, enhance, and restore water quality.

Local

Sewer System Management Plan for Orange County Sanitation District

The OCSD Sewer System Management Plan (SSMP) was updated in March 2025 to comply with the State Water Resources Control Board Order No. 2022-0103-DWQ, adopted December 6, 2022, and effective June 4, 2024, entitled Statewide General Waste Discharge Requirements for Sanitary Sewer Systems. The

SSMP provides a plan and schedule to properly manage, operate, and maintain the sanitary sewer system; to reduce and prevent spills; and to contain and mitigate spills that do occur.

Moulton Niguel Water District Sewer System Management Plan

The purpose of the MNWD SSMP, last updated in February 2019, is to provide a plan and schedule for implementing measures that prevent, effectively clean up, report sanitary sewer overflows, and to fund, manage, operate, and maintain MNWD's sewage collection system.

City of Laguna Niguel Municipal Code

Laguna Niguel Municipal Code Title 8, Division 4, *Sanitary Sewer Collection Systems*, contains procedures and criteria for the design, construction, and connection of sewer collection systems within the City.

City of Laguna Niguel CEQA Manual

The City of Laguna Niguel CEQA Manual provides the City and project applicants with local guidelines, procedures, requirements, and thresholds of significance for the environmental review process within the City of Laguna Niguel consistent with the California Environmental Quality Act (Public Resources Code [PRC] Section 21000 et seq.), referred to as "CEQA" or "CEQA Statutes," and the State CEQA Guidelines (Title 14, California Code of Regulations (CCR), Division 6, Chapter 3, Section 15000 et seq.). The City's CEQA Manual applies to all public and private projects under the jurisdiction of the City of Laguna Niguel that constitute a "project" and therefore subject to CEQA review.

STORMWATER AND FLOOD CONTROL FACILITIES

Refer to Section 4.9, *Hydrology and Water Quality*, for a discussion of the regulatory setting specific to stormwater.

City of Laguna Niguel CEQA Manual

The City of Laguna Niguel CEQA Manual provides the City and project applicants with local guidelines, procedures, requirements, and thresholds of significance for the environmental review process within the City of Laguna Niguel consistent with the California Environmental Quality Act (Public Resources Code [PRC] Section 21000 et seq.), referred to as "CEQA" or "CEQA Statutes," and the State CEQA Guidelines (Title 14, California Code of Regulations (CCR), Division 6, Chapter 3, Section 15000 et seq.). The City's CEQA Manual applies to all public and private projects under the jurisdiction of the City of Laguna Niguel that constitute a "project" and therefore subject to CEQA review.

SOLID WASTE

Federal

Resource Conservation and Recovery Act of 1976

The Resource Conservation and Recovery Act (RCRA) 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 of 1989 (AB 939)

The Integrated Solid Waste Management Act of 1989 (AB 939) (California Public Resources Code Section 40050 et seq.) established an integrated waste management system that focuses on source reduction, recycling, composting, and land disposal of waste. AB 939 requires every city and county in California to divert 50 percent of its waste from landfills whether through waste reduction, recycling, or other means. Compliance with AB 939 is measured in part by comparing solid waste disposal rates for a jurisdiction with target disposal rates. Actual rates at or below target rates are consistent with AB 939. AB 939 also requires California counties to show 15 years of disposal capacity for all jurisdictions in the county or show a plan to transform or divert its waste.

Assembly Bill 341

Assembly Bill 341 (AB 341), which took effect on July 1, 2012, was designed to help meet California's recycling goal of 75 percent by the year 2020. AB 341 made "…a legislative declaration that it is the policy goal of the state that not less than 75 percent of solid waste generated be source reduced, recycled, or composted by the year 2020…" AB 431 requires a business, defined to include a commercial or public entity that generates more than 4 cubic yards (CY) of commercial solid waste per week or a multifamily residential dwelling of 5 units or more to arrange for recycling services. Such business/residential development must: 1) source separate recyclable materials from the solid waste they are discarding, and either self-haul or arrange for separate collection of the recyclables; and 2) subscribe to a service that includes mixed waste processing that yields diversion results comparable to source separation.

Assembly Bill 1826

Assembly Bill 1826 (AB 1826) (California Public Resources Code Sections 42649.8 et seq.) requires recycling of organic matter by businesses generating such wastes in amounts over certain thresholds. AB 1826 also requires that local jurisdictions implement an organic waste recycling program to divert organic waste generated by businesses and multi-family developments that consist of five or more units.

Senate Bill 1383

Senate Bill 1383 (SB 1383) is a State law that aims to drastically reduce organic waste, conserve landfill space, and address climate change. SB 1383 requires the reduction of organic waste disposed of in landfills and expands on existing commercial recycling mandates of AB 341 and AB 1826. SB 1383 establishes methane emission reduction targets by reducing statewide organic waste disposal 75 percent by 2025 (based on 2014 levels) and recovering at least 20 percent of currently disposed surplus edible food by 2025. Certain food generators, identified by business category as Tier 1 or 2, are required to donate all surplus edible food to a non-profit.

Local

City of Laguna Niguel Municipal Code

The City of Laguna Niguel Municipal Code Title 6, Division 3, Article 2, *Solid Waste Management*, establishes regulations for solid waste collection of residential and non-residential uses, and construction/demolition waste. Municipal Code Title 6, Division 3, Article 6, *Construction and Demolition Waste Recycling Program*, establishes mandatory solid waste and recycling collection to comply with the requirements of AB 939. Municipal Code Title 6, Division 3, Article 7, *Organic Waste Disposal Reduction*, establishes regulations for organic waste disposal.

Municipal Code Title 5, Division 1, Article 10, *California Green Building Standards Code*, adopts the 2022 California Green Building Standards Code, also referred to as CALGreen. CALGreen includes regulations related to solid waste, including that newly constructed buildings and demolition projects divert at least 65 percent of the construction and demolition (C&D) materials generated at the project site.

City of Laguna Niguel CEQA Manual

The City of Laguna Niguel CEQA Manual provides the City and project applicants with local guidelines, procedures, requirements, and thresholds of significance for the environmental review process within the City of Laguna Niguel consistent with the California Environmental Quality Act (Public Resources Code [PRC] Section 21000 et seq.), referred to as "CEQA" or "CEQA Statutes," and the State CEQA Guidelines (Title 14, California Code of Regulations (CCR), Division 6, Chapter 3, Section 15000 et seq.). The City's CEQA Manual applies to all public and private projects under the jurisdiction of the City of Laguna Niguel that constitute a "project" and therefore subject to CEQA review.

ELECTRICAL POWER, NATURAL GAS, AND TELECOMMUNICATIONS

Federal

Federal Energy Regulation Commission

The Federal Energy Regulatory Commission duties include the regulation of the transmission and sale of electricity and natural gas in interstate commerce, licensing of hydroelectric projects, and oversight of related environmental matters.

State

California Public Utilities Commission

Established in 1911, the California Public Utilities Commission (CPUC) regulates privately owned electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies. The commission is organized into several advisory units, an enforcement division, and a strategic planning group. Southern California Edison, San Diego Gas & Electric, and Southern California Gas Company are regulated by the CPUC.

Local

City of Laguna Niguel CEQA Manual

The City of Laguna Niguel CEQA Manual provides the City and project applicants with local guidelines, procedures, requirements, and thresholds of significance for the environmental review process within the City of Laguna Niguel consistent with the California Environmental Quality Act (Public Resources Code [PRC] Section 21000 et seq.), referred to as "CEQA" or "CEQA Statutes," and the State CEQA Guidelines (Title 14, California Code of Regulations (CCR), Division 6, Chapter 3, Section 15000 et seq.). The City's CEQA Manual applies to all public and private projects under the jurisdiction of the City of Laguna Niguel that constitute a "project" and therefore subject to CEQA review.

4.16.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

CEQA Guidelines Appendix G contains the Initial Study Environmental Checklist, which includes questions related to utilities and service systems. The City relies on the questions included in Appendix G as the thresholds of significance for assessing impacts on utilities and service systems. A significant impact will occur if implementation of the proposed Project will:

- 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 (refer to Impact Statement USS-1);
- Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years (refer to Impact Statement USS-2;
- 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 (refer to Impact Statement USS-3);
- 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 (refer to Impact Statement USS-4); and/or
- Not comply with federal, state, and local management and reduction statutes and regulations related to solid waste (refer to Impact Statement USS-5).

4.16.5 IMPACTS AND MITIGATION MEASURES

USS-1: Would the Project 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?

Impact Analysis:

WATER

Based on the anticipated growth, as described in Section 2.0, *Project Description*, and summarized in Section 2.5.5, *General Plan Buildout Analysis*, subsequent development with buildout of the General Plan Update Land Use Element could yield a net growth above existing conditions of up to approximately 3,464 new dwelling units, 8,418 people, 1,099,496 square feet of new commercial building floor area, 557 hotel rooms, and 5,467 jobs. This growth is expected to result in an overall increase in demand for water supply, which could necessitate construction of future water supply infrastructure. This increased demand for water and potential new or expanded water infrastructure would be located within areas that are already developed and serviced by MNWD.

Buildout consistent with the General Plan Update Land Use Element would primarily accommodate new residential and non-residential development, generally within the Laguna Niguel Gateway Specific Plan (Gateway Specific Plan) (Community Profile Area 4, located in the northeast portion of the City), the Marketplace at Laguna Niguel and Chet Holifield Federal Building (CHFB) (Community Profile Area 1, located in the northwest portion of the City), and the Town Center (Community Profile Area 14, located in the central portion of the City). These areas are generally developed and are currently served by existing water infrastructure.

The potential for implementation of the Gateway Specific Plan to require or result in the construction of new water treatment facilities or expansion of existing facilities has been analyzed within the Laguna Niguel Gateway Specific Plan Program EIR (Gateway Specific Plan EIR) and determined to be less than significant. The General Plan Update would not provide for new or different land uses or development potential beyond what is currently allowed by the Gateway Specific Plan and analyzed in the Gateway Specific Plan EIR.

Subsequent development and redevelopment of the Marketplace at Laguna Niguel, CHFB, and the Town Center may require the replacement or expansion of existing infrastructure or new infrastructure to accommodate the specific uses and development within the site. The proposed General Plan Update Land Use Element also identifies two sites for a Hospitality Overlay with the potential to accommodate future high-quality hotel uses. One of the sites, located at the northwest corner of Golden Lantern and Camino Del Avion, is currently developed and has existing water supply infrastructure. Similar to the other areas anticipated for growth and redevelopment, expanded or modified water infrastructure may be necessary to serve subsequent development within the site. However, the proposed Hospitality Overlay site at the northwest corner of Pacific Island Drive and Crown Valley Parkway is currently undeveloped, and

therefore, would require new water infrastructure to connect to the City's existing water supply system and potentially expansion of existing off-site water infrastructure to serve subsequent development.

As stated under Impact USS-2, the total water demand associated with buildout of the General Plan Update Land Use Element would be within MNWD's capacity to serve the Project throughout the duration of the General Plan Update horizon; however, implementation of subsequent development projects consistent with the General Plan Update Land Use Element could require construction of new water infrastructure, such as upsizing of on-and off-site water lines where existing water lines are not sufficient to accommodate the increased water demand. These determinations would be made on a project-by-project basis, including site-specific fire flow tests and hydraulic pressure analyses as projects are developed. Since no specific development projects are proposed as part of the General Plan Update, except for the assumption that the CHFB will be demolished as part of a future redevelopment effort, the environmental effects from constructing or expanding facilities are unknown at this time. The demolition of CHFB would not require new or expanded water infrastructure. The City's Public Works Department coordinates with MNWD on water system upgrades and issues encroachment permits when improvements are needed. MNWD charges connection fees in order to maintain and improve water facilities and would continue to ensure adequate water distribution facilities are available to serve future development within the Planning Area.

Subsequent development would be reviewed on an individual basis to determine the water demand and potential need for new or expanded water infrastructure. Except for very small projects, an analysis of project demand compared to system capacity is required. Projects are required to demonstrate that sufficient system capacity is available to serve the project's demands and to demonstrate adequate fire flow and pressure zone capacity. Larger projects that are subject to CEQA would be required to comply with SB 610, as applicable. A Water Supply Assessment (WSA) would determine the availability of water to serve the project in addition to existing and planned future uses. Projects that would be required to prepare a WSA include residential development of more than 500 dwelling units, commercial development of more than 250,000 square feet of floor space, a retail center with more than 500,000 square feet of floor space, a hotel or motel having more than 500 rooms, a mixed-use project that includes one or more of the projects specified, or a project that will demand an amount of water equal to or greater than the amount of water required by 500 dwelling units. Water infrastructure construction activities associated with subsequent development would be subject to project-specific CEQA review and compliance with existing local, State, and federal laws, ordinances, and regulations, which would ensure impacts are reduced to less than significant levels. Following the implementation of existing regulations, impacts associated with the relocation or construction of new or expanded water facilities would be reduced to a less than significant level.

The General Plan Update includes policies intended to ensure the provision of water and that potential environmental impacts associated with the implementation of new or expanded infrastructure would be reduced. Proposed Public Facilities Element Policy PF-3.2 directs the City to collaborate with MNWD to ensure sufficient capacity and provision of potable water, recycled water, and wastewater services for new developments, and to ensure that these projects plan and implement necessary infrastructure improvements to support future water supply and wastewater demands. Policy PF-3.3 directs the City to

collaborate with applicable stakeholders in the placement and design of utility facilities for new developments to minimize their environmental, aesthetic, and safety impacts. Policy PF-3.4 ensures the city's water usage and wastewater treatment are compliant with regional and statewide regulations.

WASTEWATER

With respect to wastewater, subsequent development with buildout of the General Plan Update Land Use Element is expected to result in increased population and employment growth within the Planning Area, and thus, an overall increase in demand on the existing sewer system associated with increased sewage flows.

The majority of the Planning Area is urbanized and contains existing wastewater infrastructure. Buildout consistent with the General Plan Update Land Use Element would primarily accommodate new residential and non-residential development, generally within the Gateway Specific Plan the Marketplace at Laguna Niguel, CHFB and the Town Center These areas are generally developed and are currently served by existing wastewater infrastructure.

The potential for implementation of the Gateway Specific Plan to require or result in the construction of new wastewater treatment facilities or expansion of existing facilities has been analyzed within the Gateway Specific Plan EIR and determined to be less than significant. The General Plan Update would not provide for new or different land uses or development potential beyond what is currently allowed by the Gateway Specific Plan and analyzed in the Gateway Specific Plan EIR.

Subsequent development and redevelopment of the Marketplace at Laguna Niguel, CHFB, and the Town Center may require the replacement or expansion of existing wastewater infrastructure to accommodate specific uses and development within the site. The proposed General Plan Update Land Use Element also identifies two sites for a Hospitality Overlay with the potential to accommodate future high-quality hotel uses. One of the sites, located at Golden Lantern and Camino Del Avion, is currently developed and has existing wastewater infrastructure. Similar to the other areas anticipated for growth and redevelopment, expanded or modified water infrastructure may be necessary to serve subsequent development within the site. However, the proposed Hospitality Overlay site, located at Pacific Island Drive and Crown Valley Parkway, is currently undeveloped and would require new wastewater infrastructure to connect to the City's existing wastewater/sewer system.

As discussed above, both MNWD and SCWD provide wastewater service to the Planning Area. Wastewater is collected through a network of collectors, gravity lines, lift stations, and force mains owned and operated by MNWD and SCWD, then conveyed through OCSD's regional trunklines to local and regional facilities for treatment and disposal or recycling. Currently, wastewater produced within the City is treated at the RTP, Treatment Plant 3A, and JBLTP. The RTP has a design capacity of 12 MGD of liquid waste and is currently treating an average of 7.3 MGD. The JBLTP has a design capacity of 13 MGD and is currently treating an average of 6 MGD. Treatment Plant 3A has a design capacity of 6 MGD and is currently treating an average of 1.8 MGD. Combined, these three facilities have a combined design capacity of 31 MGD and currently treat an average of 15.1 MGD. Subsequent development with buildout of the General Plan

Update Land Use Element is anticipated to increase sewer demands by 0.59 MGD.[23] Thus, the facilities have the capacity to serve the potential growth identified within the General Plan Update. MNWD and SCWD continue to monitor and adjust projected flows and would expand treatment capacity as needed based on updated growth projections within its service area.

The General Plan Update does not include specific development proposals; therefore, the environmental effects of future wastewater collection systems are unknown at this time. At the time subsequent projects are proposed, they would be required to ensure sufficient local and trunk sewer capacity exists to serve the specific development. Pursuant to Laguna Niguel Municipal Code Title 8, Division 4, *Sanitary Sewer Collection Systems*, all sewer collection systems within the City shall be designed, constructed, and connected consistent with City standards. Similar to water, except for very small projects, an analysis of project demand compared to system capacity is required. Projects are required to demonstrate that sufficient system capacity is available to serve the project's demands. In addition, MNWD and SCWD charge connection fees in order to maintain and improve wastewater facilities.

Wastewater infrastructure construction activities associated with subsequent development would be subject to project-specific CEQA review and compliance with existing local, State, and federal laws, ordinances, and regulations, which would ensure impacts are reduced to less than significant levels. Following the implementation of existing regulations, impacts associated with the relocation or construction of new or expanded wastewater facilities would be reduced to a less than significant level.

In addition, the General Plan Update includes policies to ensure adequate wastewater services and facilities are available, and that potential environmental impacts associated with the implementation of new or expanded infrastructure would be reduced. Proposed Public Facilities Element Policy PF-3.2 directs the City to collaborate with MNWD to ensure sufficient capacity and provision of potable water, recycled water, and wastewater services for new developments, and to ensure that these projects plan and implement necessary infrastructure improvements to support future water supply and wastewater demands. Policy PF-3.3 directs the City to collaborate with applicable stakeholders in the placement and design of utility facilities for new developments to minimize their environmental, aesthetic, and safety impacts. Policy PF-3.4 ensures the city's water usage and wastewater treatment are compliant with regional and statewide regulations.

STORMWATER

The Planning Area is generally developed and served by existing stormwater drainage and conveyance facilities. As described above, the Planning Area has a storm drain system composed of catch basins and storm drains, which conveys stormwater runoff through roadways and underground infrastructure. The City's Public Works Department and OCFCD work together to monitor and maintain their respective storm drainage infrastructure to ensure the system functions effectively. Most storm flows would be conveyed in the City's roadways, to City-owned catch basins and storm drain systems. From there, the flows are discharged into OCFCD channels and are ultimately discharged into the Pacific Ocean.

[23] Fuscoe Engineering, Inc. July 7, 2025. *City of Laguna Niguel General Plan Update, Proposed Conditions Infrastructure Report for Water, Sewer, Storm Drainage, and Water Quality.*

The General Plan Update Land Use Element would primarily accommodate new development projects within specific areas of the City, including the Gateway Specific Plan, the Opportunity Areas, and the Hospitality Overlay sites. The Gateway Specific Plan, Opportunity areas, and the Hospitality Overlay site located at Golden Lantern and Camino Del Avion are generally developed with impervious surfaces and drain to existing stormwater infrastructure. Redevelopment projects within these areas are not expected to substantially alter post-construction drainage patterns of the site or result in an increase in impervious surfaces.

Since the Hospitality Overlay site located at Pacific Island Drive and Crown Valley Parkway is undeveloped, future redevelopment projects within that area would be expected to alter post-construction drainage patterns by increasing the amount of impervious surface at the site relative to existing conditions. This could substantially increase the rate or amount of surface runoff from the site. Future development of the site would require site-specific design of stormwater infrastructure that is anticipated to connect to the City's existing stormwater system and would be required to be consistent with the Regional MS4 Permit and Laguna Niguel Code Section 6-3-405; refer to Section 4.9, *Hydrology and Water Quality*.

The potential for implementation of the Gateway Specific Plan to create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems has been analyzed within the Gateway Specific Plan EIR and determined to be less than significant. The General Plan Update would not provide for new or different land uses or development potential beyond what is currently allowed by the Gateway Specific Plan and analyzed in the Gateway Specific Plan EIR.

Although subsequent development has the potential to slightly increase impervious areas within the Planning Area, the majority of development activities under buildout of the General Plan Update Land Use Element would consist of infill and redevelopment on currently urbanized sites. Therefore, with the exception of the Hospitality Overlay site located at Pacific Island Drive and Crown Valley Parkway, implementation of the Project is not anticipated to substantially increase the rate or amount of surface runoff. The City requires that new development projects and site alterations to existing project sites require preparation of a Hydrology and Hydraulics study and a Preliminary Water Quality Management Plan (PWQMP) by a qualified engineer. A project would not be allowed to increase the flow or velocity of runoff in the developed condition compared to the pre-development condition.

Required stormwater drainage and conveyance facilities would be evaluated at the project-level in association with subsequent development projects. However, the facilities would be primarily provided on sites with land use designations that allow such uses and the environmental impacts of constructing and operating the facilities would likely be similar to those associated with new development, redevelopment, and infrastructure projects under the General Plan Update. As subsequent development and infrastructure projects are considered by the City, each project would be evaluated for conformance with the General Plan, Municipal Code, and other applicable regulations. Subsequent development and infrastructure projects would also be analyzed for potential environmental impacts, consistent with CEQA requirements. As such, impacts would be less than significant.

The General Plan Update policies would further ensure that there is adequate stormwater drainage and flood control infrastructure to serve subsequent development and ensure that future drainage and flood

control infrastructure projects do not result in adverse environmental impacts. The proposed Public Safety Element Policy PS-3.3 directs the City to regularly assess and maintain the local storm drainage infrastructure to identify the needed improvements and ensure the system is functioning properly. Policy PS-3.5 ensures development projects comply with state, regional, and local flood control and stormwater runoff requirements and standards.

ELECTRICAL, NATURAL GAS, AND TELECOMMUNICATIONS

The Planning Area is within the service areas of SCE, SDG&E, SoCalGas, and various telecommunication providers. As described above, electrical service in the Planning Area is provided by SCE, which provides electricity service to the western portion of the Planning Area, and SDG&E, which provides electricity service to the eastern portion of the Planning Area. Local electrical infrastructure is generally undergrounded within the City and connects to regional transmission lines. Overhead transmission lines include smaller voltage overhead transmission lines (less than 110 kV) that cross Alicia Parkway in the northwestern portion of the City to connect to the SCE substation north of Avila Road, and overhead transmission lines (above 110 kV) that run along the rail line in the northeastern portion of the City. SoCalGas provides natural gas services for the Planning Area. A network of local distribution mains and service lines connect to Gas Transmission Pipelines and High Pressure (greater than 60 pounds per square inch) Gas Distribution Mains owned and operated by SoCalGas, which are located along the eastern boundary of the City. Additionally, the Planning Area is served by multiple telecommunications providers. Telecommunication providers serving the Planning Area include, but not limited to, AT&T and Cox Communications.

Subsequent development associated with buildout of the General Plan Update Land Use Element would require increased electrical, natural gas, and telecommunications facilities and services, potentially resulting in the new construction or relocation of facilities through 2045. The environmental effects of future expansions of electrical, natural gas, and telecommunication facilities would be evaluated with each development proposal and would require a separate environmental review related to the construction and operation of new electrical, natural gas, and telecommunications infrastructure. However, the facilities would be primarily provided on sites with land use designations that allow such uses and the environmental impacts of constructing and operating the facilities would likely be similar to those associated with new development, redevelopment, and infrastructure projects under the General Plan Update. Subsequent projects under the General Plan Update would have to coordinate with each utility provider to establish service, provide any necessary extensions of facilities, and comply with regulations in existence at that time. As subsequent development and infrastructure projects are considered by the City, each project would be evaluated for conformance with the General Plan, Municipal Code, and other applicable regulations. Subsequent development and infrastructure projects would also be analyzed for potential environmental impacts, consistent with CEQA requirements. As such, adherence to the established regulatory environment would reduce impacts associated with the relocation or construction of new or expanded electrical, natural gas, and telecommunications facilities to a less than significant level.

Future facilities would be subject to General Plan Update policies intended to ensure adequate provision of services and facilities. Proposed Public Facilities Element Policy PF-4.1 directs the City to collaborate Southern California Edison, San Diego Gas and Electric, Southern California Gas Company, and other applicable agencies to support a sustainable and resilient energy future for the Planning Area. Policy PF-4.2 directs the City to collaborate with energy utility providers to ensure sufficient capacity and service availability for new developments and to ensure that these projects plan and implement necessary infrastructure improvements to support their future energy demands. Policy PF-4.3 directs the City to collaborate with applicable stakeholders in the placement and design of utility facilities for new developments to minimize their environmental, aesthetic, and safety impacts. Policy PF-4.4 ensures City infrastructure, facilities, and equipment energy usage complies with regional and statewide regulations.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

PUBLIC FACILITIES ELEMENT

Policy PF-3.1: **Water Supply and Wastewater Collaboration.** Collaborate with Moulton Niguel Water District and other applicable agencies to support a sustainable and resilient water supply and wastewater future for Laguna Niguel by ensuring:

- A safe and reliable water supply for both drinking and fire protection.
- Upgrades and improvements to the water and wastewater infrastructure, as needed.
- Sustainable water supplies and adequate system capacity.
- Proactive planning and mitigation of vulnerabilities to natural disasters and climate change impacts.
- Implementation of effective water conservation and recycling strategies.
- Maintenance of sufficient water capacity and pressure for fire protection.
- Adoption of innovative technologies to minimize costs, inefficiencies, and excessive water use.
- Compliance with local, regional, and state regulations.
- Pursuit of alternative funding sources for infrastructure improvements and renewable energy initiatives, including grants and public-private partnerships.
- Wastewater systems designed to minimize inflow, infiltration, treatment volume, prevent contamination, maximize efficiency, and reduce costs and greenhouse gas emissions.
- Public education initiatives promoting:
    - Water conservation and drought tolerant landscaping.
    - The use of reclaimed/recycled water, as available.
    - Maintenance of a safe and clean wastewater system by limiting the amount of oils, pesticides, and toxic chemicals entering the sewer system.

Policy PF-3.2: **Development Review (Water and Wastewater).** Collaborate with Moulton Niguel Water District to ensure sufficient capacity and provision of potable water, recycled water, and wastewater services for new developments. Additionally, ensure that these projects plan and implement necessary infrastructure improvements to support future water supply and wastewater demands.

Policy PF-3.3: **Utility Coordination (Water and Wastewater).** Collaborate with applicable stakeholders in the placement and design of utility facilities for new developments to minimize their environmental, aesthetic, and safety impacts.

Policy PF-3.4: **Compliance with State Legislation.** Ensure City water usage and wastewater treatment compliance with regional and statewide regulations.

Policy PF-4.1: **Utility Service Collaboration.** Collaborate with Southern California Edison, San Diego Gas and Electric, Southern California Gas Company, and other applicable agencies to support a sustainable and resilient energy future for Laguna Niguel by ensuring:

- A safe and reliable supply of electricity and natural gas.
- Upgrades and improvements to the utility infrastructure, as needed.
- Sustainable electricity and natural gas supplies and adequate system capacity.
- Proactive planning and mitigation of vulnerabilities to natural disasters and climate change impacts.
- Compliance with local, regional, and state regulations.
- Pursuit of alternative funding sources for water supply and wastewater infrastructure improvements, including grants and public-private partnerships.
- Implementation of innovative technologies and solutions to improve energy efficiency, conservation, grid reliability, and reduce energy costs.
- Public education initiatives promoting:
    - Energy conservation and renewable energy options.
    - Availability of cost-saving initiatives such as appliance and equipment rebates and incentives.

Policy PF-4.2: **Development Review (Energy Utilities).** Collaborate with energy utility providers to ensure sufficient capacity and service availability for new developments. Additionally, ensure that these projects plan and implement necessary infrastructure improvements to support their future energy demands.

Policy PF-4.3: **Utility Coordination (Energy Utilities).** Collaborate with applicable stakeholders in the placement and design of utility facilities for new developments to minimize their environmental, aesthetic, and safety impacts.

Policy PF-4.4: **Energy Compliance with State Legislation.** Ensure City infrastructure, facilities, and equipment energy usage complies with regional and statewide regulations.

PUBLIC SAFETY ELEMENT

Policy PS-3.3: **Storm Drainage Infrastructure.** Regularly assess and maintain the local storm drainage infrastructure to identify needed improvements and ensure the system is functioning properly.

Policy PS-3.5: **Flood Control and Stormwater Management.** Ensure development projects comply with state, regional, and local flood control and stormwater runoff requirements and standards.

USS-2: Would the Project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

Impact Analysis: While no specific development projects are proposed as part of the General Plan Update, except for the assumption that the CHFB will be demolished as part of a future redevelopment effort, subsequent development with buildout of the General Plan Update Land Use Element could yield a net growth above existing conditions of up to approximately 3,464 new dwelling units, 8,418 people, 1,099,496 square feet of new commercial building floor area, 557 hotel rooms, and 5,467 jobs. As such, the Project would result in an increase in the demand for additional water supplies.

As discussed above, MNWD provides water service to the Planning Area. MNWD's water supply sources include imported potable water and locally sourced recycled water. MNWD's 2020 UWMP concluded that MNWD will be able to meet projected future water demands under normal, dry, and multiple dry water years through 2045. The 2020 UWMP provides projected water demands out to 2045 based on Laguna Niguel's existing General Plan land uses as well as the General Plans of each city within the MNWD service area. The MNWD UWMP indicates a projected potable water demand within its service area of 24,992 AF in 2045 compared to 23,083 AF of actual usage in 2020 (difference of 1,909 AFY) and a projected recycled water demand of 6,288 AF in 2045 compared to 5,013 AF of actual usage in 2020 (difference of 1,275 AFY). Overall, total potable and non-potable water demand in the service area is projected to increase from 28,096 in 2020 to 31,280 between 2020 and 2045 (difference of 3,184).

Buildout of the General Plan Update Land Use Element could result in increased population growth in the Planning Area and a corresponding increase in the demand for additional water supplies, which have not been accounted for in the 2020 UWMP. The General Plan Update would result in a projected increase in water demand of approximately 831 AFY over existing conditions.[24]

The projected increase in water demand associated with the buildout of the General Plan Update Land Use Element of approximately 831 AFY would be within the 2020 UWMP's projected increase in water demand of 1,909 AFY between 2020 to 2045. As the 2020 UWMP concluded that MNWD will be able to meet projected future water demands, the increase in water demand falls within the projected water supply identified in the 2020 UWMP. Further, the UWMP is required to be updated every five years and the future UWMP update will account for the additional residential and non-residential growth

[24] Fuscoe Engineering, Inc. July 7, 2025. *City of Laguna Niguel General Plan Update, Proposed Conditions Infrastructure Report for Water, Sewer, Storm Drainage, and Water Quality.*

opportunities provided by Project implementation and would identify short-term and long-term water demand management measures to meet growing water demands during normal, dry, and multiple dry water years. Additionally, MNWD has adopted a WSCP that provides actions for managing water supply and demands during a declared water shortage to better ensure there will be an adequate water supply in the future. As such, it is expected that residents and businesses in the Planning Area will have a sufficient water supply throughout the duration of the General Plan Update horizon.

For subsequent qualifying projects, a WSA would be required pursuant to SB 610 for inclusion in the project's CEQA analysis. The WSA discerns whether the expected demand from the project has been accounted for in the forecasted demands in the most recent UWMP. A Written Verification of Supply per SB 221 is prepared as a condition of approval for a subdivision map of 500 dwelling units or more. Considered a fail-safe mechanism to provide sufficient evidence that adequate water supplies are available before construction begins, the Written Verification of Supply is also prepared/adopted by the water supplier and approved by the land use authority. Depending on the project, one or both of these analyses may be required. Development proposals that may not warrant a water supply assessment and/or Written Verification of Supply but meet the definition of a project under CEQA would still require an analysis of sufficient water supplies in the CEQA process. Through implementation of existing federal, State, and local regulations, the environmental impacts related to water supplies would be less than significant.

Additionally, the General Plan Update includes policies to further ensure that adequate water supply, treatment, and distribution capacity is available to meet the needs of the proposed development without negatively impacting the existing community. Proposed Public Facilities Element Policy PF-3.1 directs the City to collaborate with MNWD and other applicable agencies to support a sustainable and resilient water supply and wastewater future for the Planning Area. Policy PF-3.2 directs the City to collaborate with MNWD to ensure sufficient capacity and provision of potable water, recycled water, and wastewater services for new developments. Additionally, ensure that these projects plan and implement necessary infrastructure improvements to support future water supply and wastewater demands. Policy PF-3.3 directs the City to collaborate with applicable stakeholders in the placement and design of utility facilities for new developments to minimize their environmental, aesthetic, and safety impacts. Policy PF-3.4 ensures the City's water usage and wastewater treatment are compliant with regional and statewide regulations.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

PUBLIC FACILITIES ELEMENT

Policy PF-3.1: **Water Supply and Wastewater Collaboration.** Collaborate with Moulton Niguel Water District and other applicable agencies to support a sustainable and resilient water supply and wastewater future for Laguna Niguel by ensuring:

- A safe and reliable water supply for both drinking and fire protection.
- Upgrades and improvements to the water and wastewater infrastructure, as needed.
- Sustainable water supplies and adequate system capacity.
- Proactive planning and mitigation of vulnerabilities to natural disasters and climate change impacts.
- Implementation of effective water conservation and recycling strategies.
- Maintenance of sufficient water capacity and pressure for fire protection.
- Adoption of innovative technologies to minimize costs, inefficiencies, and excessive water use.
- Compliance with local, regional, and state regulations.
- Pursuit of alternative funding sources for infrastructure improvements and renewable energy initiatives, including grants and public-private partnerships.
- Wastewater systems designed to minimize inflow, infiltration, treatment volume, prevent contamination, maximize efficiency, and reduce costs and greenhouse gas emissions.
- Public education initiatives promoting:
    - Water conservation and drought tolerant landscaping.
    - The use of reclaimed/recycled water, as available.
    - Maintenance of a safe and clean wastewater system by limiting the amount of oils, pesticides, and toxic chemicals entering the sewer system.

Policy PF-3.2: **Development Review (Water and Wastewater).** Collaborate with Moulton Niguel Water District to ensure sufficient capacity and provision of potable water, recycled water, and wastewater services for new developments. Additionally, ensure that these projects plan and implement necessary infrastructure improvements to support future water supply and wastewater demands.

Policy PF-3.3: **Utility Coordination (Water and Wastewater).** Collaborate with applicable stakeholders in the placement and design of utility facilities for new developments to minimize their environmental, aesthetic, and safety impacts.

Policy PF-3.4: **Compliance with State Legislation.** Ensure City water usage and wastewater treatment compliance with regional and statewide regulations.

USS-3: Would the project 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?

Impact Analysis: As discussed above, wastewater is collected through a network of collectors, gravity lines, lift stations, and force mains owned and operated by MNWD and SCWD, then conveyed through OCSD's regional trunklines to local and regional facilities for treatment and disposal or recycling. Currently, wastewater produced within the City is treated at the RTP, Treatment Plant 3A, and JBLTP. These three

facilities have a combined design capacity of 31 MGD and currently treat an average of 15.1 MGD, resulting in a remaining capacity of 15.9 MGD.

Subsequent development with buildout of the General Plan Update Land Use Element is anticipated to increase sewer demands by 0.59 MGD.[25] Thus, the existing facilities have the capacity to serve the potential growth identified within the General Plan Update. Further, subsequent projects would be required to demonstrate that sufficient system capacity is available to serve the project's demands. MNWD and SCWD charge connection fees in order to maintain and improve wastewater facilities and would continue to monitor and adjust projected flows and would expand treatment capacity as needed based on updated growth projections within its service area. Thus, impacts would be less than significant.

In addition, the General Plan Update includes policies to ensure adequate wastewater facilities capacity to serve the Project's projected demand, further reducing potential impacts. Proposed Public Facilities Element Policy PF-3.1 directs the City to collaborate with MNWD and other applicable agencies to support a sustainable and resilient water supply and wastewater future for the Planning Area. Policy PF-3.2 directs the City to collaborate with MNWD to ensure sufficient capacity and provision of potable water, recycled water, and wastewater services for new developments and to ensure that these projects plan and implement necessary infrastructure improvements to support future water supply and wastewater demands. Policy PF-3.3 directs the City to collaborate with applicable stakeholders in the placement and design of utility facilities for new developments to minimize their environmental, aesthetic, and safety impacts. Policy PF-3.4 ensures the city's water usage and wastewater treatment are compliant with regional and statewide regulations. Policy PF-4.1 directs the City to collaborate Southern California Edison, San Diego Gas and Electric, Southern California Gas Company, and other applicable agencies to support a sustainable and resilient energy future for the Planning Area.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

PUBLIC FACILITIES ELEMENT

Policy PF-3.1: **Water Supply and Wastewater Collaboration.** Collaborate with Moulton Niguel Water District and other applicable agencies to support a sustainable and resilient water supply and wastewater future for Laguna Niguel by ensuring:

- A safe and reliable water supply for both drinking and fire protection.
- Upgrades and improvements to the water and wastewater infrastructure, as needed.
- Sustainable water supplies and adequate system capacity.
- Proactive planning and mitigation of vulnerabilities to natural disasters and climate change impacts.

[25] Fuscoe Engineering, Inc. July 7, 2025. *City of Laguna Niguel General Plan Update, Proposed Conditions Infrastructure Report for Water, Sewer, Storm Drainage, and Water Quality.*

- Implementation of effective water conservation and recycling strategies.
- Maintenance of sufficient water capacity and pressure for fire protection.
- Adoption of innovative technologies to minimize costs, inefficiencies, and excessive water use.
- Compliance with local, regional, and state regulations.
- Pursuit of alternative funding sources for infrastructure improvements and renewable energy initiatives, including grants and public-private partnerships.
- Wastewater systems designed to minimize inflow, infiltration, treatment volume, prevent contamination, maximize efficiency, and reduce costs and greenhouse gas emissions.
- Public education initiatives promoting:
    - Water conservation and drought tolerant landscaping.
    - The use of reclaimed/recycled water, as available.
    - Maintenance of a safe and clean wastewater system by limiting the amount of oils, pesticides, and toxic chemicals entering the sewer system.

Policy PF-3.2: **Development Review (Water and Wastewater).** Collaborate with Moulton Niguel Water District to ensure sufficient capacity and provision of potable water, recycled water, and wastewater services for new developments. Additionally, ensure that these projects plan and implement necessary infrastructure improvements to support future water supply and wastewater demands.

Policy PF-3.3: **Utility Coordination (Water and Wastewater).** Collaborate with applicable stakeholders in the placement and design of utility facilities for new developments to minimize their environmental, aesthetic, and safety impacts.

Policy PF-3.4: **Compliance with State Legislation.** Ensure City water usage and wastewater treatment compliance with regional and statewide regulations.

Policy PF-4.1: **Utility Service Collaboration.** Collaborate with Southern California Edison, San Diego Gas and Electric, Southern California Gas Company, and other applicable agencies to support a sustainable and resilient energy future for Laguna Niguel by ensuring:

- A safe and reliable supply of electricity and natural gas.
- Upgrades and improvements to the utility infrastructure, as needed.
- Sustainable electricity and natural gas supplies and adequate system capacity.
- Proactive planning and mitigation of vulnerabilities to natural disasters and climate change impacts.
- Compliance with local, regional, and state regulations.
- Pursuit of alternative funding sources for water supply and wastewater infrastructure improvements, including grants and public-private partnerships.
- Implementation of innovative technologies and solutions to improve energy efficiency, conservation, grid reliability, and reduce energy costs.
- Public education initiatives promoting:

- Energy conservation and renewable energy options.
- Availability of cost-saving initiatives such as appliance and equipment rebates and incentives.

USS-4: Would the Project 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?

Impact Analysis: Subsequent development with buildout of the General Plan Update Land Use Element could yield a net growth above existing conditions of up to approximately 3,464 new dwelling units, 8,418 people, 1,099,496 square feet of new commercial building floor area, 557 hotel rooms, and 5,467 jobs. As shown in Table 4.16-6, the City has achieved a disposal rate of 4.2 pounds per day (PPD) per resident in 2023. Assuming the 2023 disposal rate of 4.2 PPD remains constant throughout the life of the General Plan Update, the new growth under 2045 buildout (8,418 persons) would result in a net increase of approximately 35,355.6 PPD of solid waste over existing conditions, which equals approximately 17.7 net tons per day or 6,452.4 net tons of solid waste per year.

Laguna Niguel's per capita disposal target rate in 2023 was 6.6 pounds/person/day and 29.8 pounds/employee/day; hence, the City's per capita disposal rate in 2023 of 4.2 pounds/person/day and 17 pounds/employee/day successfully satisfied the target reduced disposal rate. The City's projected increase in solid waste generation associated with buildout of the General Plan Update Land Use Element is within the permitted capacity of the Prima Deshecha Landfill, where the vast majority of waste from the City was disposed of in 2024. Prima Deshecha Landfill has a remaining capacity of approximately 128,800,000 cubic yards as of 2023, a maximum permitted throughput of 4,000 TPD, and has a projected capacity to serve residents and businesses until approximately 2102, well beyond the planning horizon of the General Plan Update. In addition, the City disposes of solid waste to a number of other landfills. Conservatively assuming the Prima Deshecha Landfill is unable to accept solid waste, the Frank R. Bowerman Landfill would have adequate capacity to accommodate the City's projected solid waste generation through the planning horizon. Further, it is more likely that future solid waste would be distributed to the other landfills serving the City. Therefore, the General Plan Update would not 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 and impacts would be less than significant.

Chet Holifield Federal Building Demolition

Demolition of the CHFB would generate C&D materials requiring disposal. According to CalEEMod estimates, demolition of the CHFB is estimated to generate 79,686.4 tons of waste requiring disposal.[26] In accordance with State law and the Laguna Niguel Municipal Code, CHFB demolition activities would be required to satisfy C&D debris diversion requirements by recycling, reuse, and/or salvage; refer also to Section 4.8, *Hazards and Hazardous Materials*. As such, through compliance with applicable regulations, including those related to recycling and solid waste diversion, the amount of C&D requiring disposal at

[26] Estimates were calculated using the CalEEMod computer program, which is designed to model emissions for land use development projects based on typical construction requirements; refer to Appendix B, *Air Quality, Energy and Greenhouse Gas Emissions Modeling Data.*

landfills would be significantly less than the 79,686.4 tons estimated above. However, even with the conservative assumption that no recycling and solid waste diversion would occur, the Prima Deshecha Landfill, Frank R. Bowerman Landfill, or a number of other landfills serving the City would have capacity to accommodate the estimated C&D materials requiring disposal. Since demolition of the CHFB would be consistent with local solid waste infrastructure capacity and solid waste reduction statutes and regulations, impacts would be less than significant.

The General Plan Update includes policies to responsibly manage and reduce solid waste further ensuring compliance with solid waste reduction goals and regulations related to solid waste. Proposed Public Facilities Element Policy PF-5.1 ensures compliance with local, regional, and state regulations on waste diversion, source reduction, recycling, and composting through regular monitoring and updates to City practices. Policy PF-5.2 directs the City to collaborate with service provider(s) to ensure the timely and efficient collection of garbage, organic waste, and recycling. Policy PF-5.4 directs the City to collaborate with service provider(s) to collect and compost green waste, including landscaping debris and other sources of organic waste, to distribute for use in parks, medians, and other municipal areas. Policy PF-5.5 directs the City to collaborate with service provider(s) to periodically evaluate collection, recycling, and disposal fees to ensure compliance with state and federal requirements, align with community expectations, and reflect cost efficiencies or increases for services.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

PUBLIC FACILITIES ELEMENT

Policy PF-5.1: **Waste Management and Recycling Compliance.** Ensure compliance with local, regional, and state regulations on waste diversion, source reduction, recycling, and composting through regular monitoring and updates to City practices.

Policy PF-5.2: **Trash Collection and Recycling Services.** Collaborate with service provider(s) to ensure the timely and efficient collection of garbage, organic waste, and recycling.

Policy PF-5.4: **Organic Waste.** Collaborate with service provider(s) to collect and compost green waste, including landscaping debris and other sources of organic waste, to distribute for use in parks, medians, and other municipal areas.

Policy PF-5.5: **Fees and Funding.** Collaborate with service provider(s) to periodically evaluate collection, recycling, and disposal fees to ensure compliance with state and federal requirements, align with community expectations, and reflect cost efficiencies or increases for services.

USS-5: Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Impact Analysis: Laguna Niguel Municipal Code Title 6, Division 3, Article 6, *Construction and Demolition Waste Recycling Program*, establishes mandatory solid waste and recycling collection to comply with the requirements of AB 939. Municipal Code Title 6, Division 3, Article 2, *Solid Waste Management*, establishes regulations for solid waste collection of residential and non-residential uses, and construction/demolition waste. Municipal Code Title 6, Division 3, Article 7, *Organic Waste Disposal Reduction*, establishes regulations for organic waste disposal. As permitted by AB 939, the City authorizes a private solid waste franchisee (i.e., CR&R Environmental Services) to handle the city's solid waste and requires CR&R Environmental Services to cooperate in the preparation of solid waste disposal characterization studies and the preparation of waste stream audits. CR&R Environmental Services and the City work together to submit information to meet the reporting requirements of AB 939, local diversion requirements, or any other law or regulation, to reach the solid waste and recycling goals mandated by AB 939. Through compliance with existing regulations, subsequent development implemented by the General Plan Update would be required to comply with management and reduction statutes and regulations related to solid waste, and impacts would be less than significant.

The General Plan Update includes policies to responsibly manage and reduce solid waste further ensuring compliance with solid waste reduction goals and regulations related to solid waste; refer to the General Plan Update goals and policies cited above in USS-4.

Chet Holifield Federal Building Demolition

Demolition of the CHFB would generate C&D materials requiring disposal. In accordance with State law and the Laguna Niguel Municipal Code, CHFB demolition activities would be required to satisfy C&D debris diversion requirements by recycling, reuse, and/or salvage; refer also to Section 4.8, *Hazards and Hazardous Materials*. As such, through compliance with applicable regulations, including those related to recycling and solid waste diversion, demolition of the CHFB would be consistent with solid waste reduction statutes and regulations, and impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan Update goals and policies cited above in USS-4.

4.16.6 CUMULATIVE IMPACTS

Section 3.0, *Basis of Cumulative Analysis*, identifies projected regional growth having the potential to interact with the proposed Project to the extent that a significant cumulative effect may occur. The geographic setting for utilities and service systems would include cumulative projects within the same service areas specific to water, wastewater conveyance and treatment, and solid waste, as the Planning Area.

Would the project, combined with other related cumulative projects, require or result in the relocation or construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects?

Impact Analysis:

WATER

Subsequent development with buildout of the General Plan Update Land Use Element could result in new development and intensification of existing development within the Planning Area. This growth is expected to result in an overall increase in demand for water supply, which could necessitate construction of future water supply infrastructure. This increased demand for water and potential new or expanded water infrastructure would be located within areas that are already developed and serviced by MNWD.

Subsequent development would be reviewed on an individual basis to determine the water demand and potential need for new or expanded water infrastructure. Water infrastructure construction activities associated with subsequent development would be subject to project-specific CEQA review and compliance with existing local, State, and federal laws, ordinances, and regulations, which would ensure impacts are reduced to less than significant levels. Following the implementation of existing regulations, impacts associated with the relocation or construction of new or expanded water facilities would be reduced to a less than significant level.

Cumulative water impacts are analyzed in terms of impacts to MNWD's water supplies and facilities. Related cumulative projects could contribute to an overall increase in demand for water services within MNWD service area, which could necessitate construction of future water supply infrastructure. Similar to the Project, related cumulative development projects would be located within areas that are generally developed and serviced by MNWD. As with the Project, related cumulative projects could require construction of new water infrastructure, such as upsizing of on-and off-site water lines where existing water lines are not sufficient to accommodate the increased water demand. These determinations would be made on a project-by-project basis. Related cumulative projects would also be required to pay applicable MNWD water service fees to ensure water facilities can be constructed/expanded, if necessary. Water infrastructure construction activities associated with related cumulative projects would be subject to project-specific CEQA review and compliance with existing local, State, and federal laws, ordinances, and regulations. Thus, the General Plan Update's incremental effects associated with the potential to require or result in the relocation or construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects would not be cumulatively considerable.

WASTEWATER

Subsequent development with buildout of the General Plan Update Land Use Element is expected to result in increased population and employment growth within the Planning Area, and thus, an overall increase in demand on the existing sewer system associated with increased sewage flows, which could necessitate construction of future wastewater infrastructure. This increased demand for potential new or expanded wastewater infrastructure would be located within areas that are already developed and serviced by MNWD and SCWD. At the time subsequent projects are proposed, they would be required to ensure

sufficient local and trunk sewer capacity exists to serve the specific development. Wastewater infrastructure construction activities associated with subsequent development would be subject to project-specific CEQA review and compliance with existing local, State, and federal laws, ordinances, and regulations, which would ensure impacts are reduced to less than significant levels. Following the implementation of existing regulations, impacts associated with the relocation or construction of new or expanded wastewater facilities would be reduced to a less than significant level.

Cumulative water impacts are analyzed in terms of impacts to MNWD and SCWD's facilities. Related cumulative projects could contribute to an overall increase in demand on the existing sewer system and wastewater treatment facilities in the MNWD and SCWD service areas, which could necessitate construction of future wastewater infrastructure. Similar to with Project, related cumulative development projects would be located within areas that are generally developed and serviced by MNWD and SCWD. As with the Project, cumulative projects would be served by the RTP, Treatment Plant 3A, and JBLTP. As discussed above, these three facilities have a combined design capacity of 31 MGD and currently treat an average of 15.1 MGD. Subsequent development with buildout of the General Plan Update Land Use Element is anticipated to increase sewer demands by 0.59 MGD, which would still allow for additional capacity to serve future related cumulative projects.

As with the Project, related cumulative projects could require construction of new wastewater infrastructure, such as upsizing of on-and off-site sewer lines where existing sewer lines are not sufficient to accommodate the increased sewage flows. These determinations would be made on a project-by-project basis. Related cumulative projects would also be required to pay applicable MNWD and SCWD connection fees to ensure wastewater facilities can be constructed/expanded, if necessary. Wastewater infrastructure construction activities associated with related cumulative projects would be subject to project-specific CEQA review and compliance with existing local, State, and federal laws, ordinances, and regulations. Thus, the General Plan Update's incremental effects associated with the potential to require or result in the relocation or construction of new or expanded wastewater facilities, the construction or relocation of which could cause significant environmental effects would not be cumulatively considerable.

STORMWATER

The General Plan Update Land Use Element would primarily accommodate new development projects within specific areas of the City. Although subsequent development has the potential to slightly increase impervious areas within the Planning Area, the majority of development activities under buildout of the General Plan Update Land Use Element would consist of infill and redevelopment on currently urbanized sites. Therefore, implementation of the Project is not anticipated to substantially increase the rate or amount of surface runoff. As subsequent development and infrastructure projects are considered by the City, each project would be evaluated for conformance with the General Plan, Municipal Code, and other applicable regulations. Subsequent development and infrastructure projects would also be analyzed for potential environmental impacts, consistent with CEQA requirements. As such, impacts would be less than significant.

Similar to the Project, the majority of development activities associated with cumulative development would consist of infill and redevelopment on currently urbanized sites and would not substantially

increase the rate or amount of surface runoff. Stormwater drainage and conveyance facilities would be evaluated at the project level, in association with subsequent development projects, and would be required to meet minimum stormwater requirements consistent with local, State, and federal regulatory standards, such as the CWA, State Porter-Cologne Act, and Regional MS4 Permit. Thus, the General Plan Update's incremental effects associated with the potential to require or result in the relocation or construction of new or expanded stormwater facilities, the construction or relocation of which could cause significant environmental effects would not be cumulatively considerable.

ELECTRICAL, NATURAL GAS, AND TELECOMMUNICATIONS

As discussed, the Planning Area is within the service areas of SCE, SDG&E, SoCalGas, and various telecommunication providers. Subsequent development associated with buildout of the General Plan Update Land Use Element would require increased electrical, natural gas, and telecommunications facilities and services, potentially resulting in the new construction or relocation of facilities through 2045. The environmental effects of future expansions of electrical, natural gas, and telecommunication facilities would be evaluated with each development proposal and would require separate environmental review related to the construction and operation of new electrical, natural gas, and telecommunications infrastructure. Subsequent projects under the General Plan Update would have to coordinate with each utility provider to establish service, provide any necessary extensions of facilities, and comply with regulations in existence at that time. As such, adherence to the established regulatory environment would reduce impacts associated with the relocation or construction of new or expanded electrical, natural gas, and telecommunications facilities to a less than significant level.

Cumulative electrical, natural gas, or telecommunications impacts are analyzed in terms of facilities and service impacts to the SCE, SDG&E, SoCalGas, and the other telecommunications providers that serve the area. Similar to the Project, related cumulative projects have the potential to increase demand for electrical, natural gas, and telecommunications services, potentially resulting in the new construction or relocation of facilities. The environmental effects of future expansions of electrical, natural gas, and telecommunication facilities would be evaluated with each development proposal and would require a separate environmental review, as required, related to the construction and operation of new electrical, natural gas, and telecommunications infrastructure. Similar to subsequent development associated with the Project, related cumulative projects would have to coordinate with each utility provider to establish service, provide any necessary extensions of facilities, and comply with regulations in existence at that time. As related cumulative development projects are considered, each project would be evaluated for conformance with the jurisdiction's municipal code and other applicable regulations. Thus, the General Plan Update's incremental effects associated with the potential to require or result in the relocation or construction of new or expanded natural gas, electrical, and telecommunications facilities, the construction or relocation of which could cause significant environmental effects would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan policies cited above.

Would the project, combined with other related cumulative projects, have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

Impact Analysis: Subsequent development with buildout of the General Plan Update Land Use Element could result in new development and intensification of existing development within the Planning Area. This growth is expected to result in an overall increase in demand for water supply. This increased demand for water would be located within areas that are already developed and serviced by MNWD. As the 2020 UWMP concluded that MNWD will be able to meet projected future water demands, the increase in water demand falls within the projected water supply identified in the 2020 UWMP. Additionally, MNWD has adopted a WSCP that provides actions for managing water supply and demands during a declared water shortage to better ensure there will be an adequate water supply in the future. As such, it is expected that residents and businesses in the Planning Area will have a sufficient water supply throughout the duration of the General Plan Update horizon. For subsequent qualifying projects, a WSA would be required pursuant to SB 610 for inclusion in the project's CEQA analysis. Development proposals that may not warrant a water supply assessment and/or Written Verification of Supply but meet the definition of a project under CEQA would still require an analysis of sufficient water supplies in the CEQA process. Through implementation of existing federal, State, and local regulations, the environmental impacts related to water supplies would be less than significant.

Cumulative water impacts are analyzed in terms of impacts to MNWD's water supplies and facilities. Related cumulative projects could contribute to an overall increase in demand for water services within MNWD service area, which could necessitate construction of future water supply infrastructure. Similar to with Project, related cumulative development projects would be located within areas that are generally developed and serviced by MNWD. The UWMP is required to be updated every five years and the future UWMP update will account for the additional residential and non-residential growth opportunities provided by related cumulative projects in the MNWD's service area and would identify short-term and long-term water demand management measures to meet growing water demands during normal, dry, and multiple dry water years. Additionally, MNWD has adopted a WSCP that provides actions for managing water supply and demands during a declared water shortage to better ensure there will be an adequate water supply in the future. Similar to subsequent development associated with Project implementation, related cumulative development projects would also be required to demonstrate the availability of sufficient water supplies through provisions in SB 610 and/or the CEQA process. Additionally, cumulative projects would be required to comply with existing federal, State, and local regulations, to conserve water and ensure the efficient use of available water supplies. Thus, the General Plan Update's incremental effects associated with having sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan policies cited above.

Would the project, combined with other related cumulative projects, 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?

Impact Analysis: With respect to wastewater, subsequent development with buildout of the General Plan Update Land Use Element is expected to result in increased population and employment growth within the Planning Area; thus, an overall increase in demand on the wastewater treatment facilities associated with increased sewage flows. Wastewater treatment facilities have the capacity to serve the potential growth identified within the General Plan Update. MNWD and SCWD charge connection fees in order to maintain and improve wastewater facilities and would continue to monitor and adjust projected flows and would expand treatment capacity as needed based on updated growth projections within its service area. Thus, impacts would be less than significant.

Cumulative water impacts are analyzed in terms of impacts to MNWD and SCWD's facilities. Related cumulative projects could contribute to an overall increase in demand on the existing wastewater treatment facilities in the MNWD and SCWD service areas. As with the Project, related cumulative projects would be served by the RTP, Treatment Plant 3A, and JBLTP. As discussed above, these three facilities have a combined design capacity of 31 MGD and currently treat an average of 15.1 MGD. Subsequent development with buildout of the General Plan Update Land Use Element is anticipated to increase sewer demands by 0.59 MGD, which would still allow for additional capacity to serve future related cumulative projects. Thus, the General Plan Update's incremental effects associated with the potential to 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 would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan policies cited above.

Would the project, combined with other related cumulative projects, 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?

Impact Analysis: The City's projected increase in solid waste generation associated with buildout of the General Plan Update Land Use Element is within the permitted capacity of the Prima Deshecha Landfill, where the vast majority of waste from the City was disposed of in 2024. Conservatively assuming the

Prima Deshecha Landfill is unable to accept solid waste, the Frank R. Bowerman Landfill would have adequate capacity to accommodate the City's projected solid waste generation through the planning horizon. Therefore, the General Plan Update would not 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 and impacts would be less than significant. Through compliance with existing regulations, subsequent development implemented by the General Plan Update, including demolition of the CHFB, would be required to comply with management and reduction statutes and regulations related to solid waste, and impacts would be less than significant.

Similar to the Project, related cumulative projects within the County and region have the potential to increase solid waste requiring disposal at landfills serving the City. The City, along with cities and County lands in the surrounding area, would continue to use common landfill resources, thereby gradually reducing the capacity of local landfills. Similar to the Project, the majority of solid waste for related cumulative projects would be served by Prima Deshecha Landfill. Prima Deshecha Landfill has a remaining capacity of approximately 128,800,000 cubic yards as of 2023, a maximum permitted throughput of 4,000 TPD, and has a projected capacity to serve residents and businesses until approximately 2102, which would include cumulative projects. Related cumulative projects would be required to meet applicable recycling requirements in force at the time such development is proposed, reducing the amount of solid waste requiring disposal at landfills. Future related cumulative developments would be reviewed on a project-by-project basis and solid waste impacts would be evaluated based on existing and planned disposal facilities and capacities available at that time. Thus, the General Plan Update's incremental effects associated with the potential to 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 would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan policies cited above.

Would the project, combined with other related cumulative projects, comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Impact Analysis: Laguna Niguel Municipal Code Title 6, Division 3, Article 6, *Construction and Demolition Waste Recycling Program*, establishes mandatory solid waste and recycling collection to comply with the requirements of AB 939. Municipal Code Title 6, Division 3, Article 2, *Solid Waste Management*, establishes regulations for solid waste collection of residential and non-residential uses, and construction/demolition waste. Municipal Code Title 6, Division 3, Article 7, *Organic Waste Disposal Reduction*, establishes regulations for organic waste disposal. As permitted by AB 939, the City authorizes a private solid waste franchisee (i.e., CR&R Environmental Services) to handle the city's solid waste and requires CR&R Environmental Services to cooperate in the preparation of solid waste disposal characterization studies and the preparation of waste stream audits. CR&R Environmental Services and

the City work together to submit information to meet the reporting requirements of AB 939, local diversion requirements, or any other law or regulation, to reach the solid waste and recycling goals mandated by AB 939. Through compliance with existing regulations, subsequent development implemented by the General Plan Update would be required to comply with management and reduction statutes and regulations related to solid waste, and impacts would be less than significant.

Similar to the Project, related cumulative projects would be required to comply with AB 939, and would be reviewed by the applicable jurisdiction to ensure compliance with federal, State, and local management and reduction statutes and regulations related to solid waste. Through compliance with existing regulations, related cumulative developments would be required to comply with management and reduction statutes and regulations related to solid waste. Thus, the General Plan Update's incremental effects associated with compliance with federal, state, and local management and reduction statutes and regulations related to solid waste would not be cumulatively significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan policies cited above.

4.16.7 SIGNIFICANT UNAVOIDABLE IMPACTS

Impacts to utilities and service systems associated with the implementation of the General Plan Update would be less than significant. No significant unavoidable impacts to utilities and service systems would occur as a result of the General Plan Update.

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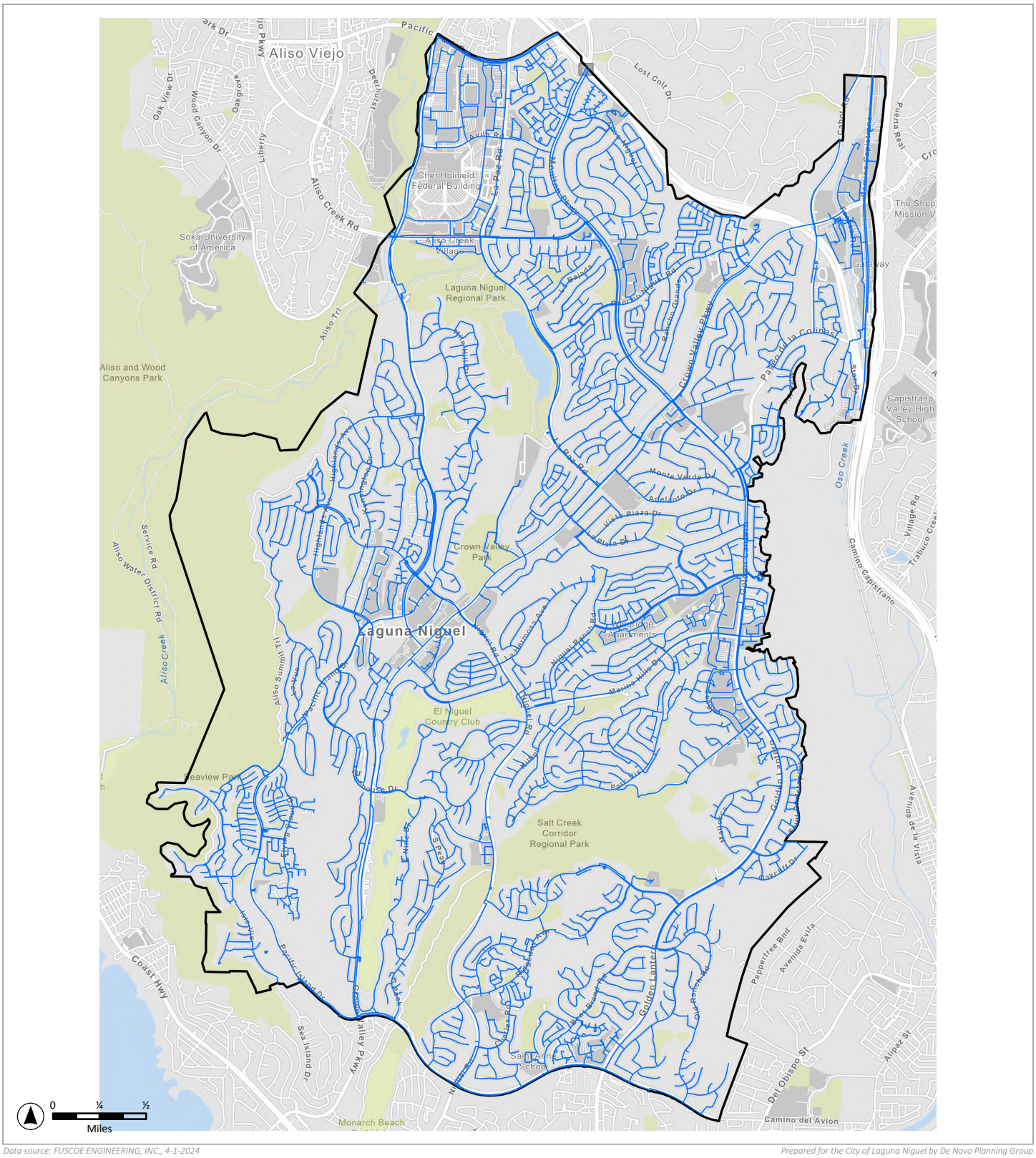

Data source: FUSCOE ENGINEERING, INC., 4-1-2024

Prepared for the City of Laguna Niguel by De Novo Planning Group
March 14, 2025

LEGEND

Laguna Niguel City Boundary

MNWD Potable Water Mainlines

Figure 4.16-1.

Existing Water Infrastructure

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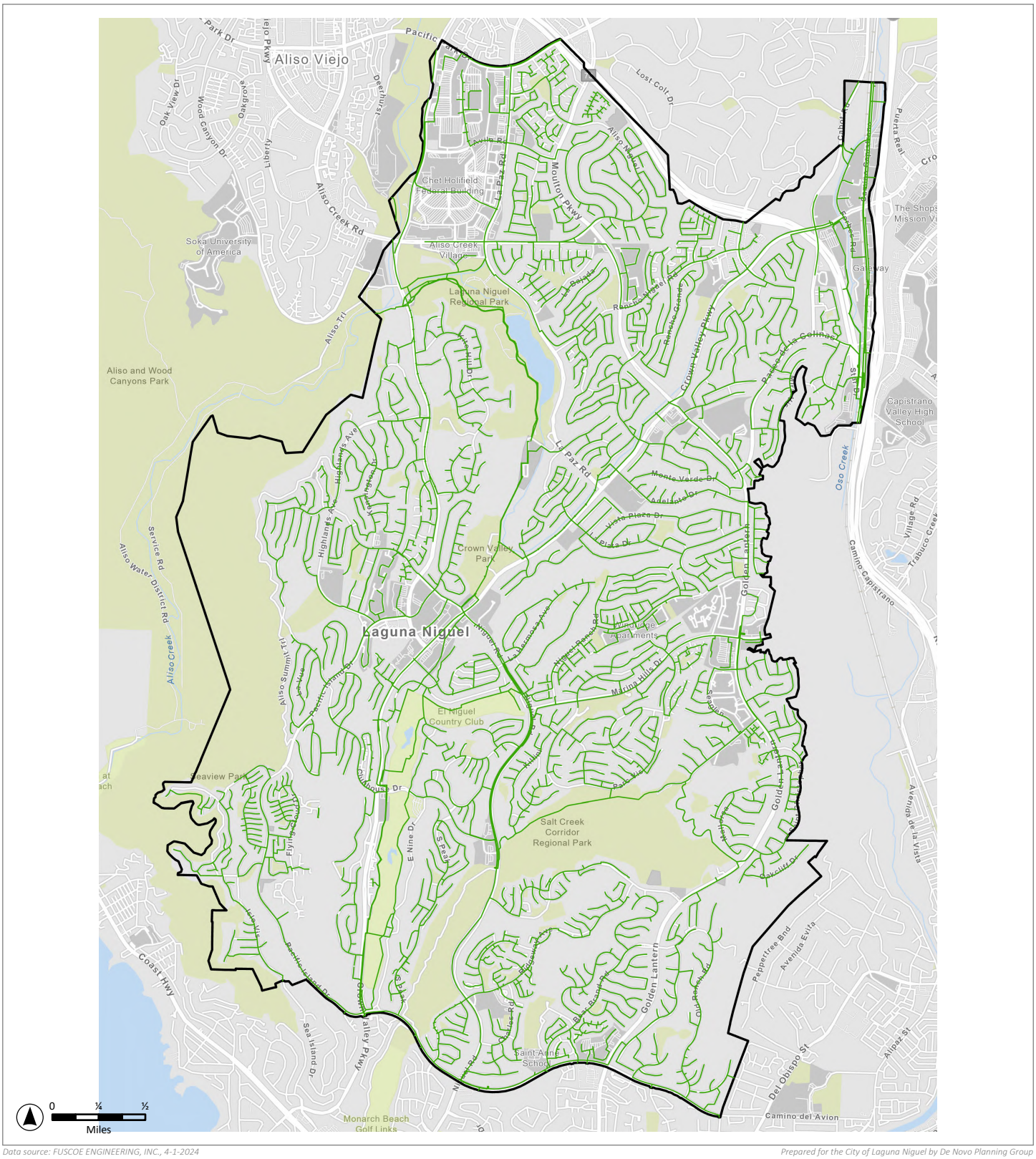

Data source: FUSCOE ENGINEERING, INC., 4-1-2024

Prepared for the City of Laguna Niguel by De Novo Planning Group
March 14, 2025

LEGEND

- Laguna Niguel City Boundary
- MNWD Wastewater Mainlines

Figure 4.16-2.

Existing Sewer Infrastructure

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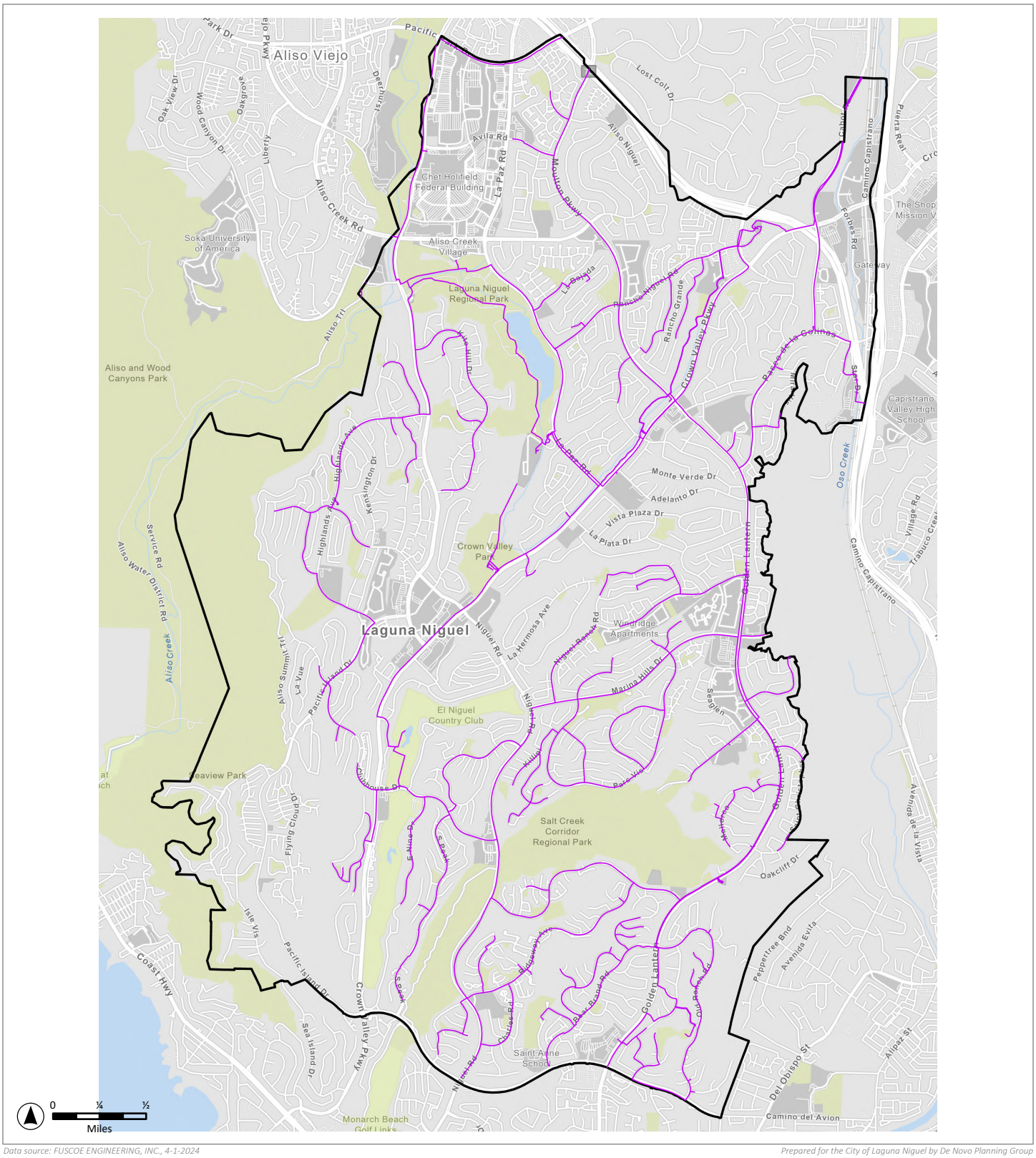

Data source: FUSCOE ENGINEERING, INC., 4-1-2024

Prepared for the City of Laguna Niguel by De Novo Planning Group
March 14, 2025

LEGEND

- Laguna Niguel City Boundary
- MNWD Recycled Mainlines

Figure 4.16-3.

Existing Stormwater and Flood Control Facilities

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4.17 WILDFIRE

4.17.1 PURPOSE

This section analyzes potentially significant impacts related to wildfire that could result from implementation of the General Plan Update Land Use Element. The discussion of fire suppression resources is located in Section 4.13, *Public Services*, of this EIR.

4.17.2 ENVIRONMENTAL SETTING

WILDFIRE HAZARDS

Wildfires are fires that burn in largely undeveloped and natural areas and are a regular feature of ecosystems throughout California. While low intensity wildfires can have a beneficial role for ecosystems, wildfires pose a risk to human health and safety, structures (e.g., homes, schools, hospitals, businesses, etc.), infrastructure (roadways, electrical poles, other utility facilities, etc.), air quality, recreation areas, water quality, wildlife habitat and ecosystem health, and forest resources at risk.

Threat from wildfire hazards is determined based on several factors, including fuel loading (vegetation); topography; climatic conditions, such as wind, humidity, and temperature; and the proximity of structures and urban development to fire hazards. Wildland fire hazards are most pronounced in the buffer zone between urbanized and undeveloped areas, known as the wildland-urban interface (WUI). In many parts of California, the WUIs have become developed, albeit at lower densities than fully urbanized areas. However, this development activity has brought more people into wildfire-prone areas. WUI areas typically contain higher amounts of vegetation that can serve as fuel for fires. The availability of fuel and increasing encroachment into the WUI, together with a changing climate, have made wildfires among California's most common and dangerous natural hazards. Generally, the periods of greatest risk for wildlife are the late summer and early fall when vegetation is at its driest. However, wildfires have occurred outside of these time periods especially following longer periods of drought or dry seasons.

The California Department of Forestry and Fire Protection (CAL FIRE) is responsible for mapping Fire Hazard Severity Zones (FHSZs) within State Responsibility Areas (SRA). FHSZs are classified as moderate, high, and very high. In addition, CAL FIRE must recommend Very High Fire Hazard Severity Zones (VHFHSZ) identified within any Local Responsibility Areas (LRA). These zone classifications do not correspond to a specific risk or intensity of the fire; rather, they reflect a hazard score based on the factors that influence fire likelihood and fire behavior, such as fire history, fuel (e.g., flammable vegetation), terrain, and typical fire weather. The FHSZ maps are used by the State Fire Marshall as a basis for the adoption of applicable building code standards and are meant to help limit wildfire damage to structures through planning, prevention, and the application of risk reduction measures. Figure 4.17-1, *Fire Hazard Severity Zones*, shows the portions of the Planning Area within a FHSZ. As shown in Figure 4.17-1, FHSZs within LRA include designated VHFHSZ, High FHSZ, and Moderate FHSZ in the western and southern portions of the Planning Area, as well as an area south of Aliso Creek Road and east of Alicia Parkway. The Planning Area does not contain any FHSZ in an SRA; however, Aliso and Wood Canyons Wilderness Park, located immediately west of the City is an SRA designated VHFHSZ and Moderate FHSZ.

PHYSICAL SETTING

As discussed in the City's Local Hazard Mitigation Plan (LHMP), the climate, topography, and vegetation in areas surrounding the City is conducive to wildfire events.[1] Limited rainfall, low humidity, and seasonal high temperatures continue to contribute to the desiccation of the grasses and chaparral which cover the foothills, providing prime fuel for intense burns. Although some of the canyons are shielded from the direct impact of the powerful, dry Santa Ana winds, their occurrence generally aggravates the fire hazard. In addition, the presence of human activities in or near a wildland area dramatically increases the risk of a major fire.

4.17.3 REGULATORY SETTING

FEDERAL

Title IV of the Fiscal Year 2001 Appropriations Act

Title IV of the Fiscal Year 2001 Appropriations Act for the US Department of the Interior and Related Agencies (Public Law 06-291), the Secretaries of Agriculture and the Interior have consulted with states and tribes to develop a list of WUI communities within the vicinity of federal lands that are at high risk from wildfire.

Disaster Mitigation Act

The Disaster Mitigation Act of 2000 requires that state mitigation plans, as a condition of disaster assistance, add incentives for increased coordination and integration of mitigation activities at the state level through the establishment of requirements for two different levels of state plans: "Standard" and "Enhanced." The Disaster Mitigation Act also established a new requirement for local mitigation plans.

National Cohesive Wildland Fire Management Strategy

Under the direction of the Federal Land Assistance, Management, and Enhancement Act of 2009 (the FLAME Act), the Secretary of the Interior and the Secretary of Agriculture created the National Cohesive Wildland Fire Management Strategy report. This report contains a cohesive wildfire management strategy as directed by the FLAME Act and under the advisement of the intergovernmental Wildland Fire Leadership Council.

Department of the Interior Department Manual Part 620

Wildland Fire Management Part 620 of the Department of the Interior Departmental Manual pertains to wildland fire management policies, with the goal of providing an integrated approach to wildland fire management. The guiding principles of the plan emphasize the need for public health and safety considerations, risk management protocols, inter-agency collaboration, and economic feasibility of wildfire management practices, as well as the ecological role of wildfires.

[1] City of Laguna Niguel, *Local Hazard Mitigation Plan*, September 2023.

STATE

California Department of Forestry and Fire Protection (CAL FIRE)

Under Title 14 of the Natural Resources of the California Code of Regulations (CCR), CAL FIRE has the primary responsibility for implementing wildfire planning and protection for SRA lands. CAL FIRE develops fire safe regulations and issues fire safe clearances for land within the SRA. The CAL FIRE Resource Management Program manages more than 31 million acres of California's privately-owned wildlands and provides emergency services in 36 of the State's 58 counties, via contracts with local governments.

Under CCR Title 24, Regulations Development, the Office of the State Fire Marshal is responsible for promulgating regulations that promote fire and life safety for inclusion into the State Building Codes, including the California Building Code, California Fire Code, California Electrical Code, California Mechanical Code, California Plumbing Code, and California Historical Building Code. The process incorporates a great deal of public participation and is guided by the State Building Standards Law.

Strategic Fire Plan for California

CAL FIRE has adopted Strategic Fire Plans for California since the 1930s and periodically updates them to reflect current and anticipated needs of California. The Strategic Plan is the State's road map for reducing the risk of wildfire through planning and prevention to reduce firefighting costs and property losses, increase firefighter safety, and contribute to ecosystem health. The Strategic Plan is adopted to better respond to the changes of the environmental, social, and economic landscape of California's wildlands and to provide CAL FIRE with appropriate guidance for adequate statewide fire protection of state responsibility areas. The latest Strategic Fire Plan is the CAL FIRE Strategic Plan 2024.

California Fire Code

The 2022 California Fire Code (CCR Title 24, Part 9) establishes regulations to safeguard against the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises. The Fire Code also establishes requirements intended to provide safety for and assistance to firefighters and emergency responders during emergency operations. The provisions of the Fire Code apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure throughout California. The Fire Code includes regulations regarding fire-resistance-rated construction, fire protection systems such as alarm and sprinkler systems, fire services features such as fire apparatus access roads, means of egress, fire safety during construction and demolition, and wildland-urban interface areas.

California State Multi-Hazard Mitigation Plan

The purpose of the State Multi-Hazard Mitigation Plan (SHMP) is to significantly reduce deaths, injuries, and other losses attributed to natural- and human-caused hazards in California. As California's primary hazard mitigation guidance plan, the SHMP represents a comprehensive mitigation strategy centered on the reduction or elimination of hazard risks and the impacts of disasters, as well as providing guidance for hazard mitigation activities emphasizing partnerships among local, state, and federal agencies as well as the private sector.

California Government Code

California Government Code Section 65302.5 requires the State Board of Forestry and Fire Protection to provide recommendations to a local jurisdiction's General Plan fire safety element at the time that the General Plan is amended. While not a direct and binding fire prevention requirement for individuals, General Plans that adopt the Board's recommendations will include goals and policies that provide for contemporary fire prevention standards for the jurisdiction.

California Government Code Section 51175 defines Very High Fire Hazard Severity Zones (VHFHSZ) and designates lands considered by the State to be susceptible to a very high fire hazard. California Government Code Section 51182 specifically requires people who own, lease, control, operate, or maintain a building or structure on or adjoining land within a VHFHSZ, to do all of the following: (A) Maintain defensible space of 100 feet from each side and from the front and rear of the structure, (B) Remove that portion of a tree that extends within 10 feet of the outlet of a chimney or stovepipe, (C) Maintain a tree, shrub, or other plant adjacent to or overhanging a building free of dead or dying wood, (D) Maintain the roof of a structure free of leaves, needles, or other vegetative materials, and (E) Prior to constructing a new dwelling or structure that will be occupied or rebuilding an occupied dwelling or occupied structure damaged by a fire in that zone, the construction or rebuilding of which requires a building permit, the owner shall obtain a certification from the local building official that the dwelling or structure, as proposed to be built, complies with all applicable state and local building standards. California Government Code Section 51189 directs the Office of the State Fire Marshal to create building standards for wildland fire resistance. The code includes measures that increase the likelihood of a structure withstanding intrusion by fire (such as building design and construction requirements that use fire-resistant building materials) and provides protection of structure projections (such as porches, decks, balconies, and eaves), and structure openings (such as attics, eave vents, and windows).

California Public Resources Code

The State's Fire Safe Regulations are set forth in Public Resources Code (PRC) Section 4290, which include the establishment of SRAs. Public Resources Code Section 4291 sets forth defensible space requirements, which are applicable to anyone that owns, leases, controls, operates, or maintains a building or structure in, upon, or adjoining a mountainous area, forest-covered lands, brush covered lands, grass-covered lands, or land that is covered with flammable material (Section 4291(a)).

Public Resources Code Sections 4292 to 4296 and 14 CCR 1256: Fire Prevention for Electrical Utilities address the vegetation clearance standards for electrical utilities. They include the standards for clearing around energy lines and conductors such as power-line hardware and power poles. These regulations are critical to wildland fire safety because of the substantial number of power lines in wildlands, the historic source of fire ignitions associated with power lines, and the extensive damage that results from power line caused wildfires in severe wind conditions.

Assembly Bill (AB) 337

Per AB 337, local fire prevention authorities and CAL FIRE are required to identify VHFHSZs in LRAs. Standards related to brush clearance and the use of fire-resistant materials in fire hazard severity zones are also established.

California Code of Regulations

In accordance with CCR Title 8, Sections 1270 and 6773 (Fire Prevention and Fire Protection and Fire Equipment), the Occupational Safety and Health Administration (Cal OSHA) establishes fire suppression service standards. The standards range from fire hose size requirements to the design of emergency access roads.

Title 14, Division 1.5 (Department of Forestry and Fire Protection) of the CCR establishes a variety of wildfire preparedness, prevention, and response regulations.

Title 19 (Public Safety) of the CCR establishes a variety of emergency fire response, fire prevention, and construction materials standards.

California Building Code (California Code of Regulations Title 24)

The California Building Code (CBC) contains general building design and construction requirements relating to fire and life safety, structural safety, and access compliance. CBC provisions provide minimum standards to safeguard life or limb, health, property, and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all buildings and structures and certain equipment.

California Health and Safety Code and Uniform Building Code Section 13000 et seq.

State fire regulations are set forth in Section 13000 et seq. of the California Health and Safety Code, which is divided into “Fires and Fire Protection” and “Buildings Used by the Public.” The regulations provide for the enforcement of the UBC and mandate the abatement of fire hazards. The California Health and Safety Code establishes broadly applicable regulations, such as standards for buildings and fire protection devices, in addition to regulations for specific land uses, such as childcare facilities and high-rise structures.

California Senate Bill (SB) 1241

SB 1241 requires that the Safety Element component of city or county general plans incorporate fire risk related to SRAs and VHFHSZs.

California Public Utilities Commission Wildfire Regulations

The California Public Utilities Commission (CPUC) works to reduce the probability of wildfires associated with utility operation. CPUC approves wildfire mitigation plans submitted by utilities and transmissions owners, issues rules and regulations regarding utility operation and maintenance for wildfire prevention and identifies locations across California that are at high risk of power line fires.

Senate Bill 99

Senate Bill (SB) 99 requires cities and counties, upon the next revision of the housing element on or after January 1, 2020, to review and update the safety element to include information identifying residential developments in hazard areas that do not have at least two emergency evacuation routes (California Government Code Section 65302(g)(5)).

LOCAL

Orange County and Orange County Fire Authority Local Hazard Mitigation Plan

The Orange County and Orange County Fire Authority Local Hazard Mitigation Plan (LHMP) focuses on mitigating all natural hazards impacting unincorporated areas of the County as well as County and Orange County Fire Authority owned facilities.[2] The LHMP is a multi-jurisdictional plan developed jointly between the County of Orange and the Orange County Fire Authority (OCFA). The mission of the LHMP is to promote sound public policy designed to protect residents, critical facilities, infrastructure, key resources, private property, and the environment from natural hazards in unincorporated areas, fire hazards in the Fire Authority service area, and County and Fire Authority owned facilities.

City of Laguna Niguel Local Hazard Mitigation Plan

The Laguna Niguel Local Hazard Mitigation Plan (LHMP) was last updated in 2023 in accordance with the Disaster Mitigation Act (DMA) of 2000.[3] The LHMP provides the City with a blueprint for hazard mitigation action planning to reduce hazard risks and disaster impacts. The LHMP conducts a risk assessment that identifies the location of hazards; the value of existing land and property in hazard locations; and an analysis of risk to life, property, and the environment that may result from natural hazard events. The LHMP also includes mitigation strategies aimed at reducing risk from natural hazards by identifying resources, information, and strategies for risk reduction, while helping to guide and coordinate mitigation activities throughout the City.

Unified County of Orange and Orange County Operational Area Emergency Operations Plan (OAEOP)

Unified County of Orange and Orange County Operational Area Emergency Operations Plan (OAEOP) was most recently adopted in 2023. The OAEOP provides guidance and procedures for Orange County and the County as the Operational Area to prepare for and respond to emergencies that are natural, technological, conflict-related, and human-caused incidents creating situations, which all requires a coordinated response. The policy document provides guidance for management concepts, identifies organizational structures and relationships, and describes responsibilities and functions of the emergency organization to protect life and property within Orange County.

City of Laguna Niguel Emergency Plan

The City of Laguna Niguel Emergency Operations Plan was adopted in 2002 and revised in 2015. This plan is designed to provide the framework for responding to major emergency disasters in the Planning Area. The main goals for this plan are to (1) prepare for, (2) respond to, and (3) recover from an emergency or disaster that affects the Planning Area.

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[2] County of Orange and Orange County Fire Authority, *Local Hazard Mitigation Plan*, December 2021. Available at: https://www.ocsheriff.gov/sites/ocsd/files/2022-03/2021%20County%20of%20Orange%20and%20Orange%20County%20Fire%20Authority%20Local%20Hazard%20Mitigation%20Plan.pdf. Accessed January 2025.

[3] City of Laguna Niguel, *Local Hazard Mitigation Plan*, 2023. Available at: https://www.cityoflagunaniguel.org/DocumentCenter/View/27301/City-of-Laguna-Niguel-LHMP-2023. Accessed February 2025.

Laguna Niguel Municipal Code

Laguna Niguel Municipal Code 7, Division 4, Article 9, *Temporary Street Closure*, provides regulations related to the closure of public streets. In accordance with Section 7-4-900, *Generally*, a street closure permit issued by the Public Works Department is required prior to temporary closure of a public street. Any closed street is required to maintain a 15-foot-wide emergency vehicle lane at all times and to be kept clear of all obstructions to provide emergency vehicular access.

Title 8, Division 1, *Buildings and Construction Generally*, adopts various building standards codes, including the 2022 California Building Code and California Residential Code, as amended to account for local conditions.

Title 8, Article 8, *Grading and Excavation Code*, contains the City's Grading and Excavation Code, which contains regulations related to excavation, grading, and earthwork construction in order to safeguard life, limb, property, and the public welfare. Per Sec. 8-1-805, *Required Permits*, a grading permit issued by the Community Development Department (or designee) is required to be issued prior to any grading, clearing, brushing, or grubbing on natural or existing grade that is preparatory to grading.

Section 9-1-289, *Fire Protection*, requires appropriate fire protection for any subdivision proposed to be located in a high fire hazard area, including through firebreaks, fuel modification programs, access roads, sufficient water supply, landscaping and open spaces, and such other methods that the fire chief has determined will ensure the public health, safety and welfare of the future occupants of the subdivision and the adjacent area.

Section 9-1-54.5, *Fuel Modification Regulations*, establishes fuel modification regulations that apply whenever a fuel modification plan has been required as a condition of development approval or through other requirements. Fuel modification plans, when required, are reviewed and approved by the OCFA and City of Laguna Niguel Community Development Director prior to issuance of a grading permit or prior to issuance of a building permit if there is no grading permit. A fuel modification maintenance program providing for continuous maintenance of fuel modification areas shall also be prepared and implemented.

Title 9, Division 1, Article 2, Subarticle 8, *Hillside Protection*, contains the City's Hillside Protection Ordinance. The stated goal of the Hillside Protection Ordinance is, in part, to protect the public health and safety by preserving very steep hillsides in open space and by minimizing geologic hazards, erosion and other potential dangers associated with hillside areas. The Hillside Protection Ordinance places restrictions on grading on steep slopes and contains other hillside protections to limit development in hillside areas.

Title 9, Division 3, *Fire Protection and Explosives*, includes several articles related to wildfire and fire protection. Article 1, *2022 Edition of the California Fire Code*, adopts the 2022 Edition of the California Fire Code, as amended to account for local conditions. Article 2, *Fire Regulations*, establishes restrictions and other regulations related to activities that may cause fires, as well as firebreaks and other fuel management practices. Article 3, *Fire Protection in State Responsibility Areas*, establishes that the City elects to assume responsibility for the prevention and suppression of all fires on all lands in the City, including lands within SRAs. Article 7, *Very High Fire Hazard Severity Zone*, contains a map of designated very high fire hazard severity zones within the City.

City of Laguna Niguel CEQA Manual

The City of Laguna Niguel CEQA Manual provides the City and project applicants with local guidelines, procedures, requirements, and thresholds of significance for the environmental review process within the City of Laguna Niguel consistent with the California Environmental Quality Act (Public Resources Code [PRC] Section 21000 et seq.), referred to as "CEQA" or "CEQA Statutes," and the State CEQA Guidelines (Title 14, California Code of Regulations (CCR), Division 6, Chapter 3, Section 15000 et seq.). The City's CEQA Manual applies to all public and private projects under the jurisdiction of the City of Laguna Niguel that constitute a "project" and therefore subject to CEQA review.

4.17.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

CEQA Guidelines Appendix G contains the Initial Study Environmental Checklist, which includes questions related to wildfire. The City relies on the questions included in Appendix G as the thresholds of significance for assessing impacts from wildfire (City of Laguna Niguel CEQA Manual, Revised February 24, 2023). A significant impact will occur if the Project would be located in or near state responsibility areas or lands classified as very high fire hazard severity zones and will:

- Substantially impair an adopted emergency response plan or emergency evacuation plan (refer to Impact Statement WF-1);
- 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 (refer to Impact Statement WF-2);
- 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 (refer to Impact Statement WF-3); and/or
- 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 (refer to Impact Statement WF-4).

4.17.5 IMPACTS AND MITIGATION MEASURES

WF-1: Would the Project substantially impair an adopted emergency response plan or emergency evacuation plan?

Impact Analysis: The Planning Area does not contain any FHSZ in SRA; however, Aliso and Wood Canyons Wilderness Park, located immediately west of the City, is an SRA designated VHFHSZ and Moderate FHSZ. The Planning Area does contain areas mapped as Very High, High, and Moderate FHSZ in LRA areas, as shown on Figure 4.17-1. The mapped FHSZ areas within the City include:

- The majority of the western portion of the Planning Area, generally west of a north-south line from the intersection of Crown Valley Parkway and Camino del Avion, is within a designated VHFHSZ. This area also contains Moderate and High FHSZs.

- A substantial portion of the southeastern Planning Area contains a VHFHSZ, generally bounded by Marina Hills Drive on the north, Golden Lantern on the east, Beacon Hill Way on the south, and Niguel Road on the west. This area is buffered by Moderate and High FHSZ.
- A north-south strip of the southern portion of the Planning Area, in between the two VHFHSZ areas described above and generally located in the Salt Creek Corridor area, between Crown Valley Parkway and Niguel Road, contains Moderate and High FHSZ.
- The northwestern-central portion of the Planning Area, generally bounded by Aliso Creek Road to the north, Moulton Parkway to the east, Crown Valley Parkway to the south, and Alicia Parkway to the west, contains a designated VHFHSZ. This area is buffered by Moderate and High FHSZ.

The Orange County OAEOP addresses the planned response to extraordinary situations associated with natural disasters and/or human caused incidents, including wildfires, and outlines mutual aid provisions within the Orange County OA. The City's EOP addresses the City's planned response to natural or human-caused disasters and describes the organizational structures, roles, responsibilities, policies, and protocols for providing emergency support. The General Plan Update does not propose revisions to the City's adopted EOP or Orange County OAEOP. Neither the City's EOP nor the Orange County OAEOP specifically designate evacuation routes; rather, evacuation measures would be implemented based on the specific emergency and area affected. As discussed in the Orange County OAEOP Evacuation Annex, evacuation routes will be selected by law enforcement officials and approved by the Incident Commander at the time of the evacuation decision. Evacuation routes will be chosen based on the relative safety of roadway infrastructure and current traffic conditions.

The General Plan Update is a policy document that does not include any site specific designs or proposals, except for the assumption that the Chet Holifield Federal Building (CHFB) site will be demolished as part of a future redevelopment effort. Demolition of the CHFB would not alter the existing site, access, or adjacent roadways and would not involve the introduction of any new uses. Subsequent projects associated with buildout of the General Plan Land Use Element could result in new development and intensification of existing development within the Planning Area. As demonstrated in Table 2-17, *General Plan Update Growth Assumptions Compared to Existing Conditions*, the General Plan Update Land Use Element identifies opportunities for new growth and development within the City. The majority of the potential growth opportunities are located within specific areas of the City. These areas include the Laguna Niguel Gateway Specific Plan (Gateway Specific Plan), the Opportunity Areas (e.g., Marketplace, CHFB site, and Town Center), and Hospitality Overlay sites.

Additionally, the General Plan Update proposed Circulation Plan would maintain existing conditions on Camino Los Padres, which consists of the removal of the previously contemplated Camino Los Padres extension from its current terminus to Camino Capistrano, beyond the City limits. The current terminus is located at the easternmost City boundary and is currently planned to extend east outside of the City through undeveloped land. The roadway does not occur under existing conditions and is therefore not included within an adopted emergency response plan or emergency evacuation plan. This portion of the Planning Area (Community Profile Area 11) is not within the primary growth opportunity areas identified by the General Plan Land Use Element. As indicated in Table 2-17, minimal non-residential growth could

occur within the Community Profile Area; however, no new residential growth would occur. Therefore, removal of this planned extension would not impair emergency evacuation within the area. This area is currently served by existing roadways, including Golden Lantern, which would continue to provide access to evacuation routes within and outside of the Planning Area.

The General Plan Update proposed Circulation Plan would reduce the number of travel lanes on La Paz between Aliso Creek Road and Crown Valley Parkway from two lanes in each direction to one lane in each direction. This portion of the Planning Area (Community Profile Areas 5 and 6) is not within the primary growth opportunity areas identified by the General Plan Update Land Use Element. As indicated in Table 2-17, minimal residential growth could occur within these Community Profile Areas. Additionally, existing residential neighborhoods east of La Paz are currently served by major roadways which would continue to be used for emergency access and evacuation routes, including Aliso Creek Road, Crown Valley Parkway, and Moulton Parkway. Therefore, the reduction of lanes would not impair emergency evacuation within the area.

The General Plan proposed Circulation Plan would maintain existing travel lane conditions on Golden Lantern between Sweet Meadow Lane and Sardina Lane, which consists of the removal of the previously contemplated roadway widening. This segment of Golden Lantern would continue as a Primary Arterial, consistent with existing conditions and would not impact an adopted emergency response plan or emergency evacuation plan. As discussed above, this portion of the Planning Area (Community Profile Area 11) is not within the primary growth opportunity areas identified by the General Plan Land Use Element and although minimal non-residential growth could occur within the Community Profile Area, no new residential growth would occur. Therefore, removal of this planned widening would not impair emergency evacuation within the area. Any subsequent development projects with buildout of the General Plan Update Land Use Element would be subject to all applicable City regulations, reviews, and requirements pertaining to emergency response, emergency access, and maintaining emergency evacuation routes, as well as further CEQA analysis of project-specific impacts.

As discussed, Project implementation would allow for increased development in the City. Although the Planning Area is highly urbanized and existing infrastructure, including roads, are generally in place, road and infrastructure improvements may occur to accommodate new development. As described in Table 2-16, *Planned Transportation Improvements*, the General Plan Circulation Plan includes proposed changes to existing roadways and intersections to accommodate the future growth outlined in the proposed Land Use Element. Implementation of the proposed improvements would be designed and conducted to comply with standard engineering practices under the purview of the City's Public Works Department. Since the improvements would be implemented to accommodate future growth with the General Plan Update Land Use Element, the Project would not interfere with an adopted emergency response plan or emergency evacuation plan. The Project plans for and supports implementation of emergency response and emergency evacuation.

Development activities within the Planning Area are not anticipated to result in the substantial modification of roadways surrounding specific development sites or the placement of any permanent physical barriers on adjacent roadways. Subsequent development would be designed, constructed, and maintained in accordance with applicable standards, including vehicular access to ensure that adequate

emergency access and evacuation would be maintained. The City's development review process provides the mechanism in which site-specific development proposals, including review of the site plans for compliance with the City's General Plan and Zoning regulations are conducted. Site-specific development review would include a review of the proposed development's land use compatibility and review of all on- and off-site improvements to ensure site design, ingress and egress, and site distance standards have been implemented and that no hazardous conditions occur. Further, development would occur consistent with the proposed Land Use Element, which addresses and plans for compatible land use development within the City. Prior to implementation, any improvements would be subject to detailed review and future consideration by the City's Public Works engineering staff and other relevant City departments. An evaluation of the roadway alignments, intersection geometrics, and traffic control features would be conducted at the project design level. Roadway improvements would occur in accordance with the City's roadway design guidelines and meet design guidelines in the MUTCD. Additionally, roadway improvements would be consistent with the Laguna Niguel Municipal Code, including Title 7, Division 4, *Traffic Ordinances*, which adopts the City traffic manual; the manual defines engineering policies, procedures, and interpretations of traffic engineering practice.

There is the potential that activities associated with subsequent site-specific development projects, including demolition of the CHFB site, could involve traffic lanes located immediately adjacent to a development site to be temporarily closed or controlled by construction personnel during construction activities. However, any temporary construction activity would be required to adhere to applicable City standards, including Municipal Code Title 8, Article 9, *Temporary Street Closure*, which requires an application for the closure or partial closure of roads in the Planning Area to be reviewed by the Public Works Department, as well as police services and the OCFA. Approval of the closure by the Director of Public Works requires a finding that: (1) That the proposed activity or use of the street will not unreasonably interfere with traffic circulation in the area; (2) That the proposed activity and use will not be detrimental to the public health, welfare, safety and recreation; and (3) That the proposed activity or use will not entail extraordinary or burdensome expense to the emergency services of the City. Additionally, the applicant of any proposed development would be required to submit appropriate plans for plan review to ensure compliance with zoning, building, and fire codes prior to the issuance of a building permit. The proposed development would be required to comply with all applicable building and fire code requirements and would submit construction plans to OCFA Planning and Development Services for review and approval prior to issuance of any building permit. Approval by the OCFA would ensure that construction and operation of subsequent projects associated with implementation of the General Plan Update Land Use Element would not impair or physically interfere with an adopted emergency response plan or emergency evacuation plan. Thus, as demonstrated in the previous discussion, impacts would be less than significant.

The General Plan Update includes the following policies to further support preparedness and response to wildfire hazards, including emergency response and evacuation. Public Safety Element Policy PS-4.3 ensures that the OCFA reviews applicable development projects for fire-safe design, proximity to adequate emergency services, sufficient water supply and fire flow, and emergency vehicle access, in accordance with current California Building and Fire Codes, including local amendments adopted by the City. Policy PS-4.9 directs the City to coordinate with federal, State, and regional fire protection agencies

on fire suppression, rescue, training, education, and to update emergency evacuation and hazard mitigation plans, as necessary. Policy PS-5.2 ensures the City's adopted emergency plans, policies, and procedures, including both the City's Local Hazard Mitigation Plan and Emergency Operations Plan, are maintained and updated, as necessary. Policy PS-5.3 directs the City to assess emergency response and evacuation capabilities to address potential disruptions from current and future hazards that may affect the community. Policy PS-5.4 directs the City to maintain a transportation network that supports effective emergency response and evacuation operations. This includes maintaining both a primary and alternative mobile Emergency Operations Center. Policy PS-5.6 directs the City to coordinate disaster preparedness and recovery with local key stakeholders (officials, schools, businesses, and organizations), neighboring jurisdictions, other governmental agencies, and utility providers. Policy PS-5.9 directs the City to maintain an Emergency Preparedness page on the City's website that provides links to other resources, such as the Evacuation Zones, Earthquake Preparedness, and other emergency preparedness information.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

PUBLIC SAFETY ELEMENT

Policy PS-4.1: **Fire Authority Staffing and Resources.** Ensure Orange County Fire Authority staffing levels, equipment and facilities, programs, and practices align with the City's high safety standards, including timely emergency responses and effectively address the community's evolving needs.

Policy PS-4.3: **Fire-Safe Design.** Ensure Orange County Fire Authority review of applicable development projects for fire-safe design, proximity to adequate emergency services, sufficient water supply and fire flow, and emergency vehicle access, in accordance with current California Building and Fire Codes, including local amendments adopted by the City.

Policy PS-4.5: **Urban Fire Risks.** Coordinate with Orange County Fire Authority to maintain an ongoing fire inspection program to reduce fire hazards associated with multifamily developments, critical facilities, public assembly facilities, industrial buildings, and other nonresidential buildings.

Policy PS-4.9: **Fire Hazards Agency Coordination.** Coordinate with federal, state, and regional fire protection agencies on fire suppression, rescue, training, education and to update emergency evacuation and hazard mitigation plans, as necessary.

Goal PS-5: **Emergency Preparedness.** Ensure the community is well-prepared for emergency response and disaster management to minimize impacts to persons, property, the environment, and essential services.

Policy PS-5.1: **Emergency Services Staffing and Resources.** Ensure emergency and disaster staffing levels, equipment and facilities, programs, and practices align with the City's high safety

standards, including timely responses and effectively address the community's evolving needs.

Policy PS-5.2: **Emergency Preparedness.** Ensure the City's adopted emergency plans, policies and procedures, including both the City's Local Hazard Mitigation Plan and Emergency Operations Plan, are maintained and updated as necessary. This involves making sure they stay consistent with the City's current hazards and issues, and comply with Assembly Bill 2140, Senate Bill 379, and any relevant subsequent federal or state legislation.

Policy PS-5.3: **Emergency Response and Evacuation.** Assess emergency response and evacuation capabilities to address potential disruptions from current and future hazards that may affect the community.

Policy PS-5.4: **Emergency Transportation Routes.** Maintain a transportation network that supports effective emergency response and evacuation operations. This includes maintaining both a primary and alternative mobile Emergency Operations Center.

Policy PS-5.5: **Disaster Response and Recovery (Critical Facilities).** Coordinate with agencies and service providers to ensure the resilience of essential public facilities, lifeline services, and infrastructure, and plan for the use of critical facilities during post-disaster response and recovery.

Policy PS-5.6: **Disaster Response and Recovery Coordination.** Coordinate disaster preparedness and recovery with local key stakeholders (officials, schools, businesses, and organizations), neighboring jurisdictions, other governmental agencies, and utility providers.

Policy PS-5.7: **Resiliency Infrastructure.** Maintain a local system of public and private resilience hubs, cooling centers, and emergency shelters to provide safe places for residents during hazard events or emergency conditions.

Policy PS-5.8: **Public Education (Emergency Preparedness).** Sponsor and promote public awareness and training programs focused on emergency and disaster preparedness, as well as response protocols and procedures.

Policy PS-5.9: **Emergency Preparedness Information.** Maintain an Emergency Preparedness page on the City's website that provides links to other resources, such as the Evacuation Zones, Earthquake Preparedness, and other emergency preparedness information.

Policy PS-5.10: **School Safety (Emergency Preparedness).** Coordinate with local schools on their emergency and disaster preparedness programs and response protocols and procedures.

WF-2: Due to slope, prevailing winds, and other factors, would the Project exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Impact Analysis: As previously stated, the Planning Area contains areas mapped as Very High, High, and Moderate FHSZ in LRA areas, as shown on Figure 4.17-1. The Planning Area does not contain any FHSZ in

SRA; however, Aliso and Wood Canyons Wilderness Park, located immediately west of the City, is an SRA designated VHFHSZ and Moderate FHSZ.

While no specific development projects are proposed as part of the General Plan Update Land Use Element, except for the assumption that CHFB site will be demolished as part of a future redevelopment effort, subsequent development with buildout of the General Plan Update Land Use Element could result in new development and intensification of existing development within the Planning Area. The General Plan Update Land Use Element would primarily accommodate new development projects within specific areas of the City, including the Gateway Specific Plan, the Opportunity Areas, and the Hospitality Overlay sites. The Gateway Specific Plan, Opportunity Area 1 (The Marketplace at Laguna Niguel), Opportunity Area 2 (the CHFB site), and the Hospitality Overlay site located at Golden Lantern and Camino Del Avion are generally developed with urban uses and are not located within FHSZ areas. The western portion of Opportunity Area 3 (Town Center) is located within a Moderate and High FHSZ, and the Hospitality Overlay site located at the northwest corner of Pacific Island Drive and Camino Del Avion is located within a Very High FHSZ.

The Hospitality Overlay site located at Pacific Island Drive and Crown Valley Parkway is currently undeveloped. Subsequent development consistent with the proposed General Plan Update Land Use Element would provide for increased development within the site.

Implementation of the General Plan Update Land Use Element would allow for new or higher density development within mapped FHSZs and WUI areas, which could exacerbate wildfire risks and increase exposure to City residents, employees, or visitors to increased pollutant concentrations from wildfire or result in the uncontrollable spread of a wildfire. As discussed in the State Office of the Attorney General's *Best Practices for Analyzing and Mitigating Wildfire Impacts of Development Projects Under the California Environmental Quality Act*,[4] variables influencing a project's impact on wildfire risk includes:

- Project density. Fire spread and structure loss are more likely to occur in low- to-intermediate developments because there are more people present to ignite a fire (as compared to undeveloped land), and the development is not concentrated enough (as compared to high-density developments) to disrupt fire spread by removing or substantially fragmenting wildland vegetation.
- Project location in the landscape. How a development project is planned within the landscape determines to what extent it will influence fire risk. For instance, siting structures in rugged terrain or on the top of steep hills may increase wildfire risk.
- Water supply and infrastructure. The adequacy of water supplies and infrastructure to address fire fighting, including supply and pressure and the potential loss of power.

Any subsequent activities under the General Plan Update Land Use Element would be required to comply with the provisions of federal, State, and local requirements related to wildland fire hazards, including State fire safety regulations associated with WUIs, fire-safe building standards, and defensible space

[4] State of California Office of the Attorney General, *Best Practices for Analyzing and Mitigating Wildfire Impacts of Development Projects Under the California Environmental Quality Act*, 2022.

requirements as part of the project's approval process. This includes Laguna Niguel Municipal Code Section 9-1-289, *Fire Protection*, which requires appropriate fire protection for any subdivision proposed to be located in a high fire hazard area; and Section 9-1-54.5, *Fuel Modification Regulations*, which establishes fuel modification regulations that apply whenever a fuel modification plan has been required as a condition of development approval or through other requirements. Fuel modification plans, when required, are reviewed and approved by the OCFA and City of Laguna Niguel Community Development Director prior to issuance of a grading permit or prior to issuance of a building permit if there is no grading permit. As subsequent development and infrastructure projects are considered by the City, each project would be evaluated for potential impacts, specific to that project, associated with wildland fire hazards as required under CEQA. Further, subsequent development projects would be subject to all applicable City regulations, reviews, and requirements pertaining to emergency response, emergency access, and maintaining emergency evacuation routes, as well as being subject to all applicable building code and fire code requirements and further CEQA analysis of project-specific impacts for individual development projects.

As discussed in Section 4.16, *Utilities and Service Systems*, the projected increase in water demand associated with buildout of the General Plan Update Land Use Element falls within the Moulton Niguel Water District (MNWD) projected water supply through 2045. As subsequent development projects under the General Plan Update Land Use Element are proposed, project applications would undergo review by the MNWD for fire flow and hydraulic pressure analyses to determine the on-site and off-site improvements required, if any, to ensure proper delivery of domestic and fire flows to the project site.

However, the General Plan Update Land Use Element allows for new or higher density development, including the development of hotel uses, within mapped FHSZs and WUI areas, which could exacerbate wildfire risks during project construction and operation. Further, buildout under the General Plan Update Land Use Element would increase residential densities and non-residential land use intensities in specific areas of the City, and residents and employees of these areas could be exposed to windborne pollutants and wildfire risks from wildfires occurring outside of the Planning Area. This would result in a significant impact. Mitigation Measure WF-1 would require development projects in High FHSZs and VHFHSZs to prepare a project-specific fire prevention plan for construction and operation of the project. The site-specific plan would incorporate wildfire safety design features intended to reduce the risk of fire ignition, limit fire spread and facilitate safe and effective emergency response and evacuation. Such features could include the use of ignition-resistant materials for roofs, vents, exterior walls, and windows; provision of adequate emergency evacuation routes, and combustible vegetation management protocols (removal or reduction) within 100 or more feet of habitable structures depending on site conditions. Implementation of local and State requirements, discussed previously, as well as Mitigation Measure WF-1, would ensure that the potential for impacts associated with the exposure of project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire would be reduced to less than significant levels.

Mitigation Measures:

WF-1: As part of the development review process, the Laguna Niguel Community Development Department shall determine if the proposed project is located within an area designated as a Very

High or High Fire Hazard Severity Zone, as mapped by the California Department of Forestry and Fire Protection. For projects within these designated zones, applicants shall prepare project-specific fire prevention plans in accordance with the methodologies, standards, and significance thresholds in the California Fire Code (as locally amended), California Building Code (as locally amended) and the City's CEQA Manual and submitted for review and approval by the Orange County Fire Authority (OCFA) and Laguna Niguel Community Development Department in accordance with applicable state and local wildfire safety regulations.

The site-specific plans shall incorporate wildfire safety design features intended to reduce the risk of fire ignition, limit fire spread, and facilitate safe and effective emergency response and evacuation. Such features may include the use of ignition-resistant materials for roofs, vents, exterior walls, and windows; provision of adequate emergency evacuation routes, and combustible vegetation management protocols (removal or reduction) within 100 or more feet of habitable structures depending on site conditions.

All identified project-specific requirements shall be incorporated into the project's final construction plans in compliance with the California Building Code (CBC) and California Fire Code (CFC), which are both parts of Title 24 of the California Code of Regulations (the California Building Standards Code). The final construction plans shall be submitted for building permit review and approval by the Laguna Niguel Community Development Department and OCFA.

Level of Significance: Less Than Significant with Mitigation Incorporated.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

PUBLIC SAFETY ELEMENT

Policy PS-4.2: **Wildfire Hazard Mapping.** Maintain accurate and current geographic information system mapping of the City's Fire Hazard Severity Zones. Upon any designation changes by California Department of Forestry and Fire Protection, update the City's geographic information system mapping accordingly.

Policy PS-4.3: **Fire-Safe Design.** Ensure Orange County Fire Authority review of applicable development projects for fire-safe design, proximity to adequate emergency services, sufficient water supply and fire flow, and emergency vehicle access, in accordance with current California Building and Fire Codes, including local amendments adopted by the City.

Policy PS-4.4: **Fuel Management/Modification.** Support fuel management/modification requirements consistent with state law and Orange County Fire Authority requirements, and other fuel reduction and weed abatement approaches to reduce significant fire risk. When fuel modification or reduction is required, ensure a balance between fuel management for the benefit of structures and preserving vegetation and sensitive habitats.

Policy PS-4.5: **Urban Fire Risks.** Coordinate with Orange County Fire Authority to maintain an ongoing fire inspection program to reduce fire hazards associated with multifamily developments,

critical facilities, public assembly facilities, industrial buildings, and other nonresidential buildings.

Policy PS-4.6: **Critical Facilities (Fire Hazard Zones).** When feasible, locate new essential public facilities and infrastructure (e.g., hospitals, emergency shelters, fire and police stations, emergency command centers, communication facilities, and utilities) outside of Very High Fire Hazard Severity Zones. If located within these zones, utilize construction methods or other measures to minimize risk.

Policy PS-4.7: **Post-Fire Recovery Plan**. Collaborate with agencies such as the California Department of Forestry and Fire Protection, Orange County Fire Authority, and other applicable government and nongovernmental organizations to create a post-fire recovery plan that addresses the full recovery of burned areas and minimizes the risk of future fire damage and repetitive losses.

Policy PS-4.9: **Fire Hazards Agency Coordination.** Coordinate with federal, state, and regional fire protection agencies on fire suppression, rescue, training, education and to update emergency evacuation and hazard mitigation plans, as necessary.

WF-3: Would the Project 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?

Impact Analysis: The General Plan Update Land Use Element does not propose any site-specific development projects, except for the assumption that CHFB will be demolished as part of a future redevelopment effort, and therefore, does not specifically require the installation of new infrastructure. The Planning Area is urbanized, and subsequent development would primarily occur through infill development or redevelopment of currently developed sites. As described in Table 2-16, *Planned Transportation Improvements*, the General Plan Circulation Plan includes proposed changes to existing roadways and intersections to accommodate the future growth outlined in the proposed Land Use Element. Implementation of the proposed improvements would be designed and conducted to comply with standard engineering practices under the purview of the City's Public Works Department and would therefore not exacerbate fire risks. As discussed, the General Plan Update Land Use Element would primarily accommodate new development projects within specific areas of the City, including the Gateway Specific Plan, the Opportunity Areas, and the Hospitality Overlay sites. The Gateway Specific Plan, Opportunity Area 1 (The Marketplace at Laguna Niguel), Opportunity Area 2 (the CHFB site), and the Hospitality Overlay site located at Golden Lantern and Camino Del Avion are not located within FHSZ areas. The western portion of Opportunity Area 3 (Town Center) is located within a Moderate and High FHSZ and the Hospitality Overlay site located at Pacific Island Drive and Camino Del Avion is located within a Very High FHSZ.

The Hospitality Overlay site, located at Pacific Island Drive and Camino Del Avion, is currently undeveloped. Buildout of the proposed General Plan Update Land Use Element would include development of the site. Development of this site would require the installation of associated

infrastructure which may include the extension of roadways/driveways to provide access to the site, emergency water sources, power lines, and utilities.

While there is the potential that subsequent development in or near FHSZs could require the installation of infrastructure to serve the specific development being proposed, the City is primarily developed, and infrastructure already occurs within and adjacent to most development sites within the Planning Area. Therefore, the installation of new infrastructure would generally not occur in areas where infrastructure does not already exist.

The installation and operation of new electrical transmission lines, particularly when above-ground, would create a higher risk of wildfire compared to other infrastructure. Development of electrical utilities infrastructure would be subject to the requirements established in PRC Section 4292, which requires clearing of flammable fuels for a minimum 10-foot radius from the outer circumference of poles and towers, and Section 4293, which sets basic requirements for clearances around electrical conductors. Furthermore, subsequent projects would be required to meet vegetation clearance requirements outlined in CCR Title 14, Section 1104.1(d) for single overhead facilities.

Maintenance of existing infrastructure and the potential installation of new infrastructure for subsequent projects in the Planning Area would be required to comply with the Fire Code requirements found in the Municipal Code for new development projects and, as such, would be reviewed by the OCFA to determine the specific fire requirements applicable to ensure compliance with the codes in place. Applicable building code and fire code requirements include provisions for fire-resistant building materials, the clearance of debris, and fire safety requirements during demolition and construction activities. The potential for subsequent projects to impact environmental resources to meet compliance with fire development standards, such as fuel breaks and clearance requirements, would require environmental evaluation under CEQA to identify any site-specific impacts. In addition, any development in the City would need to comply with applicable CBC and PRC requirements to ensure that new developments have access to necessary utilities, and any additional utility construction complies with all code requirements. Mitigation Measure WF-1 would require development projects in High FHSZs and VHFHSZs to prepare a project-specific fire prevention plan for construction and operation of the project. The site-specific plan would incorporate wildfire safety design features intended to reduce the risk of fire ignition, limit fire spread, and facilitate safe and effective emergency response and evacuation. Such features could include the use of ignition-resistant materials for roofs, vents, exterior walls, and windows; provision of adequate emergency evacuation routes, and combustible vegetation management protocols (removal or reduction) within 100 or more feet of habitable structures depending on site conditions. Implementation of local and State requirements, discussed previously, as well as Mitigation Measure WF-1, would ensure that the potential for fire risks to be exacerbated or result in temporary or ongoing impacts to the environment resulting from the installation or maintenance of associated infrastructure would be reduced to less than significant levels.

Additionally, the General Plan Update includes policies to address utility infrastructure against potential wildfire risk. Public Safety Element Policy PS-4.3 ensures that the OCFA reviews applicable development projects for fire-safe design, proximity to adequate emergency services, sufficient water supply and fire flow, and emergency vehicle access, in accordance with current California Building and Fire Codes,

including local amendments adopted by the City. Policy PS-4.5 directs the City to coordinate with the OCFA to maintain an ongoing fire inspection program to reduce fire hazards associated with multifamily developments, critical facilities, public assembly facilities, industrial buildings, and other nonresidential buildings. Policy PS-4.6 directs the City to locate new essential public facilities and infrastructure outside of VHFHSZs, when feasible. If located within these zones, it ensures that construction methods or other measures are utilized to minimize risk. Policy PS-4.8 directs the City to coordinate with Moulton Niguel Water District to ensure the availability and maintenance of adequate water supply systems and fire flow for structural fire suppression.

Mitigation Measures: Refer to Mitigation Measure WF-1.

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

PUBLIC FACILITIES ELEMENT

Policy PF-3.1: **Water Supply and Wastewater Collaboration.** Collaborate with Moulton Niguel Water District and other applicable agencies to support a sustainable and resilient water supply and wastewater future for Laguna Niguel by ensuring:

- A safe and reliable water supply for both drinking and fire protection.
- Upgrades and improvements to the water and wastewater infrastructure, as needed.
- Sustainable water supplies and adequate system capacity.
- Proactive planning and mitigation of vulnerabilities to natural disasters and climate change impacts.
- Implementation of effective water conservation and recycling strategies.
- Maintenance of sufficient water capacity and pressure for fire protection.
- Adoption of innovative technologies to minimize costs, inefficiencies, and excessive water use.
- Compliance with local, regional, and state regulations.
- Pursuit of alternative funding sources for infrastructure improvements and renewable energy initiatives, including grants and public-private partnerships.
- Wastewater systems designed to minimize inflow, infiltration, treatment volume, prevent contamination, maximize efficiency, and reduce costs and greenhouse gas emissions.
- Public education initiatives promoting:
    - Water conservation and drought tolerant landscaping.
    - The use of reclaimed/recycled water, as available.
    - Maintenance of a safe and clean wastewater system by limiting the amount of oils, pesticides, and toxic chemicals entering the sewer system.

PUBLIC SAFETY ELEMENT

Policy PS-4.3: **Fire-Safe Design.** Ensure Orange County Fire Authority review of applicable development projects for fire-safe design, proximity to adequate emergency services, sufficient water supply and fire flow, and emergency vehicle access, in accordance with current California Building and Fire Codes, including local amendments adopted by the City.

Policy PS-4.5: **Urban Fire Risks.** Coordinate with Orange County Fire Authority to maintain an ongoing fire inspection program to reduce fire hazards associated with multifamily developments, critical facilities, public assembly facilities, industrial buildings, and other nonresidential buildings.

Policy PS-4.6: **Critical Facilities (Fire Hazard Zones).** When feasible, locate new essential public facilities and infrastructure (e.g., hospitals, emergency shelters, fire and police stations, emergency command centers, communication facilities, and utilities) outside of Very High Fire Hazard Severity Zones. If located within these zones, utilize construction methods or other measures to minimize risk.

Policy PS-4.8: **Water Supply Systems**. Coordinate with Moulton Niguel Water District to ensure the availability and maintenance of adequate water supply systems and fire flow for structural fire suppression.

WF-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?

Impact Analysis: As previously stated, the Planning Area contains areas mapped as Very High, High, and Moderate FHSZ in LRA areas, as shown on Figure 4.17-1. The Planning Area does not contain any FHSZ in SRA; however, Aliso and Wood Canyons Wilderness Park, located immediately west of the City, is an SRA designated VHFHSZ and Moderate FHSZ. Wildfire can alter the hydrologic response of a watershed to the extent that even modest rainstorms can produce dangerous flash floods and debris flows.[5] A number of factors affect the likelihood of downstream flooding or landslide after a fire, including basin morphometry, burn severity, soil properties, and rainfall characteristics. Burned landscapes are particularly susceptible to debris flows because wildfire removes vegetation and alters soil properties, reducing the ability of the soil surface to absorb rainwater. These changes can result in increased runoff that may include large amounts of debris.

As discussed, the General Plan Update Land Use Element would primarily accommodate new development projects within specific areas of the City, including the Gateway Specific Plan, the Opportunity Areas, and the Hospitality Overlay sites. The Gateway Specific Plan, Opportunity Area 1 (The Marketplace at Laguna Niguel), Opportunity Area 2 (the CHFB site), and the Hospitality Overlay site located at Golden Lantern and Camino Del Avion are not located within FHSZ areas. The western portion

[5] United States Geologic Survey (USGS), *Emergency Assessment of Post-Fire Debris-Flow Hazards*. Available at: https://landslides.usgs.gov/hazards/postfire_debrisflow/. Accessed March 2025.

of Opportunity Area 3 (Town Center) is located within a Moderate and High FHSZ and the Hospitality Overlay site located at Pacific Island Drive and Camino Del Avion is located within a Very High FHSZ.

The Hospitality Overlay site, located at Pacific Island Drive and Camino Del Avion, is currently undeveloped. Buildout of the proposed General Plan Update Land Use Element would include development of the site. The site is undeveloped, naturally vegetated and includes slopes and steep topography.

All subsequent development projects requiring grading would be required to obtain a building permit and adhere to building codes and the standards established in the City's Grading and Excavation Code (Title 8, Article 8, *Grading and Excavation Code*), which would minimize the risks of erosion, slope failure, and landslides. All subsequent development projects located in or adjacent to hillsides, including within the proposed Hospitality Overlay site at Pacific Island Drive and Camino Del Avion, would also be required to adhere to the standards established in the City's Hillside Protection Ordinance (Title 9, Division 1, Article 2, Subarticle 8, *Hillside Protection*), which contains restrictions on grading on steep slopes and contains other hillside protections to protect slope failure. Further, Mitigation Measure WF-1 would require development projects in High FHSZs and VHFHSZs to prepare a project-specific fire prevention plan for construction and operation of the project. The site-specific plan would incorporate wildfire safety design features intended to reduce the risk of fire ignition, limit fire spread, and facilitate safe and effective emergency response and evacuation. Such features could include the use of ignition-resistant materials for roofs, vents, exterior walls, and windows; provision of adequate emergency evacuation routes, and combustible vegetation management protocols (removal or reduction) within 100 or more feet of habitable structures depending on site conditions. Additionally, all subsequent developments located in or adjacent to FHSZs would be required to adhere to the standards established in Municipal Code Section 9-1-289, *Fire Protection*, which requires appropriate fire protection for any subdivision proposed to be located in a high fire hazard area; and Section 9-1-54.5, *Fuel Modification Regulations*, which establishes fuel modification regulations that apply whenever a fuel modification plan has been required as a condition of development approval or through other requirements. Fuel modification plans, when required, are reviewed and approved by the OCFA and City of Laguna Niguel Community Development Director prior to issuance of a grading permit or prior to issuance of a building permit if there is no grading permit. With adherence to the Municipal Code and other applicable development standards, subsequent development consistent with the General Plan Update Land Use Element on sloped terrain prone to flooding, landslides, and instability would not have adverse effects on the environment.

As detailed in Section 4.9, *Hydrology and Water Quality*, subsequent development resulting from implementation of the General Plan Update Land Use Element could lead to potential flooding in a number of ways. New development and redevelopment could increase storm water velocity leading to off-site flooding; new development and redevelopment could impede or redirect flood flows; and the placement of new or redevelopment projects could create or contribute to runoff which would exceed the capacity of existing or planned stormwater drainage systems. However, as discussed, all subsequent development and redevelopment would comply with applicable federal, State, regional, and local plans, policies, and regulations. Subsequent projects would be required to include project-specific flood control measures, production of storm water plans and use of BMPs, as well as FEMA processing, among other planning tools (see Section 4.9 additional details), as applicable. FEMA mapping provides important

guidance for the City in planning for flooding events and regulating development within identified flood hazard areas. FEMA's National Flood Insurance Program (NFIP) is intended to encourage state and local governments to adopt responsible floodplain management programs and flood measures. As part of the program, the NFIP defines floodplain and floodway boundaries that are shown on Flood Insurance Rate Maps (FIRMs). Floodways within the Planning Area are shown on Figure 4.9-3, *FEMA Flood Map*. Additionally, project-specific development would be required to implement Mitigation Measure HWQ-1, which would require preparation of a Hydrology Study to demonstrate that post-development drainage patterns and stormwater runoff flows are designed so as not exceed to existing conditions and will not result in flooding on or- off-site and to determine if the project site is within a regulatory floodplain and evaluate the potential for the proposed development to impede or redirect flood flows. For projects located within High FHSZs, VHFHSZs, or slopes prone to producing debris flows, the Hydrology Study shall analyze both the burned and bulked conditions to determine the appropriate size and location of detention/debris basins, as necessary, based on project site conditions.

Wildfires could exacerbate conditions of slope instability or flood because wildfires destroy vegetation and change soil conditions, which could expose people or structures to post-fire hazards regardless of whether flooding and geologic hazards are addressed. Construction of projects located in Very High FHSZs, or that have recently involved wildfires combined with areas prone to landslides or slope instability, could expose workers, structures, and property to significant risks related to post-fire conditions. This is a potentially significant impact. Projects located in High FHSZs and VHFHSZs would be required to implement Mitigation Measure WF-1, which would require applicants to prepare a project-specific fire prevention plan for construction and operation of the project. The site-specific plan would incorporate wildfire safety design features intended to reduce the risk of fire ignition, limit fire spread, and facilitate safe and effective emergency response and evacuation. Such features could include the use of ignition-resistant materials for roofs, vents, exterior walls, and windows; provision of adequate emergency evacuation routes, and combustible vegetation management protocols (removal or reduction) within 100 or more feet of habitable structures depending on site conditions. Through implementation of Mitigation Measures WF-1 and HWQ-1, and compliance with local, State, and federal regulations, the potential for exacerbated impacts related to flooding and landslides would be less than significant.

The General Plan Update includes policies to address flooding and landslides caused by wildfires. Public Safety Element Policy PS-4.3 ensures that the OCFA reviews applicable development projects for fire-safe design, proximity to adequate emergency services, sufficient water supply and fire flow, and emergency vehicle access, in accordance with current California Building and Fire Codes, including local amendments adopted by the City. Policy PS-4.4 supports fuel management/modification requirements consistent with State law and OCFA requirements, and other fuel reduction and weed abatement approaches to reduce significant fire risk. Policy PS-4.7 directs the City to collaborate with agencies such as CAL FIRE, OCFA, and other applicable government and nongovernmental organizations to create a post-fire recovery plan that addresses the full recovery of burned areas and minimizes the risk of future fire damage and repetitive losses. Policy PS-4.9 directs the City to coordinate with federal, State, and regional fire protection agencies on fire suppression, rescue, training, education, and to update emergency evacuation and hazard mitigation plans, as necessary.

Mitigation Measures: Refer to Mitigation Measures WF-1 and HWQ-1.

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts:

PUBLIC SAFETY ELEMENT

Policy PS-4.2: **Wildfire Hazard Mapping.** Maintain accurate and current geographic information system mapping of the City's Fire Hazard Severity Zones. Upon any designation changes by California Department of Forestry and Fire Protection, update the City's geographic information system mapping accordingly.

Policy PS-4.3: **Fire-Safe Design.** Ensure Orange County Fire Authority review of applicable development projects for fire-safe design, proximity to adequate emergency services, sufficient water supply and fire flow, and emergency vehicle access, in accordance with current California Building and Fire Codes, including local amendments adopted by the City.

Policy PS-4.4: **Fuel Management/Modification.** Support fuel management/modification requirements consistent with state law and Orange County Fire Authority requirements, and other fuel reduction and weed abatement approaches to reduce significant fire risk. When fuel modification or reduction is required, ensure a balance between fuel management for the benefit of structures and preserving vegetation and sensitive habitats.

Policy PS-4.5: **Urban Fire Risks.** Coordinate with Orange County Fire Authority to maintain an ongoing fire inspection program to reduce fire hazards associated with multifamily developments, critical facilities, public assembly facilities, industrial buildings, and other nonresidential buildings.

Policy PS-4.7: **Post-Fire Recovery Plan**. Collaborate with agencies such as the California Department of Forestry and Fire Protection, Orange County Fire Authority, and other applicable government and nongovernmental organizations to create a post-fire recovery plan that addresses the full recovery of burned areas and minimizes the risk of future fire damage and repetitive losses.

Policy PS-4.9: **Fire Hazards Agency Coordination.** Coordinate with federal, state, and regional fire protection agencies on fire suppression, rescue, training, education and to update emergency evacuation and hazard mitigation plans, as necessary.

4.17.6 CUMULATIVE IMPACTS

Section 3.0, *Basis of Cumulative Analysis*, identifies projected regional growth having the potential to interact with the proposed Project to the extent that a significant cumulative effect may occur. The geographic setting for wildfire is the City and neighboring jurisdictions or areas within a FHSZ.

Would the Project, combined with other relevant cumulative projects, substantially impair an adopted emergency response plan or emergency evacuation plan?

Impact Analysis: The General Plan Update Land Use Element does not propose revisions to the City's adopted EOP or Orange County OAEOP. Neither the City's EOP nor the Orange County OAEOP specifically designate evacuation routes; rather, evacuation measures would be implemented based on the specific emergency and area affected. Any subsequent development projects that would implement the General Plan Update Land Use Element would be subject to all applicable local, State, and federal regulations, reviews, and requirements pertaining to emergency response, emergency access, and maintaining emergency evacuation routes, as well as further CEQA analysis of project-specific impacts.

The General Plan Update proposed Circulation Plan would maintain existing conditions on Camino Los Padres, which consists of the removal of the previously contemplated Camino Los Padres extension from its current terminus to Camino Capistrano beyond the City limits. The current terminus is located at the easternmost City boundary and is currently planned to extend east outside of the City through undeveloped land. The roadway does not occur under existing conditions and is therefore not included within an adopted emergency response plan or emergency evacuation plan. Removal of this planned extension would not impair emergency evacuation within the area. This area is currently served by existing roadways which would continue to provide access to evacuation routes within and outside of the Planning Area. The General Plan Update proposed Circulation Plan would reduce the number of travel lanes on La Paz between Aliso Creek Road and Crown Valley Parkway from two lanes in each direction to one lane in each direction. This portion of the Planning Area (Community Profile Areas 5 and 6) is not within the primary growth opportunity areas identified by the General Plan Update Land Use Element. Additionally, existing residential neighborhoods east of La Paz are currently served by major roadways which would continue to be used for emergency access and evacuation routes, including Aliso Creek Road, Crown Valley Parkway, and Moulton Parkway. Therefore, the reduction of lanes would not impair emergency evacuation within the area. The General Plan proposed Circulation Plan would maintain existing travel lane conditions on Golden Lantern between Sweet Meadow Lane and Sardina Lane, which consists of the removal of the previously contemplated roadway widening. This segment of Golden Lantern would continue as a Primary Arterial, consistent with existing conditions and would not impact an adopted emergency response plan or emergency evacuation plan. Any subsequent development projects with buildout of the General Plan Update Land Use Element would be subject to all applicable City regulations, reviews, and requirements pertaining to emergency response, emergency access, and maintaining emergency evacuation routes, as well as further CEQA analysis of project-specific impacts.

The proposed Project could result in temporary closure or control of traffic lanes located immediately adjacent to a development site during construction activities. However, as discussed above, any temporary closure within the City would be required to comply with the Laguna Niguel Municipal Code which would ensure adequate emergency access is maintained during any construction activities.

As discussed, the Project does not propose changes to the citywide roadway network and configuration that would affect emergency access. The General Plan Circulation Plan includes proposed changes to existing roadways and intersections to accommodate the future growth outlined in the proposed Land Use Element. Some of these proposed changes are located at facilities in proximity to neighboring

jurisdictions. Implementation of the proposed improvements would be designed and conducted to comply with standard engineering practices under the purview of the City's Public Works Department. Any improvements located within proximity to neighboring jurisdictions would be coordinated to ensure potential improvements or modifications within and outside of the City are coordinated. Since the improvements would be implemented to accommodate future growth with the General Plan Update Land Use Element, which considers cumulative traffic conditions, the Project would not result in inadequate emergency access.

As site-specific development is not currently proposed, it is unknown if implementation of the Project would involve the removal of existing driveways or the construction of new driveways or any associated improvements, such as curb, gutter, and sidewalks. Proposed development would be required to submit appropriate plans for plan review to ensure compliance with zoning, building, and fire codes prior to the issuance of a building permit. The proposed development would be required to comply with all applicable Building and Fire Code requirements and would submit construction plans to OCFA's Planning and Development Services for review and approval prior to the issuance of any building permit. Approval by the Orange County Fire Authority would ensure that construction and operation would not impair implementation of or physically interfere with the City's EOP or OAEOP.

As with the Project, related cumulative projects would be reviewed by the local agency in which they are located to evaluate the potential for the project to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Any temporary closure associated with adjacent development within a neighboring jurisdiction would be required to comply with the specific regulations of that agency to continue to provide emergency access within the area of construction. Any site or infrastructure improvements proposed by a related cumulative project would be subject to all applicable local, State, and federal regulations, reviews, and requirements pertaining to emergency response, emergency access, and maintaining emergency evacuation routes, as well as further CEQA analysis of project-specific impacts. Therefore, the General Plan Update's incremental effects associated with the potential to substantially impair an adopted emergency response plan or emergency evacuation plan would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan policies cited above.

Due to slope, prevailing winds, and other factors, would the Project, combined with other relevant cumulative projects, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Impact Analysis: Subsequent development consistent with the proposed General Plan Update Land Use Element would provide for increased development within both the Town Center and Hospitality Overlay site, located at Pacific Island Drive and Camino Del Avion, with the potential to expose people or structures to areas identified as having moderate and very high fire hazard severity, respectively. Implementation of

the General Plan Update Land Use Element would allow for new or higher density development within mapped FHSZs and WUI areas, which could exacerbate wildfire risks and increase exposure to City residents, employees, or visitors to increased pollutant concentrations from wildfire or result in the uncontrollable spread of a wildfire. Additionally, the General Plan Update Land Use Element allows for new or higher density development within mapped FHSZs and WUI areas located within and adjacent to the Planning Area. Any subsequent projects resulting from implementation of the General Plan Update Land Use Element would be required to comply with the provisions of federal, State, and local requirements related to wildland fire hazards.

As discussed in Impact WF-2, subsequent development within the Planning Area would be required to comply with the provisions of federal, State, and local requirements related to wildland fire hazards, including State fire safety regulations associated with wildland-urban interfaces, fire-safe building standards, and defensible space requirements, as well as the Laguna Niguel Municipal Code, which incorporates the California Fire Code. Laguna Niguel Municipal Code Section 9-1-54.5, *Fuel Modification Regulations*, establishes fuel modification regulations that apply whenever a fuel modification plan has been required as a condition of development approval or through other requirements. Fuel modification plans, when required, are reviewed and approved by the OCFA and City of Laguna Niguel Community Development Director. A fuel modification maintenance program providing for continuous maintenance of fuel modification areas would also be required to be prepared and implemented. Laguna Niguel Municipal Code Section 9-1-289, *Fire Protection*, requires appropriate fire protection for any subdivision proposed to be located in a high fire hazard area, including through firebreaks, fuel modification programs, access roads, sufficient water supply, landscaping and open spaces, and such other methods that the fire chief has determined will ensure the public health, safety and welfare of the future occupants of the subdivision and the adjacent area. Additionally, special attention would be given to development in hillside areas in the City per Municipal Code Title 9, Subarticle 8, *Hillside Protection*. In addition to the above regulatory requirements, subsequent development projects located in High FHSZs and Very High FHSZs would be required to comply with Mitigation Measure WF-1. Mitigation Measure WF-1 would require site-specific development projects in High FHSZs and Very High FHSZs to develop a project-specific fire prevention plan for construction and operation of the project. Implementation of local and State requirements, discussed previously, as well as Mitigation Measure WF-1, would ensure that the potential for impacts associated with the exposure of project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire would be reduced to less than significant levels.

Related cumulative projects within neighboring jurisdictions with land identified as within a FHSZ, could have the potential to expose people to windborne pollutants and wildfire risks from wildfires. As previously discussed, new growth associated with buildout of the General Plan Update Land Use Element would primarily occur within specific areas of the City. These areas are largely located outside of FHSZ areas or within areas of the City not directly adjacent to other jurisdictions. However, there are areas, such as the Hospitality Overlay site, located at Pacific Island Drive and Camino Del Avion, that are located within a Very High FHSZ and adjacent to neighboring jurisdictions.

The western portion of the City is located adjacent to areas within unincorporated Orange County and the City of Laguna Beach that are identified as Moderate and Very High FHSZ. However, lands within unincorporated Orange County include Aliso and Wood Parks and are designated Open Space Reserve,

which does not provide for development. Lands within the City of Laguna Beach adjacent to Laguna Niguel are either developed with residential uses or designated as Open Space. The southeastern portion of the City is located adjacent to areas within the City of San Juan Capistrano that are identified as High FHSZ. These areas are currently developed with residential uses or are comprised of designated general open space.

Similar to the Project, related cumulative development located within or adjacent to areas at risk for wildfire would be required to comply with all requirements established by the agency in which the development is located. All projects would also be subject to all applicable CBC and Fire Code requirements, as well as further CEQA analysis of project-specific impacts for individual discretionary development projects. Project-specific implementation of applicable regulations, reviews, and requirements pertaining to protection from wildfires would reduce risks and exposure to wildfire risks within the region. Thus, the General Plan Update's incremental effects associated with the potential to due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from wildfire or the uncontrolled spread of wildfire would not be cumulatively considerable.

Mitigation Measures: Refer to Mitigation Measure WF-1.

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan policies cited above.

Would the Project, combined with other relevant cumulative projects, 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?

Impact Analysis: The Hospitality Overlay site, located at Pacific Island Drive and Camino Del Avion within a Very High FHSZ, is currently undeveloped. Buildout of the proposed General Plan Update Land Use Element would include development of the site. Development of this site would require the installation of associated infrastructure which may include the extension of roadways/driveways to provide access to the site, emergency water sources, power lines, and utilities.

While there is the potential that subsequent development in or near FHSZs could require the installation of infrastructure to serve the specific development being proposed, the City is primarily developed, and infrastructure already occurs within and adjacent to most development sites within the Planning Area. Therefore, the installation of new infrastructure would generally not occur in areas where infrastructure does not already exist.

All development projects within the City would be required to comply with the CBC and PRC to ensure that new developments have access to necessary utilities and that additional utility construction complies with all applicable code requirements. Additionally, implementation of Mitigation Measure WF-1 would ensure that the potential for fire risks to be exacerbated or result in temporary or ongoing impacts to the

environment resulting from the installation or maintenance of associated infrastructure would be reduced to less than significant levels.

Similar to the Project, related cumulative within the Planning Area would be required to comply with applicable CBC and PRC requirements to ensure that new developments have access to necessary utilities, and any additional utility construction complies with all code requirements. Projects would be reviewed on a project-by-project basis and the potential for related cumulative projects to impact environmental resources in order to meet compliance with fire development standards, such as fuel breaks and clearance requirements, would require environmental evaluation under CEQA to identify any site-specific impacts. Thus, the General Plan Update's incremental effects associated with the potential to require 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 would not be cumulatively considerable.

Mitigation Measures: Refer to Mitigation Measure WF-1.

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan policies cited above.

Would the Project, combined with other relevant cumulative projects, 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?

Impact Analysis: All subsequent developments located in or adjacent to FHSZs would be required to adhere to State and local regulations designed to reduce the risks of geologic hazards, flooding, and wildfire. Development projects within the Planning Area requiring grading would be required to obtain a building permit and adhere to the standards established in the City's Grading and Excavation Code (Title 8, Article 8, *Grading and Excavation Code*). All subsequent development projects located in or adjacent to hillsides within the Planning Area would also be required to adhere to the standards established in the City's Hillside Protection Ordinance (Title 9, Division 1, Article 2, Subarticle 8, *Hillside Protection*), which contains restrictions on grading on steep slopes and contains other hillside protections to protect slope failure. Subsequent projects would be required to include project-specific flood control measures, production of storm water plans and use of BMPs, as well as FEMA processing, among other planning tools. Subsequent development within the Planning Area would be required to adhere to Municipal Code Section 9-1-289, *Fire Protection*, which requires appropriate fire protection for any subdivision proposed to be located in a high fire hazard area; and Section 9-1-54.5, *Fuel Modification Regulations*, which establishes fuel modification regulations that apply whenever a fuel modification plan has been required as a condition of development approval or through other requirements. Fuel modification plans, when required, are reviewed and approved by the OCFA and City of Laguna Niguel Community Development Director prior to issuance of a grading permit or prior to issuance of a building permit if there is no grading permit. Projects located in High FHSZs and VHFHSZs would also be required to implement Mitigation Measure WF-1, which would require development projects in High FHSZs and VHFHSZs to prepare a project-specific fire prevention plan for construction and operation of the project.

New development and redevelopment could increase storm water velocity leading to off-site flooding; new development and redevelopment could impede or redirect flood flows; and the placement of new or redevelopment projects could create or contribute to runoff which would exceed the capacity of existing or planned stormwater drainage systems. However, as discussed herein, all subsequent development and redevelopment would comply with applicable federal, State, regional, and local plans, policies, and regulations. Subsequent projects would be required to include project-specific flood control measures, production of storm water plans and use of BMPs, as well as FEMA processing, among other planning tools (see Section 4.9 additional details), as applicable. Additionally, project-specific development would be required to implement Mitigation Measure HWQ-1, which would require applicants of proposed developments within the Planning Area that are located within High FHSZs, VHFHSZs, or slopes prone to producing debris flows, the Hydrology Study shall analyze both the burned and bulked conditions to determine the appropriate size and location of detention/debris basins, as necessary, based on project site conditions.

Related cumulative development would also be required to adhere to applicable State and local development codes, regulations, and further CEQA analysis of project-specific impacts on a project-by-project basis. Individual developments would be reviewed in the context of the site and surrounding area in which it is located related to the potential to expose people or structures to significant risks as a result of runoff, post-fire slope instability, or drainage changes. Thus, the General Plan Update's incremental effects associated with the potential to 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 would not be cumulatively considerable.

Mitigation Measures: Refer to Mitigation Measures WF-1 and HWQ-1.

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

Proposed General Plan Update Goals and Policies That Minimize Potential Impacts: Refer to the General Plan policies cited above.

4.17.7 SIGNIFICANT UNAVOIDABLE IMPACTS

Wildfire impacts associated with the implementation of the General Plan Update would be less than significant. No significant unavoidable impacts to wildfire would occur as a result of the General Plan Update.

4.17.8 REFERENCES

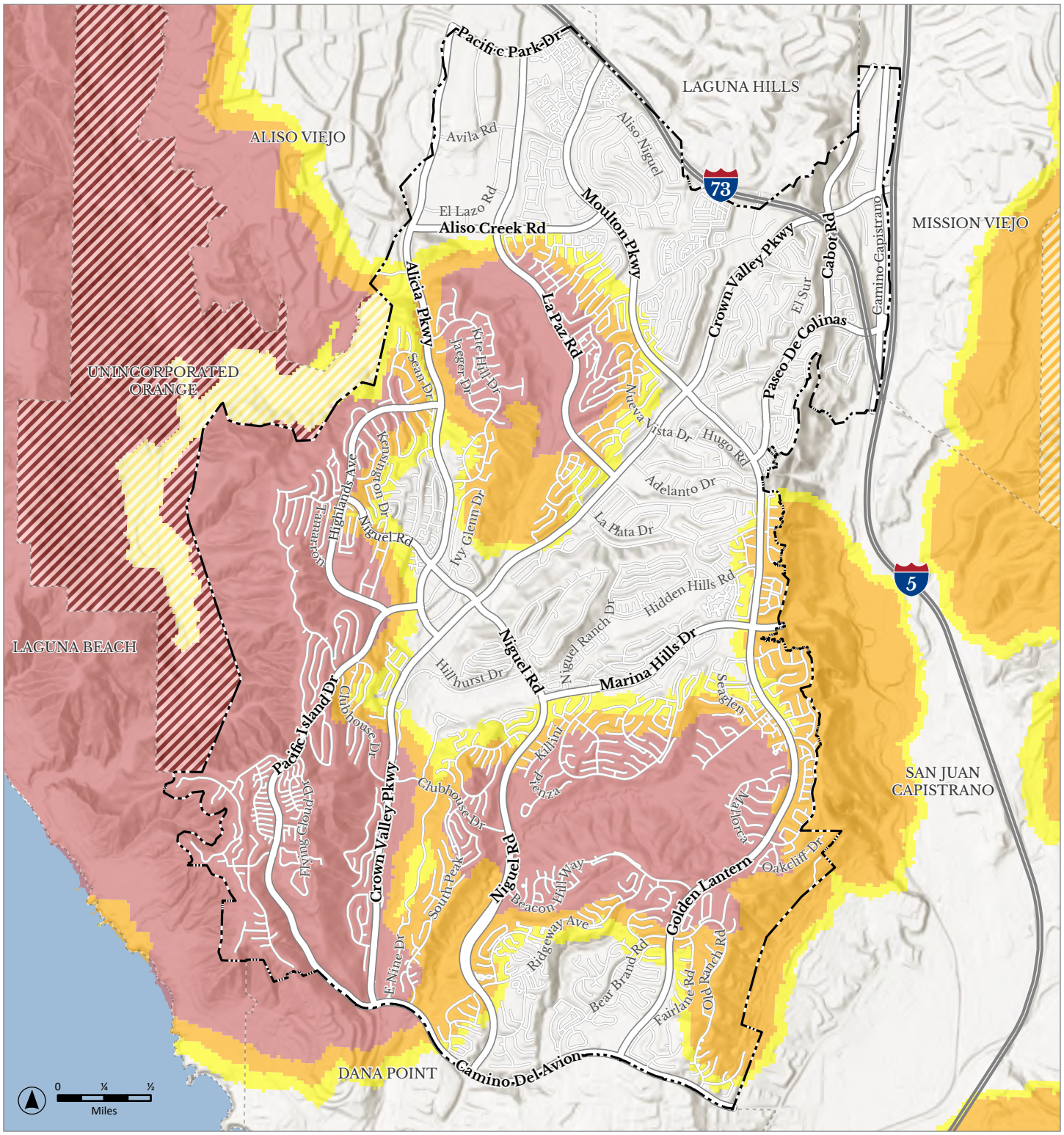
California Department of Forestry and Fire Protection (CAL FIRE), *FHSZ Viewer*, https://egis.fire.ca.gov/FHSZ/, accessed March 2025.

City of Laguna Niguel, Local Hazard Mitigation Plan, 2023. Available at: https://www.cityoflagunaniguel.org/DocumentCenter/View/27301/City-of-Laguna-Niguel-LHMP-2023. Accessed February 2025.

County of Orange and Orange County Fire Authority, Local Hazard Mitigation Plan, December 2021. Available at: https://www.ocsheriff.gov/sites/ocsd/files/2022-03/2021%20County%20of%20Orange%20and%20Orange%20County%20Fire%20Authority%20Local%20Hazard%20Mitigation%20Plan.pdf. Accessed January 2025.

State of California Office of the Attorney General, *Best Practices for Analyzing and Mitigating Wildfire Impacts of Development Projects Under the California Environmental Quality Act*, 2022.

United States Geologic Survey (USGS), *Emergency Assessment of Post-Fire Debris-Flow Hazards*, https://landslides.usgs.gov/hazards/postfire_debrisflow/, accessed March 2025.



Data sources: CALFIRE/State Office of the Fire Marshall, State Responsibility Areas effective April 1, 2024 and Local Responsibility Areas effective March 24, 2025; City of Laguna Niguel; Orange County GIS.

Prepared for the City of Laguna Niguel by De Novo Planning Group May 15, 2025

LEGEND

- Laguna Niguel City Boundary
- Other Jurisdictions

Fire Hazard Severity Zones in State Responsibility Areas

- Very High
- High
- Moderate

Fire Hazard Severity Zones in Local Responsibility Areas

- Very High
- High
- Moderate

Figure 4.17-1.

Fire Hazard Severity Zones

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5.0 OTHER CEQA CONSIDERATIONS

5.1 LONG-TERM IMPLICATIONS OF THE PROPOSED PROJECT

Pursuant to CEQA Guidelines Section 15126.2, *Consideration and Discussion of Significant Environmental Impacts*, an EIR is required to consider: (a) The Significant Environmental Effects of the Proposed Project; (b) Energy Impacts; (c) Significant Environmental Effects Which Cannot be Avoided if the Proposed Project is Implemented; (d) Significant Irreversible Environmental Changes Which Would be Caused by the Proposed Project Should it be Implemented; and (e) Growth-Inducing Impact of the Proposed Project.

In response to CEQA Guidelines, Section 15126.2(a), *Significant Environmental Effects of the Proposed Project*, and Section 15126.2(c) and *Significant Environmental Effects Which Cannot be Avoided if the Proposed Project is Implemented*, these are identified and discussed Section 4.0, *Environmental Analysis*, of this EIR. Section 4.5, *Energy*, analyzes energy impacts, pursuant to CEQA Guidelines Section 15126.2(b).

5.2 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

According to CEQA Guidelines Sections 15126(c) an EIR is required to address any significant irreversible environmental changes that would occur should the proposed Project be implemented. As stated in CEQA Guidelines Section 15126.2(d):

> *"Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified."*

The following discusses the significant irreversible changes that would occur should the proposed Project be implemented:

CONSUMPTION OF NONRENEWABLE RESOURCES AND IRREVERSIBLE DAMAGE

The environmental impacts associated with implementation of the General Plan Update are analyzed in Section 4.0. Subsequent development with buildout of the General Plan Update Land Use Element would consume limited, slowly renewable, and non-renewable resources. This consumption would occur during each individual project's construction phase and would continue throughout its operational lifetime.

Construction associated with subsequent development would require a commitment of resources that would include: (1) building materials; (2) fuel and operational materials/resources; and (3) the transportation of goods and persons to and from individual development sites. Construction would require the consumption of resources that are not renewable, or which may renew so slowly as to be considered non-renewable. These resources would include the following construction supplies: lumber

and other forest products; aggregate materials used in concrete and asphalt; metals; and water. Fossil fuels such as gasoline and oil would also be consumed to power construction vehicles and equipment.

The operational activities of new development accommodated through implementation of the General Plan Update Land Use Element would consume resources which would be similar to those currently consumed within the Planning Area (i.e., energy resources such as electricity and natural gas, petroleum-based fuels required for vehicle-trips, fossil fuels, and water). Fossil fuels would represent the primary energy source associated with both construction and ongoing operation, and the existing, finite supplies of these natural resources would be incrementally reduced. Subsequent development operations would occur in accordance with California Code of Regulations (CCR) Title 24, Part 6, which sets forth conservation practices that would limit energy consumption. Nonetheless, the proposed Project's energy requirements would represent a long-term commitment of essentially non-renewable resources.

The potential for irreversible damage from environmental accidents can occur during the construction and operation of site-specific development or infrastructure projects. Construction activities associated with buildout of the General Plan Update Land Use Element could release hazardous materials into the environment through reasonably foreseeable upset and accident conditions; refer to Section 4.8, *Hazards and Hazardous Materials*. All potential demolition, grading, and excavation activities would be subject to the established regulatory framework, including but not limited to, the Hazardous Materials Transportation Act, the CCR, the California Health and Safety Code, the California Vehicle Code, the California Public Resources Code, and the City of Laguna Niguel Municipal Code. Additionally, mitigation measures would be required at the project level to reduce potential hazards associated with site-specific environmental conditions.

Facilities that use hazardous materials are required to obtain permits under the Resource Conservation and Recovery Act, which gives the Environmental Protection Agency (EPA) the authority to control the generation, transportation, treatment, storage, and disposal of hazardous waste. Locally, the Orange County Health Care Agency, Environmental Health Division is the Certified Unified Program Agencies (CUPA) for Orange County and is responsible for consolidating, coordinating, and making consistent administrative requirements, permits, inspections, and enforcement activities of state standards regarding the transportation, use, and disposal of hazardous materials in Orange County including the Planning Area. Permits issued by the CUPA would include preventative requirements and best practices for the use of hazardous materials related to the specific project and operations. As required by the CUPA, a Hazardous Materials Business Plan would detail the location and quantities of hazardous materials stored onsite, accompanied by the appropriate Materials Safety Data Sheets. That information would be made available to emergency responders, such as firefighters and medical personnel, who would, in part, use such information to contain the hazardous materials and avoid the creation of a significant hazard. All future development activities requiring the routine use, storage, transport, or disposal of hazardous materials would be subject to all applicable federal, state, and local regulations and standards in place for hazardous materials. Compliance with these regulations and standards would protect against significant and irreversible environmental changes due to the accidental release of hazardous materials.

In conclusion, subsequent construction and operation activities with buildout of the General Plan Land Use Element would result in the irretrievable commitment of limited, slowly renewable, and nonrenewable resources, which would limit the availability of these resource quantities for future generations.

IRRETRIEVABLE COMMITMENTS/IRREVERSIBLE PHYSICAL CHANGES

Implementation of the General Plan Update would result in a commitment of land uses designated for development for the foreseeable future. Buildout of the General Plan Update Land Use Element would result in irretrievable commitments by providing opportunity for development that is more intense when compared to existing conditions. Subsequent development with buildout of the General Plan Update Land Use Element would physically change the environment in terms of aesthetics, air emissions, cultural resources, noise, and traffic, as described in Section 4.0. These physical changes are irreversible after development occurs. Therefore, the Project would result in changes within the Planning Area that would commit future generations to these uses.

5.3 GROWTH-INDUCING IMPACTS

According to CEQA Guidelines Sections 15126(c) an EIR is required to address growth-inducing impacts of the proposed project. As stated in CEQA Guidelines Section 15126.2(e):

> *"The way in which a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a waste water treatment plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment."*

The CEQA Guidelines do not provide specific criteria for evaluating growth inducement. Growth-inducing impacts fall into two general categories: direct or indirect. Direct growth-inducing impacts are generally associated with new residences or businesses that could induce population growth directly. Indirect growth-inducing impacts provide urban services, such as the extension of roads or other infrastructure, to an undeveloped area that could induce population growth indirectly.

In general, a project may foster spatial, economic, or population growth in a geographic area if it results in any of the following:

- Removal of an impediment to growth (e.g., establishment of an essential public service and provision of new access to an area);
- Fostering of economic expansion or growth (e.g., changes in revenue base and employment expansion);

- Fostering of population growth (e.g., construction of additional housing), either directly or indirectly;
- Establishment of a precedent-setting action (e.g., an innovation, a change in zoning and general plan amendment approval); or
- Development of or encroachment on an isolated or adjacent area of open space (being distinct from an infill project).

A project may be considered growth inducing if it meets any one of the above-listed criteria. Generally, growth-inducing projects are either located in isolated, undeveloped, or underdeveloped areas, necessitating the extension of major infrastructure such as sewer and water facilities or roadways, or encourage premature or unplanned growth. Note that the CEQA Guidelines require an EIR to "discuss the ways" a project could be growth inducing and to "discuss the characteristics of some projects that may encourage… activities that could significantly affect the environment." However, the CEQA Guidelines do not require that an EIR predict (or speculate) specifically where such growth would occur, in what form it would occur, or when it would occur. The answers to such questions require speculation, which CEQA discourages (refer to CEQA Guidelines Section 15145).

Additionally, 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 the General Plan Update could contribute to significant changes in the environment, beyond the direct consequences associated with buildout of the General Plan Land Use Element examined in the preceding sections of this EIR.

In accordance with the CEQA Guidelines and based on the above-listed criteria, the Project's potential growth-inducing impacts are evaluated below.

Removal of an Impediment to Growth: The Planning Area and surrounding area are generally developed and urbanized. Transportation and utility infrastructure exist to serve the range of land uses within the area. The General Plan Update does not introduce significant new, modified, or expanded roadways or utility infrastructure that would provide for new development outside of the Planning Area. Potential infrastructure improvements associated with subsequent site-specific development would not remove obstacles to growth since the Planning Area and surrounding areas are already served by existing utility providers and potential improvements would be to serve the specific development being proposed. As the General Plan Update would not establish an essential public service or provide new access to an area, the proposed Project would not be considered growth-inducing.

Economic Expansion or Growth: The construction of subsequent development projects would result in construction-related jobs. However, construction activities and durations would vary depending upon the specific development and would be temporary in respect to each individual development site and therefore, would not be considered growth-inducing.

Project operations would introduce new residents and jobs to the Planning Area. Subsequent development with buildout of the General Plan Update Land Use Element would primarily consist of infill development and redevelopment of already developed sites. New residential development would provide

additional housing opportunities that would further support commercial and retail uses within the City. Additional non-residential development would provide new employment opportunities. Residents and employees would seek shopping, entertainment, employment, and other economic opportunities in the Planning Area. This could create an increased demand for goods and services that would encourage the creation of new businesses or the expansion of existing businesses. The physical impacts of job growth are reflected in the analysis contained in Section 4.0. Although economic growth is anticipated within the Planning Area, there is nothing unusual about the anticipated growth that would result in significant economic expansion or growth outside of the Planning Area.

Population Growth: A project could induce population growth in an area either directly or indirectly. More specifically, the development of new residences or businesses could induce population growth directly, whereas the extension of roads or other infrastructure could induce population growth indirectly. The Planning Area is located within an urbanized area served by existing transportation and utility infrastructure. The Project does not involve the extension of roads or infrastructure into undeveloped areas; refer to the "Removal of an Impediment to Growth" discussion above.

As shown in Table 2-17, *General Plan Update Growth Assumptions Compared to Existing Conditions*, and Table 2-18, *General Plan Update Growth Assumptions*, buildout of the General Plan Update Land Use Element could yield a total of up to 31,124 dwelling units, 520 managed care facility units, a population of 76,151 people, approximately 6,862,257 square feet of commercial building floor area, approximately 401,658 square feet of public institutional building floor area, 590 hotel rooms, and 19,267 jobs within the Planning Area. Buildout of the General Plan Update Land Use Element represents growth above existing conditions of up to approximately 3,464 new dwelling units, 8,418 people, 1,099,496 square feet of new commercial building floor area, 557 hotel rooms, and 5,467 jobs (no new managed care facility units or public institutional square footage are anticipated).

SCAG is the responsible agency for developing and adopted regional growth forecasts for local Orange County governments, among other counties. SCAG provides household, population, and employment projection estimates through 2050 at the County level and household and employment projection estimates through 2050 at the City level. It is important to note that the General Plan Update accommodates a buildout year of 2045, whereas SCAG provides growth forecasts for 2035 and 2050. Therefore, a direct comparison cannot be provided. SCAG projects that the City's population will reach 78,090 persons and employment will reach 22,400 by 2050. Buildout of the General Plan Land Use Element is projected to yield a total of 76,151 persons at the theoretical full buildout year (2045). The 2045 population projected by the General Plan Update is approximately 2.5 percent less than SCAG's 2050 forecast. Therefore, the population anticipated by buildout of the General Plan Land Use Element would be within SCAG's 2050 forecasts.

With implementation of General Plan Update Land Use Element and implementation of mitigation measures subsequent development associated with buildout of the General Plan Update Land Use Element would not induce growth that would exceed adopted thresholds, beyond those disclosed and analyzed throughout this EIR.

Establishment of a Precedent-Setting Action: The proposed General Plan Update would serve as a comprehensive, long-term plan (buildout year 2045) for the physical development of Laguna Niguel. The General Plan Update is intended to accommodate projected population, housing, and employment growth, including the appropriate balance among these factors with the necessary public services and infrastructure. The proposed General Plan Update would only regulate future land development within the Planning Area and would not induce growth within areas outside of the City's jurisdiction. Any subsequent development within the Planning Area would be reviewed in light of the General Plan Update and this General Plan Update Draft EIR, pursuant to CEQA, on a project-by-project basis. Subsequent development would be required to demonstrate consistency with the General Plan Update and implement mitigation measures identified in Section 4.0 to reduce potential environmental impacts associated with subsequent site-specific development. The Project would not involve a precedent-setting action that would encourage and/or facilitate other activities that could significantly affect the environment.

Development or Encroachment of Open Space: As stated, the Planning Area is located within an urbanized area. As shown in Figure 4.10-1, *Existing Land Uses*, the City is dominated by parks, open space, and recreation land uses. Subsequent development with buildout of the General Plan Update Land Use Element would increase residential densities and non-residential land use intensities in specific areas of the City. In general, buildout of the General Plan Update Land Use Element would result in new development in and around existing urbanized areas. The majority of the potential growth opportunities are located within specific areas of the City. These areas include the Laguna Niguel Gateway Specific Plan (Gateway Specific Plan), the Opportunity Areas (e.g., Marketplace at Laguna Niguel, Chet Holifield Federal Building (CHFB) site, and Town Center), and Hospitality Overlay sites. Focused growth and development within these areas would preserve existing residential, parks and recreation, and open space areas of the City. The Project would not be growth-inducing with respect to development or encroachment into an isolated or adjacent area of an existing open space.

5.4 SIGNIFICANT AND UNAVOIDABLE IMPACTS

CEQA Guidelines Section 15125.2(b) requires an EIR to discuss unavoidable significant environmental effects, including those that can be mitigated but not reduced to a level of insignificance. The following significant and unavoidable impacts of the General Plan Update are discussed in Section 4.0. Refer to those discussions for further details and analysis of the significant and unavoidable impacts identified below:

Air Quality

- General Plan implementation would conflict with or obstruct implementation of the applicable air quality plan for construction and operation at the project level.
- General Plan implementation would result in a cumulatively considerable net increase of criteria pollutants for which the project region is non-attainment under an applicable federal or state ambient air quality standard for construction and operation at the project level.

- General Plan implementation would potentially expose sensitive receptors to substantial pollutant concentrations for construction and operation at the project level.
- General Plan implementation combined with other related cumulative projects would conflict with or obstruct implementation of the applicable air quality plan for construction and operation.
- General Plan implementation combined with other related cumulative projects would result in cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under the applicable federal or state ambient air quality standard for construction and operation.
- General Plan implementation combined with other related cumulative projects would result in a cumulatively considerable contribution to significant cumulative air quality impacts with the potential to expose sensitive receptors to substantial pollutant concentrations for construction and operation.

Cultural Resources

- General Plan implementation would result in a significant and unavoidable impact to historic resources specific to the CHFB (Project).

Greenhouse Gas Emissions

- General Plan implementation would generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment at the project level for construction and operation.
- General Plan implementation would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases at the project level.
- General Plan implementation, combined with other related cumulative projects, would generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment for construction and operation.
- General Plan implementation, combined with other related cumulative projects, would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Transportation

- General Plan implementation would conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b) at the Project level.
- General Plan implementation combined with other related cumulative projects would conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).

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6.0 ALTERNATIVES TO THE PROPOSED PROJECT

6.1 INTRODUCTION

Under CEQA, the identification and analysis of alternatives to a project is a fundamental part of the environmental review process. CEQA Public Resources Code Section 21002.1(a) establishes the need to address alternatives in an EIR by stating that, in addition to determining a project's significant environmental impacts and indicating potential means of mitigating or avoiding those impacts, "the purpose of an environmental impact report is ... to identify alternatives to the project."

CEQA Guidelines Section 15126.6 provides further direction regarding the definition of project alternatives:

> *An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives.*

The CEQA Guidelines emphasize that the selection of project alternatives is to be based primarily on the ability to reduce significant effects relative to the proposed project, "even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly." The range of alternatives is to be guided by a "rule of reason," such that only those alternatives necessary to permit a reasoned choice are addressed.

Project alternatives selected for analysis must be considered for their feasibility. Specifically, CEQA Guidelines Section 15126.6(f)(1) states that:

> *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, and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site…*

CEQA Guidelines Section 15126.6(e) also requires the analysis of a "no project" alternative.

> *When the project is a revision of an existing land use or regulatory plan, policy or ongoing operation, the "no project" alternative will be the continuation of the existing plan, policy, or operation into the future."*

Based on the alternatives analysis, an environmentally superior alternative is to be designated. If the environmentally superior alternative is the No Project Alternative, then the EIR shall identify an environmentally superior alternative among the other alternatives. In addition, CEQA Guidelines Section 15126.6(c) requires that an EIR identify any alternatives that were considered for analysis but rejected as infeasible and discuss the reasons for their rejection.

The range of potential alternatives to the proposed project shall also include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects. Among the factors that may be considered when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, General Plan consistency, other plans or regulatory limitations, jurisdictional boundaries, 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).

Only locations that would avoid or substantially lessen any of the project's significant effects need be considered for inclusion. An alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative need not be considered. The range of feasible alternatives shall be selected and discussed in a manner that fosters meaningful public participation and informed decision making.

FACTORS GUIDING SELECTION OF ALTERNATIVES

An EIR must only discuss in detail an alternative that is capable of feasibly attaining most of the basic objectives associated with an action, while at the same time avoiding or substantially lessening any of the significant effects associated with the proposed project. As described in Section 2.0, *Project Description*, the following objectives have been identified for the update to the General Plan:

1. Preserve, protect, and enhance Laguna Niguel's existing residential neighborhoods;
2. Promote residential growth that includes a diverse range of housing development options and densities, ensuring that residents across income levels, age groups, and those with special needs can live within the community;
3. Promote redevelopment in Opportunity Areas that provide economic and community benefits through job creation, enhanced retail and restaurant spaces, and the incorporation of public gathering spaces;
4. Advance economic development policies that support existing local businesses, attract new businesses, promote job growth, and avoid vacant buildings or underutilized commercial sites;
5. Ensure new developments incorporate well-designed site planning, high-quality architecture, and functional outdoor spaces, while ensuring they are compatible with the surrounding setting in terms of land uses, scale, and aesthetics;
6. Ensure new development provides positive fiscal benefit to the City and contributes to new and existing infrastructure;
7. Preserve, protect, and enhance an integrated network of natural and man-made parks and open spaces that supports conservation of natural resources and recreational opportunities;
8. Maintain adequate, reliable, and essential public infrastructure and facilities, including transportation and utilities to support both existing and future development;

9. Maintain a Circulation Plan that fosters a safe and efficient roadway network by minimizing congestion and providing acceptable operation and level of service for vehicles at intersections and roadways; and

10. Maintain and enhance the City's active transportation network to facilitate walking, bicycling, and public transit, improving multimodal connectivity throughout the City.

SIGNIFICANT AND UNAVOIDABLE IMPACTS

Pursuant to Section 15126.6(a) of the CEQA Guidelines, an EIR shall describe a range of reasonable alternatives to the project that 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. Only those impacts found significant and unavoidable are relevant in making the final determination of whether an alternative is environmentally superior or inferior to the proposed project. Through the analysis provided within this Draft EIR, it has been determined that the proposed General Plan Update would result in significant and unavoidable impacts associated with the following environmental issue area(s):

Air Quality

- General Plan implementation would conflict with or obstruct implementation of the applicable air quality plan for construction and operation at the project level.
- General Plan implementation would result in a cumulatively considerable net increase of criteria pollutants for which the project region is non-attainment under an applicable federal or state ambient air quality standard for construction and operation at the project level.
- General Plan implementation would potentially expose sensitive receptors to substantial pollutant concentrations for construction and operation at the project level.
- General Plan implementation combined with other related cumulative projects would conflict with or obstruct implementation of the applicable air quality plan for construction and operation.
- General Plan implementation combined with other related cumulative projects would result in cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under the applicable federal or state ambient air quality standard for construction and operation.
- General Plan implementation combined with other related cumulative projects would result in a cumulatively considerable contribution to significant cumulative air quality impacts with the potential to expose sensitive receptors to substantial pollutant concentrations for construction and operation.

Cultural Resources

- General Plan implementation would result in a significant and unavoidable impact to historic resources specific to the Chet Holifield Federal Building (CHFB) (Project).

Greenhouse Gas Emissions

- General Plan implementation would generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment at the project level for construction and operation.
- General Plan implementation would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases at the project level.
- General Plan implementation, combined with other related cumulative projects, would generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment for construction and operation.
- General Plan implementation, combined with other related cumulative projects, would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Transportation

- General Plan implementation would conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b) at the Project level.
- General Plan implementation combined with other related cumulative projects would conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).

All other impacts are less than significant or can be reduced to a less than significant level with adherence to the regulatory requirements and implementation of identified mitigation measures.

6.2 ALTERNATIVES CONSIDERED BUT REJECTED

In accordance with CEQA Guidelines Section 15126.6(c), an EIR should identify any alternatives that were considered for analysis but rejected as infeasible and briefly explain the reasons for their rejection. According to the CEQA Guidelines, among the factors that may be used to eliminate alternatives from detailed consideration are the failure to meet most of the basic Project objectives, infeasibility, or inability to avoid significant environmental impacts. The following possible alternatives were considered but not carried forward for additional analysis since they would not accomplish most of the basic objectives of the Project or were considered infeasible.

"EXCLUSION OF INDIVIDUAL OVERLAYS" ALTERNATIVE

As discussed in Section 2.0, *Project Description*, the General Plan Update introduces the concept of three Opportunity Area Overlays and two Hospitality Overlay sites within the Planning Area. The Opportunity Area Overlays could be located in Community Sub-Profile Areas 1C, 1I, and 14A-D (excluding 14C) if applied through future legislative action. The Hospitality Overlay sites are located along the southern City limit within Community Sub-Profile Areas 12J and 13D.

Feedback received during the Notice of Preparation and scoping process included concerns with introducing new residential uses and additional development potential within the Opportunity Areas, as well as the demolition of the CHFB. Concerns were also raised about the Hospitality Overlay areas, which could potentially facilitate new high-quality hotel uses considering the potential for expansive ocean views.

The EIR does not evaluate removal of individual overlays or varying combinations of overlays as an alternative. Instead, the EIR has considered the broader "Reduced Growth" Alternative (Alternative 2 discussed further below). The Reduced Growth Alternative assumes the updated General Plan would be adopted; however, the Land Use Element, including the Land Use Map, would exclude the potential for future Opportunity Area Overlays and the Hospitality Overlays. Under Alternative 2, it is also assumed that the CHFB would not be demolished as part of a future redevelopment effort. Thus, this alternative has been rejected from further analysis.

"GENERAL PLAN UPDATE WITH PLANNED CAMINO LOS PADRES EXTENSION" ALTERNATIVE

As discussed in Section 2.0, *Project Description*, the General Plan Update proposed Circulation Plan would maintain existing conditions on Camino Los Padres, which consists of the removal of the previously contemplated Camino Los Padres extension from its current terminus to Camino Capistrano, which extends beyond the City limits. An alternative was considered that would include the General Plan Update, as proposed, with the exception that the planned Camino Los Padres Extension would remain on the Circulation Plan. However, continuation of the planned extension of Camino Los Padres from its current terminus would not reduce any of the proposed Project's significant and unavoidable impacts. Further, as demonstrated within this EIR, removal of the planned extension from the Circulation Plan, as proposed, would not directly result in any significant impacts; the roadway extension would not provide a critical evacuation route that would otherwise be needed. Further, the contemplated extension of Camino Los Padres would involve construction through undeveloped hillside area located within a high fire hazard severity zone with biological and geological constraints, as well as infrastructure constraints associated with the rail line. The extension would also result in the intersection of Golden Lantern at Marino Hills Drive/Camino Los Padres to operate at an unacceptable service level, which would be inconsistent with Policy M-1.6 of the General Plan Update Mobility Element. Thus, this alternative has been rejected from further analysis.

6.3 ALTERNATIVES CONSIDERED FOR FURTHER ANALYSIS

Potential environmental impacts associated with the following alternatives, as described further below, are compared to the Project's impacts:

- Alternative 1 – "No Project/Existing General Plan" Alternative
- Alternative 2 – "Reduced Growth" Alternative

Throughout the following analysis, the alternatives' impacts are analyzed in comparison to the proposed Project's impacts detailed in Section 4.0, *Environmental Analysis*. In this manner, each alternative can be compared to the Project on an issue-by-issue basis. Table 6-3, *Comparison of Alternatives*, which is provided at the end of this section, provides an overview of the alternatives analyzed and a comparison of each alternative's impact in relation to the proposed action. Section 6.4, "Environmentally Superior" Alternative, references the "environmentally superior" alternative, as required by the CEQA Guidelines.

ALTERNATIVE 1: NO PROJECT/EXISTING GENERAL PLAN ALTERNATIVE

As required by CEQA Guidelines Section 15126.6(e), Alternative 1 represents the No Project Alternative. Under Alternative 1, the City would not adopt the proposed General Plan Update. The existing Laguna Niguel General Plan would continue to be in effect and no changes to the General Plan, including the Land Use Map, Circulation Plan, Community Profile Areas and Sub-profile Areas, or the goals and policies would occur. The existing General Plan would continue to provide outdated information regarding several issues, including projections and policy direction identified in the 1990s that are not reflective of the existing socioeconomic data and anticipated development patterns. No changes would be made to address updated Land Use and Climate Innovation General Plan Guidelines, or the requirements of State law since the adoption of the existing General Plan. Under Alternative 1, the existing Opportunity Areas (e.g., Country Village/Narland Business Center, Camino Capistrano/Cabot Road Business Area, and Town Center) would remain, and the CHFB would not be demolished.

Table 6-1
Alternative 1: No Project/Existing General Plan Alternative Compared to the Proposed Project

Alternative	Residential Units	Managed Care Units	Commercial Square Footage	Public Institutional Square Footage	Hotel Rooms	Population	Jobs
No Project/Existing General Plan	29,481	520	8,231,443	401,658	500	71,639	22,320
Proposed Project	31,124	520	6,862,257	401,658	590	76,151	19,267
Difference	**-1,643**	**0**	**1,369,186**	**0**	**-90**	**-4,512**	**3,053**

As shown in Table 6-1, Alternative 1 (No Project/Existing General Plan Alternative) allows for less residential and hotel development potential within the Planning Area compared to the Project but would allow for greater commercial development potential. With Alternative 1, the existing General Plan policy framework would still be in effect, which would constitute a status quo approach to land use regulation in the City.

Impact Comparison to the Proposed Project

The following discussion evaluates the potential environmental impacts associated with the No Project/Existing General Plan Alternative as compared to impacts from the Project.

Aesthetics and Scenic Resources

As described in Section 4.1, *Aesthetics*, impacts related to aesthetics and scenic resources would be less than significant with buildout of the proposed General Plan Update Land Use Element.

Both the proposed Project and Alternative 1 anticipate increased development within the City through future development and identify Opportunity Areas that would accommodate new residential and non-residential development within existing urbanized areas of the City. Alternative 1 identifies growth within three primary growth areas (Opportunity Areas). Opportunity Area 1 (Country Village/Narland Business Center) in Alternative 1 includes the areas identified as the Marketplace at Laguna Niguel and CHFB Opportunity Areas in the proposed Project. In Alternative 1, this Opportunity Area includes portions of Community Profile Area 1 (Sub-profile Areas A, B, D, F, E, G, H) in the proposed Project that are not identified as an Opportunity Area. Opportunity Area 2 (Camino Capistrano/Cabot Road Business Area) is the existing Gateway Specific Plan. Opportunity Area 3 (Town Center) is the same geographic area as the Town Center Opportunity Area in the proposed Project. As with the proposed Project, Alternative 1 allows for minimal additional growth within other areas of the City.

Alternative 1 does not designate scenic vistas. The City's existing General Plan Open Space, Parks, and Conservation Element includes a Scenic Corridors Plan. While there are no City designated Scenic Highways, several major existing City thoroughfares are designated as Landscape Corridors, valued for their scenic character, and intended to enhance the driving experience and overall visual quality of the community. Similar to the proposed Project, development within these areas would not alter public views of scenic resources within the Planning Area and none of these areas contain scenic resources designated by Alternative 1. Development consistent with Alternative 1 would primarily occur in urbanized areas of the City and would not substantially damage scenic resources within an area identified as a landscape corridor.

Subsequent development of the existing Camino Capistrano/Cabot Road Business Area Opportunity Area would be governed by the previously adopted Gateway Specific Plan with either Alternative 1 or the proposed Project.

Similar to the proposed Project, additional development would occur as part of the Country Village/Narland Business Center and Town Center Opportunity Areas; however, there is the potential that the CHFB could remain or be demolished. Therefore, this Alternative would not eliminate the significant and unavoidable impact associated with the demolition of the CHFB that would occur with the proposed Project. Additionally, Alternative 1, consistent with the buildout identified in the Community Profile Area Statistical Summary table for its subarea in the existing General Plan, would allow for an additional 229,420 square feet of development on the CHFB site. If the CHFB site were to remain, this additional development would occur within the existing parking areas surrounding the CHFB. Therefore, new development within the site could potentially include the development of buildings that would screen views of the CHFB from locally designated Landscape Corridors. As discussed further in Cultural Resources, the CHFB is a historic built environment resource which has been determined eligible for listing on the National Register of Historic Properties (NRHP) and contributes to the scenic built environment. Alteration

of existing views of the CHFB from surrounding public places, including public streets within the Planning Area would be significant and unavoidable.

Similar to the Project, any subsequent development with Alternative 1 would be subject to the City's Municipal Code requirements related to construction activities, including temporary use permits. Subsequent projects would also be required to comply with all applicable requirements in the Municipal Code and/or applicable Specific Plan, which include regulations related to maximum building height, building setbacks, landscaping and screening requirements, and other development characteristics in place in each zoning district that govern scenic quality. Pursuant to the City's Community Design Guidelines (Title 9, Division 1, Article 2, Subarticle 9), applicable subsequent development projects would be reviewed to ensure that the project is consistent with the overall goal and objectives of the community design guidelines. The City's Hillside Protection Ordinance (Title 9, Division 1, Article 2, Sub-article 8) contains development standards designed to control and soften the visual impacts of hillside development. Additionally, as with the proposed Project, applicable subsequent land use and development review applications would undergo environmental review on a project-by-project basis prior to consideration by the decision-making authority. If necessary, project-specific mitigation would be recommended to reduce potential impacts to a less than significant level.

Both Alternative 1 and the proposed Project would result in increased development within the Planning Area. However, the existing General Plan does not include designated scenic resources and scenic vistas. The General Plan Update Resource Management Element proposes to designate scenic resources and scenic vistas within the Planning Area for their protection and preservation. The designation of these resources will ensure they are considered as part of the development review associated with subsequent development and that any potential impacts to these resources would be reduced to a less than significant level. Since Alternative 1 does not designate these resources to ensure their protection, the impacts to aesthetics and scenic resources with Alternative 1 would be greater than the proposed Project.

Air Quality

As described in Section 4.2, *Air Quality*, impacts to air quality would be significant and unavoidable with buildout of the proposed General Plan Update Land Use Element.

Similar to the proposed Project, Alternative 1 identifies Opportunity Areas for focused growth within the Planning Area. In comparison to the proposed Project, the Opportunity Areas in Alternative 1 permit more commercial square footage and less residential development. As described in Section 4.14, *Transportation*, when compared to the proposed Project, vehicle miles traveled (VMT) at buildout of Alternative 1 would be greater; proposed Project VMT at buildout would be approximately 3,850,543, while Alternative 1 VMT at buildout would be approximately 4,035,359.

The proposed Project includes a range of policies and land use and transportation strategies related to reducing vehicle trips and resulting mobile source emissions, including policies to encourage mixed-use development, complete streets, and multi-modal improvements, that would further reduce air quality impacts that do not occur with Alternative 1. Therefore Alternative 1 would provide fewer opportunities than the proposed Project for trip internalization and prioritization of walking and bicycling. While land

uses and development with Alternative 1 would adhere to the same policy guidance and local, State, and regional air quality measures as the proposed Project, the increase in overall VMT at buildout would result in greater air emissions with Alternative 1 when compared to the proposed Project. Although Alternative 1 would be consistent with the growth projections identified in the current Air Quality Management Plan (AQMP), as stated, new development would exceed air quality emissions thresholds. Therefore, air quality emissions would be greater with Alternative 1, increasing the severity of the significant and unavoidable air quality impacts that would occur with the proposed Project. Thus, air quality impacts with Alternative 1 would be greater when compared to the proposed Project.

Biological Resources

As described in Section 4.3, *Biological Resources*, impacts to biological resources with buildout of the proposed General Plan Update Land Use Element would be less than significant with implementation of mitigation measures.

As with the proposed Project, primary growth within the Planning Area would occur within the respective Opportunity Areas and Gateway Specific Plan, which are primarily urbanized and do not typically contain significant biological resources. Development of the Gateway Specific Plan would be the same with the proposed Project and Alternative 1, as any subsequent development within the Gateway Specific Plan would be regulated by the development standards established by the Gateway Specific Plan.

Alternative 1 would not include a Hospitality Overlay land use designation. Therefore, the potential for development of the undeveloped site at Pacific Island Drive and Crown Valley Parkway with hotel uses that would occur with the Project would not occur with Alterative 1. Instead, potential development of the undeveloped site would be limited to one residential unit and ancillary site development over several acres, consistent with the site's current Residential Detached and Open Space land use designation. As discussed in Section 4.3, this site could potentially support candidate, sensitive, or special status species. Based on the site's development constraints, such as challenging topography and its location within a Local Coastal Program, which would likely limit the site development intensity of a hotel, development with Alternative 1 is anticipated to result in potential impacts to biological resources similar to those of the proposed Project. Additionally, potential impacts to nesting birds associated with demolition of the CHFB site would not occur with Alternative 1.

Similar to the proposed Project, subsequent development with Alternative 1 would have the potential to impact biological resources within the Planning Area. Subsequent development projects would be reviewed on a project-by-project basis and as applicable, would be required to comply with federal, State, and local regulations, including the City's CEQA Manual. The City's CEQA Manual would require preparation of a Biological Resources Assessment for subsequent projects based on the screening criteria provided in the City's CEQA Manual. Since development of the undeveloped site at Pacific Island Drive and Crown Valley Parkway would have similar potential impacts to biological resources, impacts to biological resources with Alternative 1 would be similar when compared to the proposed Project.

Cultural Resources

As described in Section 4.4, *Cultural Resources*, buildout consistent with the General Plan Update Land Use Element, would result in a significant and unavoidable impact associated with the demolition of the CHFB. All other impacts would be less than significant with the implementation of mitigation measures.

With Alternative 1, the existing Opportunity Areas (e.g., Country Village/Narland Business Center, Camino Capistrano/Cabot Road Business Area, and Town Center) would remain. The CHFB site could either remain or be demolished with Alternative 1. Therefore, Alternative 1 would not eliminate the significant and unavoidable impact associated with demolition of the CHFB. Alternative 1, consistent with the buildout identified in the Community Profile Area Statistical Summary table for its subarea in the existing General Plan, would allow for an additional 229,420 square feet of development on the CHFB site. As discussed in Section 4.4, *Cultural Resources*, the CHFB is a historic built environment resource and determined eligible for listing on the NRHP. The assessment of eligibility for listing in the NRHP for the CHFB states that the building's surrounding site and landscaping contribute to its significance with open space and complex topography enforcing a feel of monumentality. The setting of the CHFB is a defining feature of the property; as such, the development of the site surrounding the CHFB would constitute a change as compared to existing conditions and would have a significant and unavoidable impact to the resource.

Similar to the proposed Project, while most new development in the City would occur in areas that have been previously developed, subsequent development with Alternative 1 could result in new development and intensification of existing development within areas with the potential to directly impact archaeological resources. Subsequent development with Alternative 1 would be required to comply with the City's CEQA Manual. The City's CEQA Manual requires the preparation of a cultural resources assessment for qualified projects in order to reduce potential impacts to cultural resources.

Subsequent construction projects within the Planning Area could have the potential to disturb or destroy buried Native American human remains, as well as other human remains, including those interred outside of formal cemeteries. Similar to the proposed Project, subsequent development with Alternative 1 would be required to comply with existing regulations, including Health and Safety Code Section 7050.5, CEQA Guidelines Section 15064.5(e), and PRC Section 5097.98, to address the potential for unanticipated discoveries for site-specific projects and ensure that potential impacts associated with the inadvertent discovery of human remains would be less than significant.

Since new development within the CHFB site under Alternative 1 could alter views from surrounding public places, including public streets, resulting in a significant and unavoidable impact and demolition of the CHFB would result in a significant and unavoidable impact impacts to cultural resources with Alternative 1 would be greater when compared to the proposed Project.

Energy

As described in Section 4.5, *Energy*, impacts associated with energy with buildout of the General Plan Update Land Use Element would be less than significant.

Alternative 1 would result in increased energy demand when compared to the Project. Similar to the Project, Alternative 1 would not result in any significant adverse impacts related to Project energy requirements, energy use inefficiencies, and/or the energy intensiveness of materials by amount and fuel type, including during construction, operation, maintenance, and/or removal. Subsequent development within the City would be required to comply with all existing energy standards, and there would be no resulting significant adverse impacts on energy resources with Alternative 1.

Additionally, subsequent development with Alternative 1 would adhere to the same policy guidance and local, state, and regional measures regulating energy usage as the proposed Project and would not conflict with or obstruct regional plans for renewable energy or energy efficiency. However, the overall increase in non-residential development along with the higher VMT that would be generated with Alternative 1 would result in a corresponding increase in electricity and gas usage for the operation of buildings, diesel fuel for off-road construction activities, and gasoline due to overall traffic volumes when compared to the proposed Project. Impacts related to energy use with Alternative 1 would be greater when compared to the proposed Project.

Geology and Soils

As described in Section 4.6, *Geology and Soils*, impacts associated with geology and soils with buildout of the General Plan Update Land Use Element would be less than significant with the implementation of mitigation measures.

Primary growth within the Planning Area with Alternative 1 would occur within the existing Opportunity Areas and Gateway Specific Plan. Development of the Gateway Specific Plan would be the same with either the proposed Project or Alternative 1. The Planning Area is located within a seismically active area, and portions of the existing and proposed Opportunity Areas are located within identified landslide and liquefaction zones and include soils having shrink-swell potential.

The potential for new development to expose people or structures to adverse effects associated with seismic ground shaking and geologic instabilities would be similar with Alternative 1 and the proposed Project. Additionally, all subsequent development and infrastructure projects would be evaluated for conformance with the California Building Standards Code (CBSC), Municipal Code, National Pollutant Discharge Elimination System (NPDES) permit, and other relevant regulations, including development and implementation of a SWPPP to identify erosion-control and sediment-control BMPs in compliance with the Construction General Permit to control stormwater quality degradation due to potential construction-related pollutants. As with the proposed Project, impacts would be less than significant with Alternative 1.

It is possible that future ground-disturbing activities with Alternative 1 could encounter undiscovered paleontological resources within the Planning Area. Subsequent development and infrastructure projects with Alterative 1 would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA, pursuant to the City's entitlement review process, and would comply with the City's CEQA Manual. The City's CEQA Manual requires the preparation of a records search and field survey for paleontological resources for qualified projects.

Since Alternative 1 would result in new development and the Planning Area is the same with both the proposed Project and Alternative 1, similar physical constraints related to geology and soils exist. Thus, impacts associated with geology and soils with Alternative 1 would be similar when compared to the proposed Project.

Greenhouse Gas Emissions

As described in Section 4.7, *Greenhouse Gas Emissions,* impacts associated with GHGs would be significant and unavoidable with buildout of the proposed General Plan Update Land Use Element.

Similar to the proposed Project, Alternative 1 identifies Opportunity Areas for focused growth within the Planning Area. In comparison to the proposed Project, the Opportunity Areas in Alternative 1 permit more commercial square footage and less residential development. As described in Section 4.14, *Transportation*, when compared to the proposed Project, VMT at buildout of Alternative 1 would be greater; proposed Project VMT at buildout would be approximately 3,850,543, while Alternative 1 VMT at buildout would be approximately 4,035,359.

When compared to the proposed Project, Alternative 1 does not provide the policy framework and land use and transportation strategies that would contribute to the reduction of vehicle trips and resulting reduction in mobile source emissions, including policies to encourage mixed-use development, complete streets, and multi-modal improvements, that would further reduce greenhouse gas emissions impacts. The proposed Project envisions redevelopment and intensification of uses within specified growth areas, with the potential to integrate a mix of complementary land uses that would encourage reduced vehicle trips, VMT, and associated transportation-related GHG emissions, whereas Alternative 1 would not provide for the mix of land uses to the same extent.

While land uses and development with Alternative 1 would adhere to the same policy guidance and local, State, and regional air quality measures as the proposed Project, the increase in overall VMT at buildout would result in increases in greenhouse gas emissions with Alternative 1 when compared to the proposed Project, and impacts related to greenhouse gas emissions would continue to be significant and unavoidable. Since overall GHGs would be greater, the severity of the GHG impacts with Alternative 1 would be greater when compared to the proposed Project.

Hazards and Hazardous Materials

As described in Section 4.8, *Hazards and Hazardous Materials*, impacts associated with hazards and hazardous materials with buildout of the General Plan Update Land Use Element would be less than significant with implementation of mitigation measures.

As with the proposed Project, primary growth within the Planning Area with Alternative 1 would occur within the Opportunity Areas and Gateway Specific Plan. Development of the Gateway Specific Plan would be the same with both the proposed Project and Alternative 2. Similar to the proposed Project, subsequent construction activities with Alternative 1 may involve the routine transport, use, or disposal of hazardous materials, such as petroleum-based fuels or hydraulic fluid used in construction equipment. Compliance with applicable laws and regulations governing the routine use, storage, transportation, and

disposal of hazardous materials would ensure all potentially hazardous materials are used and handled in an appropriate manner and would minimize the potential for safety impacts. Additionally, subsequent projects could potentially involve the use of hazardous materials as part of operational activities. Compliance with applicable laws and regulations governing the routine use, storage, transportation, and disposal of hazardous materials would ensure all potentially hazardous materials are used and handled in an appropriate manner and would minimize the potential for safety impacts.

The Planning Area includes existing development from and prior to the 1960s; therefore, the presence of lead-based paint, ACMs, and/or other contaminants, which are typically present in buildings and structures constructed prior to 1978, are likely present in some structures, including the CHFB. As with the proposed Project, subsequent development with Alternative 1 would be required to comply with including California *Health and Safety Code* Sections 17920.10 and 105256, California Code of Regulations Title 8, Section 1532.1, and SCAQMD Rule 1403, as well as the City's CEQA Manual, which would require the preparation of a Phase I ESA for qualified projects.

Similar to the proposed Project, subsequent projects with Alternative 1 may involve the development of sites with aboveground storage tanks (ASTs), underground storage tanks (USTs) or other storage and site operational conditions with the potential for soil and groundwater contamination. Subsequent development with Alternative 1 would be reviewed at the project level to determine whether any development sites are listed on a hazardous materials site or have experienced historic or current operational activities involving hazardous materials with the potential for contamination. Compliance with the City's CEQA Manual would require the preparation of a Phase I ESA for qualified projects. If the Phase I ESA identifies recognized environmental conditions (REC) in connection with the project site, including if the site is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.2, a Phase II Investigation would be required to determine the potential for release of hazardous materials. If contamination is present, measures would be identified in accordance with the appropriate agency's requirements (Regional Water Quality Control Board, Orange County Environmental Health Department, Department of Toxic Substances Control, and/or South Coast Air Quality Management District) to prevent, minimize, and control the identified hazardous materials during construction and operation. Compliance with the applicable regulatory requirements and the City's CEQA Manual would reduce potential impacts to less than significant.

Similar to the proposed Project, any subsequent development projects would be subject to all applicable City regulations, reviews, and requirements pertaining to emergency response, emergency access, and maintaining emergency evacuation routes, as well as further CEQA analysis of project-specific impacts.

Like the proposed Project, subsequent development with Alternative 1 would be required to comply with the provisions of federal, State, and local requirements related to wildland fire hazards, including State fire safety regulations associated with wildland-urban interfaces, fire-safe building standards, and defensible space requirements. All new construction is required to adhere to standards and requirements set forth in the CBC, including Chapter 7A which specifically addresses wildfire exposure, mandating fire-resistant construction for new buildings and structures in designated high-risk areas, including the Wildland-Urban Interface (WUI), as well as the Laguna Niguel Municipal Code, which incorporates the

California Fire Code. Laguna Niguel Municipal Code Section 9-1-54.5, *Fuel Modification Regulations*, establishes fuel modification regulations that apply whenever a fuel modification plan has been required as a condition of development approval or through other requirements. Laguna Niguel Municipal Code Section 9-1-289, *Fire Protection*, requires appropriate fire protection for any subdivision proposed to be located in a high fire hazard area. Additionally, special attention would be given to development in hillside areas in the City per Municipal Code Title 9, Subarticle 8, *Hillside Protection*. The Hillside Protection Ordinance places restrictions on grading on steep slopes and contains other hillside protections to limit development in hillside areas.

Similar to the proposed Project, Alternative 1 would result in subsequent development projects within mapped Fire Hazard Severity Zones (FHSZs) and WUI areas located within and adjacent to the Planning Area and would be required to comply with the City's CEQA Manual and assess potential impacts.

Since Alternative 1 would result in new development and the Planning Area is the same with both the proposed Project and Alternative 1, similar hazards and hazardous materials conditions, including fire hazard severity zones exist. Thus, impacts associated with hazards and hazardous materials with Alternative 1 would be similar when compared to the proposed Project.

Hydrology and Water Quality

As described in Section 4.9, *Hydrology and Water Quality*, impacts to hydrology and water quality with buildout of the General Plan Update Land Use Element would be less than significant with implementation of mitigation measures.

Primary growth within the Planning Area with Alternative 1 would occur within the existing Opportunity Areas and Gateway Specific Plan. Development of the Gateway Specific Plan would be the same with the proposed Project and Alternative 1.

Alternative 1 would mostly result in new development within the same urbanized areas as the proposed Project; however, Alternative 1 would not include the Hospitality Overlay. With Alterative 1, the undeveloped site at Pacific Island Drive and Crown Valley Parkway (Community Profile Area 13) is designated as Residential Detached and Open Space. Potential development of the undeveloped site would be limited to one residential unit. The Hospitality Overlay site, located at Pacific Island Drive and Crown Valley Parkway, is currently undisturbed and undeveloped; therefore, any development within the site would involve the removal on natural vegetated land and result in changes to the existing drainage pattern, all new development would be subject to applicable stormwater and water quality requirements per the San Diego RWQCB. This variation in intensity and land use designation changes would not substantially alter impacts from or to flooding, water quality, or on groundwater supplies because existing federal, State, and local regulations would apply to guard against flood hazards, water quality contamination, or impact on groundwater supplies. Potential hydrology and water quality impact for Alternative 1, like the Project, would be less than significant.

Similar to the proposed Project, subsequent development and infrastructure projects with Alternative 1 would be evaluated for conformance with the CBSC, Municipal Code, NPDES permit, and other relevant regulations. Through compliance with the Construction General Permit, including the preparation of a

SWPPP, implementation of BMPs appropriate for each major phase of construction, and compliance with applicable City grading regulations, construction of subsequent development would not adversely impact water quality standards or degrade surface or groundwater quality during construction activities.

The City has specific requirements for projects to include a low impact development (LID) analysis consistent with adopted regulations. As part of the Water Quality Management Plan (WQMP) preparation, feasibility of applicable LID measures would be assessed, and a component of the LID analysis is the assessment of whether infiltration is feasible. As properties within the Planning Area undergo redevelopment with Alternative 1, existing properties that do not have water quality BMPs would be replaced with projects incorporating LID BMPs, improving project operational water quality. Therefore, long-term surface water quality of runoff from the Planning Area would be expected to improve over existing conditions as more LID BMPs are implemented.

New development with Alternative 1 would primarily occur within urbanized areas. Thus, like the proposed Project, Alternative 1 would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge, or conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

Compared to the proposed Project, the potential water quality impacts related to construction and operation would be similar with Alternative 1. Subsequent development with both the proposed Project and Alternative 1 would submit a SWPPP with BMPs to the RWQCB and comply with the requirements of the Regional MS4 Permit.

Since Alternative 1 would result in new development within urbanized areas and the Planning Area is the same with both the proposed Project and Alternative 1, similar hydrology and water quality conditions exist. Thus, impacts associated with hydrology and water quality with Alternative 1 would be similar when compared to the proposed Project.

Land Use and Planning

As described in Section 4.10, *Land Use and Planning*, impacts related to land use and planning with buildout of the proposed General Plan Update Land Use Element would be less than significant.

With Alternative 1, the existing Land Use Element would continue to provide outdated information that does not reflect the current conditions, and the goals and policies would not address the vision and concerns of the City's residents, property owners, decision-makers, and other stakeholders that actively participated in the visioning and goal and policy development process. Alternative 1 would prevent the City from achieving some of the primary objectives of the proposed Project. In addition, Alternative 1 would not be consistent with applicable State and regional plans related to the provision of mixed-use development, complete streets, and multi-modal improvements that would further reduce VMT and associated GHG emissions when compared to the proposed Project. Potential impacts associated with land use and planning with Alternative 1 would be greater when compared to the proposed Project.

Noise

As described in Section 4.11, *Noise*, impacts associated with noise with buildout of the proposed General Plan Update Land Use Element would be less than significant with implementation of mitigation measures.

Similar to the proposed Project, Alternative 1 identifies Opportunity Areas for focused growth within the Planning Area. In comparison to the proposed Project, the Opportunity Areas in Alternative 1 permit more commercial square footage and less residential development. As described in Section 4.14, *Transportation*, when compared to the proposed Project, VMT at buildout of Alternative 1 would be greater; proposed Project VMT at buildout would be approximately 3,850,543, while Alternative 1 VMT at buildout would be approximately 4,035,359.

Similar to the proposed Project, while construction activities would be limited to specific hours of the day in compliance with the City's Municipal Code, there is the potential that subsequent site-specific construction activities with Alternative 1 could generate a temporary increase in ambient noise levels in the vicinity of the project site in excess of the City's standards impacting sensitive land uses. Subsequent projects with Alternative 1 would be required to comply with the City's Noise Ordinance, including providing a construction noise assessment based on the screening criteria in the City's CEQA Manual. The assessment would include an analysis of potential construction noise impacts on noise-sensitive land uses and include representative noise measurements, estimates of existing and projected noise levels, and Best Management Practices (BMPs), if necessary, to ensure compliance with the City's noise standards. Potential BMPs may include locating stationary noise sources as far from adjacent properties as possible, limiting construction hours, restricting delivery times, installing temporary noise barriers and/or other BMPs determined effective to minimize construction noise emissions.

The proposed Project would result in a less than significant impact associated with mobile noise. Since Alternative 1 would have more vehicle trips when compared to the Project, Alternative 1 would also have increased impacts related to mobile noise. However, these impacts are anticipated also be less than significant.

Additionally, Alternative 1 anticipates development to occur within specific areas identified for growth, similar to the proposed Project. The City's CEQA Manual provides the criteria for when specific projects are required to prepare a noise assessment to address potential project operational impacts, including mobile and stationary sources. Similar to the proposed Project, subsequent projects with Alternative 2 would be required to comply with the criteria identified in the City's CEQA Manual to prepare an operational noise assessment. The operational noise assessment is required to be prepared in accordance with the methodologies, standards, and significance thresholds in the City's CEQA Manual. The assessment would include representative noise measurements, estimates of existing and projected noise levels, and BMPs, if necessary, to ensure compliance with the City's noise standards. As with the proposed Project, upon compliance with existing regulations, including the City's noise limits established within Division 6 – Noise Control of the City's Municipal Code noise impacts from mobile and stationary noise sources with Alternative 1 would be reduced to a less than significant level.

Like the proposed Project, there is the potential that subsequent construction activities with Alternative 1 would produce vibration that can be felt by adjacent land uses. Subsequent construction activities within the City would be reviewed for the potential to result in construction ground-borne noise and vibration that exceeds the City's standards at the project level. Applicants of subsequent development projects with Alternative 1 would be required to prepare a construction vibration assessment in accordance with the methodologies, standards, and significance thresholds in the City of Laguna Niguel CEQA Manual for review and approval by the Laguna Niguel Community Development Department. The assessment would include a detailed plan to avoid potential significant impacts to existing buildings due to groundborne vibrations. If necessary, the plan would identify and incorporate BMPs to ensure consistency with the City's CEQA Manual criteria.

When compared to the proposed Project, Alternative 1 would not include a range of policies and land use and transportation strategies related to reducing vehicle trips and resulting mobile noise sources, including policies to encourage mixed-use development, complete streets, and multi-modal improvements, that would further reduce mobile noise impacts. Overall, Alternative 1 would not provide the opportunities for trip internalization and prioritize increased opportunities for walking and bicycling as the proposed Project.

Although Alternative 1 would focus growth within similar urbanized areas as the proposed Project, Alternative 1 would allow for greater development resulting in a corresponding increase in vehicle trips. Since overall operational noise would be greater, the noise impacts with Alternative 1 would be greater when compared to the proposed Project.

Population and Housing

As shown in Table 6-1, Alternative 1 would allow for 1,643 fewer residential units which would result in 4,512 fewer residents compared to the proposed Project. Alternative 1 would also have fewer residents and dwelling units than projected by the Southern California Association of Governments (SCAG), as compared to the proposed Project which would have fewer residents and greater residential units. Alternative 1 would not establish updated goals and policies intended to reduce potential growth-related impacts when compared to the proposed Project. Alternative 1 does not reflect the most current population, employment, and housing numbers or projections, nor does it provide quantitative population, employment, and housing projections for the year 2045.

Similar to the proposed Project, Alternative 1 does not propose the removal or displacement of existing housing or residents. However, Alternative 1 would not provide for new residential units and therefore, would not provide for improved housing opportunities to support all income levels to the extent of the proposed Project.

Although Alternative 1 would result in less development than the proposed Project, it similarly would not induce substantial unplanned population growth or displace substantial numbers of existing people or housing, necessitating the construction of replacement housing. Impacts associated with population and housing would be similar when compared to the proposed Project.

Public Services and Recreation

As described in Section 4.13, *Public Services and Recreation*, impacts to public services and recreation with buildout of the proposed General Plan Update Land Use Element would be less than significant.

Alternative 1 would result in increased demand for public services and recreation. Similar to the Project, Alternative 1 would not result in any significant adverse impacts related to increased demands on public services such as fire, police, parks, schools, and other public facilities. Additionally, since adequate parkland acreage would be available to serve the population projected with the proposed Project, adequate parkland acreage would also be available to serve the population growth projected with Alternative 1. Similar to the proposed Project, subsequent development with Alternative 1 may result in the construction of new parks or recreational facilities. Any subsequent development of parks and recreational facilities would be subject to project-specific CEQA review and be required to comply with all federal, State, and local laws and regulations. With adherence to the City's development review process and compliance with applicable regulations, impacts related to the provision of new recreational facilities, or the construction or expansion of recreational facilities would be less than significant.

Since Alternative 1 would result in increased development potential when compared to the proposed Project, increased demand on public services would also occur. However, since fewer residential uses would be developed, demand on parks and recreational facilities would be less. Overall, impacts to public services and recreation with Alternative 1 would be less when compared to the proposed Project.

Transportation

As described in Section 4.14, *Transportation*, buildout consistent with the General Plan Update Land Use Element, would result in a significant and unavoidable VMT impact. All other impacts would be less than significant with the implementation of mitigation measures.

Similar to the proposed Project, Alternative 1 would provide for increased development within the Planning Area. Alternative 1 would not include updates to the Mobility Element, including changes to the Master Plan of Arterial Highways (MPAH), which includes goals and policies to encourage new and improved facilities to support multi-modal transportation and access within the Planning Area, as well as updated Circulation, Trails, and Bikeway Plans that are consistent with County and regional plans, including SCAG's 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy, the MPAH, and OC Active Report. Since Alternative 1 would not include updates to the Mobility Element that are consistent with applicable plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities, potential impacts would be greater when compared to the proposed Project.

The planned Camino Los Padres Extension would remain on the Circulation Plan. However, continuation of the planned extension of Camino Los Padres from its current terminus would not reduce any of the proposed Project's significant and unavoidable impacts. The roadway extension would not provide a critical evacuation route that would otherwise be needed. Further, the contemplated extension of Camino Los Padres would involve construction through undeveloped hillside area located within a high fire hazard severity zone with biological and geological constraints, as well as infrastructure constraints associated

with the rail line. The extension would also result in the intersection of Golden Lantern at Marino Hills Drive/Camino Los Padres to operate at an unacceptable service level. Therefore, retaining the extension of Camino Los Padres could result in greater impacts.

Similar to the proposed Project, Alternative 1 identifies Opportunity Areas for focused growth within the Planning Area. In comparison to the proposed Project, the Opportunity Areas in Alternative 1 permit more commercial square footage and less residential development. As described in Section 4.14, *Transportation*, when compared to the proposed Project, VMT at buildout of Alternative 1 would be greater; proposed Project VMT at buildout would be approximately 3,850,543, while Alternative 1 VMT at buildout would be approximately 4,035,359.

Alternative 1 would not establish updated goals and policies intended to reduce potential VMT impacts when compared to the proposed Project. Additionally, the General Plan Update includes goals, policies that are consistent with SCAG's 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) goals (as described in detail in Section 4.14), which Alternative 1 would not include. Since the overall VMT at buildout for Alternative 1 would be higher than with the proposed Project, the severity of VMT impacts with Alternative 1 would be greater when compared to the proposed Project.

Similar to the proposed Project, subsequent projects associated with Alternative 1 could result in new development and intensification of existing development within the Planning Area. As with the proposed Project, primary growth within the Planning Area with Alternative 1 would occur within the Opportunity Areas and Gateway Specific Plan. Development of the Gateway Specific Plan would be the same with the proposed Project and Alternative 1. Site-specific development review would include a review of the proposed development's land use compatibility and review of all on- and off-site improvements to ensure site design, ingress and egress, and site distance standards have been implemented and that no hazardous conditions associated with a geometric design feature or incompatible use occur. Further, development would occur consistent with the adopted Land Use Map, which addresses and plans for compatible land use development within the City. As with the proposed Project, impacts would be less than significant with Alternative 1.

Similar to the proposed Project, any subsequent development projects would be subject to all applicable City regulations, reviews, and requirements pertaining to emergency response, emergency access, and maintaining emergency evacuation routes, as well as further CEQA analysis of project-specific impacts.

Emergency accessibility is typically assessed at the project level. Although the Planning Area is highly urbanized and existing infrastructure, including roads, are generally in place, similar to the proposed Project, subsequent roadway and infrastructure improvements may occur to accommodate new development with Alternative 1. These modifications would typically occur adjacent to or within proximity to the specific site being developed. The applicant for any subsequent development would be required to submit plans for review to ensure compliance with zoning, building, and fire codes prior to the issuance of a building permit. The proposed development would be required to comply with all applicable building and fire code requirements and would submit construction plans to OCFA Planning and Development Services for review and approval prior to issuance of any building permit. The OCFA Planning and Development Services would review proposed developments for access requirements, minimum

driveway widths, fire apparatus access roads, fire lanes, signage, access devices and gates, access walkways, among other requirements to ensure adequate emergency access would be provided to and within the site. Compliance with existing regulatory requirements and approval by the City and OCFA would ensure that construction and operation of subsequent projects associated with implementation of the Alternative 1 would not result in inadequate emergency access.

Since Alternative 1 would not be consistent with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities and would also result in a significant and unavoidable VMT impact, impacts to transportation with Alternative 1 would be greater when compared to the proposed Project.

Tribal Cultural Resources

As described in Section 4.15, *Tribal Cultural Resources*, impacts to related to tribal cultural resources would be less than significant with mitigation incorporated.

Similar to the proposed Project, analysis of potential environmental impacts associated with subsequent development and infrastructure projects would occur, consistent with the requirements of CEQA and pursuant to the City's entitlement review process. Subsequent discretionary projects implemented in accordance with both alternatives would be subject to the provisions of AB 52 and may require tribal consultation with California Native American tribes that are traditionally and culturally affiliated with the Planning Area and who have previously requested AB 52 consultations with the City. Future AB 52 consultation may identify tribal cultural resources not yet found and formally recorded. Compliance with existing regulations would ensure that Alternative 1, similar to the proposed Project, would not cause a substantial adverse change in the significance of a tribal cultural resource and impacts would be less than significant.

Since Alternative 1 would result in new development within similar growth areas and the Planning Area is the same with both the proposed Project and Alternative 1, impacts to tribal cultural resources with Alternative 1 would be similar when compared to the proposed Project.

Utilities and Service Systems

As described in Section 4.16, *Utilities and Service Systems*, impacts to utilities and service systems would be less than significant.

Alternative 1 would result in increased demand for utilities and service systems. Similar to the proposed Project, Alternative 1 would not result in any significant adverse impacts related to increased demands on utilities and service systems such as water, wastewater, stormwater, electricity, natural gas, and telecommunications facilities. However, both Alternative 1 and the Project would likely require the construction or expansion of new utilities to serve the site-specific development that could occur. Any subsequent development of infrastructure facilities would be subject to project-specific CEQA review and be required to comply with all federal, State, and local laws and regulations. With adherence to the City's development review process and compliance with applicable regulations, impacts related to the provision of new utilities and service systems would be less than significant.

Since Alternative 1 would also result in new growth and development, similar to the proposed Project, , impacts to utilities and service systems with Alternative 1 would be similar when compared to the proposed Project.

Wildfire

As described in Section 4.17, *Wildfire*, impacts associated with wildfire would be less than significant with mitigation incorporated.

The Planning Area does not contain any FHSZ in SRA; however, Aliso and Wood Canyons Wilderness Park, located immediately west of the City, is an SRA designated VHFHSZ and Moderate FHSZ. The Planning Area does contain areas mapped as Very High, High, and Moderate FHSZ in Local Responsibility Areas (LRA). Similar to the proposed Project, Alternative 1 would allow for increased development in the City.

Any subsequent development projects with Alternative 1 would be subject to all applicable City regulations, reviews, and requirements pertaining to emergency response, emergency access, and maintaining emergency evacuation routes, as well as further CEQA analysis of project-specific impacts. As development with Alternative 1 would primarily occur within the same areas as the proposed Project, Alternative 1 would not impair an adopted emergency response plan or emergency evacuation plan.

Similar to the proposed Project, Alternative 1 would result in subsequent development projects within the Planning Area. However, Alternative 1 would not include the Hospitality Overlay. The Hospitality Overlay site located at Pacific Island Drive and Camino Del Avion is located within a Very High FHSZ and is currently undeveloped. Alternative 1 would allow for new development consistent with the existing land use designation for the Planning Area, including this site, which would result in less intensive development than the proposed Project.

Like the proposed Project, Alternative 1 would allow for new development within mapped FHSZs and WUI areas, which could exacerbate wildfire risks and increase exposure to City residents, employees, or visitors to increased pollutant concentrations from wildfire or result in the uncontrollable spread of a wildfire. Subsequent development with Alternative 1 would be required to comply with the provisions of federal, State, and local requirements related to wildland fire hazards, including State fire safety regulations associated with wildland-urban interfaces, fire-safe building standards, and defensible space requirements. All new construction is required to adhere to standards and requirements set forth in the CBC, including Chapter 7A which specifically addresses wildfire exposure, mandating fire-resistant construction for new buildings and structures in designated high-risk areas, including the WUI, as well as the Laguna Niguel Municipal Code, which incorporates the California Fire Code. Laguna Niguel Municipal Code Section 9-1-54.5, *Fuel Modification Regulations*, establishes fuel modification regulations that apply whenever a fuel modification plan has been required as a condition of development approval or through other requirements. Laguna Niguel Municipal Code Section 9-1-289, *Fire Protection*, requires appropriate fire protection for any subdivision proposed to be located in a high fire hazard area. Additionally, special attention would be given to development in hillside areas in the City per Municipal Code Title 9, Subarticle 8, *Hillside Protection*. The Hillside Protection Ordinance places restrictions on grading on steep slopes and contains other hillside protections to limit development in hillside areas. Project-specific development

would be required to comply with the City's CEQA Manual which requires an assessment of Project impacts related to wildfires.

Since Alternative 1 would result in less intensive development within areas mapped as FHSZs, impacts associated with wildfires with Alternative 1 would be less when compared to the proposed Project.

Ability to Reduce the Project Impacts

As discussed above, Alternative 1 would not eliminate the significant and unavoidable impacts that would occur with the proposed Project. In addition to resulting in significant and unavoidable impacts for the following environmental topic areas, impacts in these areas would be greater with Alternative 1 when compared to the proposed Project:

- Air Quality
- Cultural Resources
- Greenhouse Gas Emissions
- Transportation

Alternative 1 would also result in greater impacts for the following environmental topic areas when compared to the proposed Project:

- Aesthetics
- Energy
- Land Use and Planning
- Noise

Alternative 1 would result in reduced impacts for the following environmental topic area when compared to the proposed Project:

- Public Services and Recreation

Alternative 1 would result in similar impacts to the proposed Project in the following environmental topic areas:

- Biological Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Population and Housing
- Tribal Cultural Resources
- Utilities and Service Systems

Ability To Meet the Project Objectives

The proposed Land Use Element, along with the policy framework proposed by the General Plan Update, provides for a development and resource conservation pattern that preserves, protects, and enhances Laguna Niguel's existing residential neighborhoods while promoting opportunities for expanded housing

options, economic development, local job growth, and other community benefits. The General Plan Update carries forward and enhances policies and measures from the City's existing General Plan intended for environmental protection. The General Plan Update was prepared in conformance with State laws and regulations associated with the preparation of general plans, including requirements for environmental protection.

Alternative 1 would not include updated policies, particularly those related to housing, greenhouse gases, hazards, and complete streets, as required by State law. This alternative would not include policies proposed in the General Plan Update to ensure protection of environmental resources, both at a project level and under cumulative conditions, consistent with the objectives of CEQA.

Alternative 1 fails to meet several of the basic Project objectives, including the following:

- Promote residential growth that includes a diverse range of housing development options and densities, ensuring that residents across income levels, age groups, and those with special needs can live within the community;
- Promote redevelopment in Opportunity Areas that provide economic and community benefits through job creation, enhanced retail and restaurant spaces, and the incorporation of public gathering spaces;
- Maintain adequate, reliable, and essential public infrastructure and facilities, including transportation and utilities to support both existing and future development;
- Maintain a Circulation Plan that fosters a safe and efficient roadway network by minimizing congestion and providing acceptable operation and level of service for vehicles at intersections and roadways; and
- Maintain and enhance the City's active transportation network to facilitate walking, bicycling, and public transit, improving multimodal connectivity throughout the City.

ALTERNATIVE 2: REDUCED GROWTH ALTERNATIVE

Alternative 2 assumes the updated General Plan would be adopted; however, the Land Use Element, including the Land Use Map, would not include the Opportunity Area Overlays and the Hospitality Overlay. With Alternative 2, the maximum development that could occur within the Planning Area would consist of complete buildout of the Maximum Development Intensities (MDIs). Thus, residential development potential, commercial square footage, hotel rooms, and anticipated job growth would be less when compared to the proposed General Plan Update. With Alternative 2, it is assumed that the CHFB would not be demolished as part of a future redevelopment effort. This alternative continues to allow for development and redevelopment opportunities throughout the City but would not allow for increased development beyond the MDIs. The purpose of this alternative is to potentially reduce the severity of potential impacts related to air quality, cultural resources, greenhouse gas emissions, noise and total VMT, as overall development of residential, commercial, and hotel uses would be less than what could developed with the proposed Project.

Table 6-2
Alternative 2: Reduced Growth Alternative Compared to the Proposed Project

Alternative	Residential Units	Managed Care Units	Commercial Square Footage	Public Institutional Square Footage	Hotel Rooms	Population	Jobs
Reduced Growth	29,624	520	6,804,895	401,658	350	72,506	18,956
Proposed Project	31,124	520	6,862,257	401,658	590	76,151	19,267
Difference	**-1,500**	**0**	**-57,362**	**0**	**-240**	**-3,645**	**-311**

As shown in Table 6-2, Alternative 2 would result in approximately 1,500 fewer housing units, 57,362 fewer commercial square feet, 240 fewer hotel rooms, 3,645 fewer residents, and 311 fewer jobs within the Planning Area when compared to the proposed General Plan Update.

Aesthetics and Scenic Resources

As described in Section 4.1, *Aesthetics*, impacts related to aesthetics and scenic resources would be less than significant with buildout of the proposed General Plan Update Land Use Element.

Alternative 2 would also allow for additional development within the Planning Area above existing conditions, but to a lesser degree than the proposed Project. As with the proposed Project, primary growth within the Planning Area would occur within the Opportunity Areas and the Gateway Specific Plan; however, growth would be limited to the MDIs identified in Section 2.0, *Project Description*. The potential for hotel uses within the undeveloped site at Pacific Island Drive and Crown Valley Parkway and within the currently developed site at Golden Lantern and Camino Del Avion would not occur. Additionally, the CHFB site would not be demolished.

Similar to the proposed Project, development within these areas would not alter public views of scenic resources from scenic vistas within the Planning Area and none of these areas contain scenic resources or scenic vistas that would be designated by Alternative 2. Development consistent with Alternative 2 would primarily occur in urbanized areas of the City and would not substantially damage scenic resources within an area identified as a scenic corridor.

Alternative 2 would retain the existing CHFB site. As demonstrated in Table 2-2, the CHFB site is currently developed to its MDI, and no additional development capacity would be available with Alternative 2. As discussed further in Cultural Resources, the CHFB is a historic built environment resource which has been determined eligible for listing on the NRHP and contributes to the scenic built environment. Existing views of the CHFB from various locations within the Planning Area would remain.

Development of the Gateway Specific Plan would be the same with the proposed Project and Alternative 2, as any subsequent development within the Gateway Specific Plan would be regulated by the development standards and design guidelines established by the Gateway Specific Plan.

Similar to the Project, any subsequent development with Alternative 2 would be subject to the City's Municipal Code requirements related to construction activities, including temporary use permits. Subsequent projects would also be required to comply with all applicable requirements in the Municipal Code and/or applicable Specific Plan, which include regulations related to maximum building height, building setbacks, landscaping and screening requirements, and other development characteristics in place in each zoning district that govern scenic quality. Pursuant to the City's Community Design Guidelines (Title 9, Division 1, Article 2, Subarticle 9), applicable subsequent development projects would be reviewed to ensure that the project is consistent with the overall goal and objectives of the community design guidelines. The City's Hillside Protection Ordinance (Title 9, Division 1, Article 2, Sub-article 8) contains development standards designed to control and soften the visual impacts of hillside development. Additionally, as with the proposed Project, applicable subsequent land use and development review applications would undergo environmental review on a project-by-project basis prior to consideration by the decision-making authority. If necessary, project-specific mitigation would be recommended to reduce potential impacts to a less than significant level.

Thus, impacts to aesthetics and scenic resources with Alternative 2 would be similar when compared to the proposed Project.

Air Quality

As described in Section 4.2, *Air Quality*, impacts to air quality would be significant and unavoidable with buildout of the proposed General Plan Update Land Use Element.

As demonstrated in Table 6-2, the Reduced Growth Alternative would result in an overall reduction in development within the Planning Area. Although construction and operational activities contributing to air quality emissions would be less with Alternative 2, similar to the proposed Project, Alternative 2 would provide for additional growth with the potential to conflict with or obstruct implementation of the applicable air quality plan, result in a cumulatively considerable net increase of criterial pollutants, and potentially expose sensitive receptors to substantial pollutant concentration, resulting in significant and unavoidable construction and operational impacts at the project and cumulative project level. Subsequent development with Alternative 2 would also be required to implement Mitigation Measure AQ-1 on a project-by-project basis to reduce potential air quality impacts. Even with the implementation of Mitigation Measure AQ-1, Alternative 2 would not eliminate the proposed Project's significant and unavoidable air quality impacts.

However, the reduced development potential and resulting reduction in population and jobs would decrease air quality emissions when compared to the proposed Project. Since overall construction and operational air quality emissions would be reduced, the severity of the air quality impacts with Alternative 2 would be less when compared to the proposed Project.

Biological Resources

As described in Section 4.3, *Biological Resources*, impacts to biological resources with buildout of the proposed General Plan Update Land Use Element would be less than significant with implementation of mitigation measures.

As with the proposed Project, primary growth within the Planning Area would occur within the Opportunity Areas and Gateway Specific Plan, which are primarily urbanized and do not typically contain significant biological resources. Development of the Gateway Specific Plan would be the same with the proposed Project and Alternative 2, as any subsequent development within the Gateway Specific Plan would be regulated by the development standards established by the Gateway Specific Plan.

Potential development of the undeveloped site at Pacific Island Drive and Crown Valley Parkway would be limited to one residential unit and ancillary site development over several acres, consistent with the MDI (Table 2-14). Considering the site's development constraints, such as challenging topography and its location within a Local Coastal Program, which would likely limit the site development intensity of a hotel, the potential biological resource impacts under Alternative 2 and the proposed Project are anticipated to be similar. Additionally, potential impacts to nesting birds associated with demolition of the CHFB site would not occur with Alternative 2.

Similar to the proposed Project, subsequent development with Alternative 2 would have the potential to impact biological resources within the Planning Area. Subsequent development projects would be reviewed on a project-by-project basis and as applicable, would be required to comply with Mitigation Measures BIO-1 and BIO-2 to reduce potential impacts to less than significant. Since development of the undeveloped site at Pacific Island Drive and Crown Valley Parkway would have similar potential impacts to biological resources, impacts to biological resources with Alternative 2 would be similar when compared to the proposed Project.

Cultural Resources

As described in Section 4.4, *Cultural Resources*, buildout consistent with the General Plan Update Land Use Element, would result in a significant and unavoidable cultural resources impact associated with the demolition of the CHFB. All other impacts would be less than significant with the implementation of mitigation measures.

As with the proposed Project, primary growth within the Planning Area with Alternative 2 would occur within the Opportunity Areas and Gateway Specific Plan. As discussed in Section 4.4, except for the CHFB site (discussed further below), none of these areas contain designated or potential historical resources. Similar to the proposed Project, Alternative 2 would be implemented over 20 years. Therefore, there is the potential that subsequent development and redevelopment activities within the Planning Area could occur in areas with the potential to result in significant impacts to a historic resource. Subsequent development with Alternative 2 would be required to implement Mitigation Measure CUL-1 through CUL-3 to reduce potential impacts to a less than significant level.

Alternative 2 would retain the existing CHFB site. As demonstrated in Table 2-2, the CHFB site is currently developed to its MDI and no additional development capacity would be available with Alternative 2. The CHFB is a historic built environment resource which has been determined eligible for listing on the NRHP and contributes to the scenic built environment. Therefore, any development within the site that would alter the existing views of the CHFB from surrounding public places, including public streets, would be significant and unavoidable. Since Alternative 2 would retain the existing CHFB site and no additional

development would occur, Alternative 2 would eliminate the significant and unavoidable impact associated with demolition of the CHFB that would occur with the proposed Project and avoid a significant and unavoidable impact that would be associated with development within the site that would alter existing views of the CHFB from surrounding public streets and locations.

Similar to the proposed Project, while most new development in the City would occur in areas that have been previously developed, subsequent development with Alternative 2 could result in new development and intensification of existing development within areas with the potential to directly impact archaeological resources. Implementation of Mitigation Measures CUL-5 and CUL-6 would be required to reduce potential impacts to a less than significant level.

Subsequent construction projects within the Planning Area could have the potential to disturb or destroy buried Native American human remains, as well as other human remains, including those interred outside of formal cemeteries. Similar to the proposed Project, subsequent development with Alternative 2 would be required to implement Mitigation Measure CUL-7 to address the potential for unanticipated discoveries for site-specific projects and ensure that potential impacts associated with the inadvertent discovery of human remains would be less than significant.

Since impacts to cultural resources would be less than significant with implementation of mitigation measures and Alternative 2 would eliminate the significant and unavoidable impact associated with the demolition of the CHFB, impacts to cultural resources would be less when compared to the proposed Project.

Energy

As described in Section 4.5, *Energy*, impacts associated with energy with buildout of the General Plan Update Land Use Element would be less than significant.

Alternative 2 would result in increased energy demand, although at a reduced amount when compared to the Project. Similar to the Project, Alternative 2 would not result in any significant adverse impacts related to Project energy requirements, energy use inefficiencies, and/or the energy intensiveness of materials by amount and fuel type, including during construction, operation, maintenance, and/or removal. Subsequent development within the City would be required to comply with all existing energy standards, and there would be no resulting significant adverse impacts on energy resources with Alternative 2.

Additionally, subsequent development with Alternative 2 would adhere to the same policy guidance and local, state, and regional measures regulating energy usage as the proposed Project and would not conflict with or obstruct regional plans for renewable energy or energy efficiency. The overall decrease in residential and non-residential development potential, and the corresponding reduction in electricity and gas usage for the operation of buildings, diesel fuel for off-road construction activities, and potential reductions in gasoline due to a decrease in the overall traffic volumes, would result in reductions in energy usage with Alternative 2 when compared to the proposed Project. Impacts related to energy use with Alternative 2 would be less when compared to the proposed Project.

Geology and Soils

As described in Section 4.6, *Geology and Soils*, impacts associated with geology and soils with buildout of the General Plan Update Land Use Element would be less than significant with the implementation of mitigation measures.

As with the proposed Project, primary growth within the Planning Area with Alternative 2 would occur within the Opportunity Areas and Gateway Specific Plan. Development of the Gateway Specific Plan would be the same with the proposed Project and Alternative 2. The Planning Area is located within a seismically active area, and portions of the Opportunity Areas are located within identified landslide and liquefaction zones and include soils having shrink-swell potential. Subsequent development with Alternative 2 would be required to implement Mitigation Measure GS-1, as applicable, which would include preparation of a Preliminary Geotechnical Study to analyze site-specific geologic hazards and provide recommendations to reduce potential impacts. A Final Geotechnical Report would ensure construction-level geotechnical recommendations and design parameters are integrated into the final grading design.

Additionally, all subsequent development and infrastructure projects would be evaluated for conformance with the CBSC, Municipal Code, NPDES permit, and other relevant regulations, including development and implementation of a SWPPP to identify erosion-control and sediment-control BMPs in compliance with the Construction General Permit to control stormwater quality degradation due to potential construction-related pollutants. As with the proposed Project, impacts would be less than significant with Alternative 2.

As with the proposed Project, it is possible that future ground-disturbing activities with Alternative 2 could encounter undiscovered paleontological resources within the Planning Area. Subsequent development with Alternative 2 would also be required to comply with Mitigation Measures GS-2 and GS-3. Mitigation Measure GS-2 requires preparation of a combined paleontological assessment and mitigation plan by a certified principal paleontologist for qualifying projects with a Bureau of Land Management (BLM) Potential Fossil Yield Classification (PFYC) ranking of moderate (PFYC 3) or above. If resources are known or reasonably anticipated, a detailed mitigation plan would be prepared and submitted to the City for review and approval. All mass grading in areas or sediments having moderate to very high paleontological sensitivity would be monitored for paleontological resources. If paleontological resources are encountered on a site in which prior paleontologist involvement was not required due to the low sensitivity for paleontological resources, Mitigation Measure GS-3 would require all earth-disturbing activities to cease within a 50-foot radius of the area of discovery and a certified principal paleontologist be contacted to evaluate the find. Should it be deemed necessary to proceed with paleontological mitigation by the paleontologist, the protocol established in Mitigation Measure GS-2 would be implemented.

Since Alternative 2 would result in similar development patterns and the Planning Area is the same with both the proposed Project and Alternative 2, similar physical constraints related to geology and soils exist. Thus, impacts associated with geology and soils with Alternative 2 would be similar when compared to the proposed Project.

Greenhouse Gas Emissions

As described in Section 4.7, *Greenhouse Gas Emissions*, impacts associated with GHGs would be significant and unavoidable with buildout of the proposed General Plan Update Land Use Element.

Like the proposed Project, Alternative 2 envisions redevelopment and intensification of uses within specified growth areas, with the potential to integrate a mix of complementary land uses that would encourage reduced vehicle trips, VMT, and associated transportation-related GHG emissions. As demonstrated in Table 6-2, the Reduced Growth Alternative would result in an overall reduction in development within the Planning Area.

Although construction and operational activities contributing to GHGs would be less with Alternative 2, similar to the proposed Project, Alternative 2 would provide for additional growth resulting in the generation of GHGs. Subsequent development, having the potential to have a significant GHG impact based on the City's screening criteria, would be required to comply with Mitigation Measure GHG-1. Mitigation Measure GHG-1 requires subsequent project, as applicable, to prepare and submit a GHG emissions technical analysis that evaluates the proposed project's construction- and operation-related GHG emissions impacts in accordance with the methodologies and significance thresholds in the City's CEQA Manual for review and approval by the City. If the assessment determines the project would exceed the City's adopted thresholds, mitigation measures for individual development projects would be required to reduce GHG emissions to below applicable threshold(s). As with the proposed Project, even with the implementation of mitigation measures, GHG impacts would be significant and unavoidable with Alternative 2.

However, the reduced development potential and resulting reduction in population and jobs would decrease total greenhouse gas emissions when compared to the proposed Project. Since overall construction and operational GHGs would be reduced, the severity of the GHG impacts with Alternative 2 would be less when compared to the proposed Project.

Hazards and Hazardous Materials

As described in Section 4.8, *Hazards and Hazardous Materials*, impacts associated with hazards and hazardous materials with buildout of the General Plan Update Land Use Element would be less than significant with implementation of mitigation measures.

As with the proposed Project, primary growth within the Planning Area with Alternative 2 would occur within the Opportunity Areas and Gateway Specific Plan. Development of the Gateway Specific Plan would be the same with the proposed Project and Alternative 2. Similar to the proposed Project, subsequent construction activities with Alternative 2 may involve the routine transport, use, or disposal of hazardous materials, such as petroleum-based fuels or hydraulic fluid used in construction equipment. Compliance with applicable laws and regulations governing the routine use, storage, transportation, and disposal of hazardous materials would ensure all potentially hazardous materials are used and handled in an appropriate manner and would minimize the potential for safety impacts. Additionally, subsequent project could potentially involve the use of hazardous materials as part of operational activities. Compliance with applicable laws and regulations governing the routine use, storage, transportation, and

disposal of hazardous materials would ensure all potentially hazardous materials are used and handled in an appropriate manner and would minimize the potential for safety impacts.

Although Alternative 2 would not include demolition of the CHFB, the Planning Area includes existing development from and prior to the 1960s; therefore, the presence of lead-based paint, ACMs, and/or other contaminants, which are typically present in buildings and structures constructed prior to 1978, are likely present in some structures. As with the proposed Project, subsequent development with Alternative 2 would be required to comply with Mitigation Measure HAZ-1 to reduce potential impacts associated with LBPs and ACMs. Mitigation Measure HAZ-1 would require subsequent development that would involve the demolition of a structure with the potential for LBP or ACMs (built before 1978), prepare a comprehensive survey for ACM and LBP to identify the locations and quantities of ACMs and LBP in the structure. The ACM and LBP surveys would be conducted in accordance with applicable SCAQMD regulations. If ACMs or LBPs are identified during the surveys, the applicant would be required to retain a licensed or certified contactor to remove and dispose of all ACMs and LBP in accordance with California Code of Regulations Title 8, Sections 1529 and 1532.1, which would reduce potential impacts to a less than significant level.

Similar to the proposed Project, subsequent projects with Alternative 2 may involve the development of sites with aboveground storage tanks (ASTs), underground storage tanks (USTs) or other storage and site operational conditions with the potential for soil and groundwater contamination. Subsequent development with Alternative 2 would be reviewed at the project level to determine whether any development sites are listed on a hazardous materials site or have experienced historic or current operational activities involving hazardous materials with the potential for contamination. Mitigation Measure HAZ-2 requires the preparation of a Phase I ESA based on the screening criteria provided in the City's CEQA Manual. If the Phase I ESA identifies recognized environmental conditions (REC) in connection with the project site, including if the site is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.2, a Phase II Investigation would be required to determine the potential for release of hazardous materials. If contamination is present, measures would be identified in accordance with the appropriate agency's requirements (Regional Water Quality Control Board, Orange County Environmental Health Department, Department of Toxic Substances Control, and/or South Coast Air Quality Management District) to prevent, minimize, and control the identified hazardous materials during construction and operation. Compliance with the applicable regulatory requirements and Mitigation Measure HAZ-2 would reduce potential impacts to less than significant.

The Circulation Plan proposed by the Project, including amendments to the MPAH, would be the same as Alternative 2. Although Alternative 2 would result in less residential and non-residential development as the proposed Project, the proposed changes to existing roadways and intersections to accommodate the future growth would still occur. As development with Alternative 2 would primarily occur within the same areas as the proposed Project, Alternative 2 would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Similar to the Project, Alternative 2 would allow for additional development within mapped FHSZs and WUI areas located within and adjacent to the Planning Area, which could expose people or structures,

either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires. However, Alternative 2 would not include the Hospitality Overlay. The Hospitality Overlay site located at Pacific Island Drive and Camino Del Avion is located within a Very High FHSZ and is currently undeveloped. Alternative 2 would allow for new development consistent with the MDIs for the Planning Area, including this site, which would result in less intensive development than the proposed Project.

Subsequent development would be required to comply with Mitigation Measure WF-1. WF-1 would require site-specific development projects in High FHSZs and Very High FHSZs to develop a project-specific fire prevention plans in accordance with the methodologies, standards, and significance thresholds in the California Fire Code (as locally amended), California Building Code (as locally amended) and the City's CEQA Manual and submitted for review and approval by the Orange County Fire Authority (OCFA) and Laguna Niguel Community Development Department in accordance with applicable state and local wildfire safety regulations. The site-specific plans would be required to incorporate wildfire safety design features intended to reduce the risk of fire ignition, limit fire spread, and facilitate safe and effective emergency response and evacuation. In addition to compliance with the identified regulatory requirements, compliance with Mitigation Measures WF-1 would reduce potential risk of exposure to wildland fires to less than significant.

Since Alternative 2 would result in similar land uses and the Planning Area is the same with both the proposed Project and Alternative 2, similar hazards and hazardous materials conditions, including fire hazard severity zones exist. Thus, impacts associated with hazards and hazardous materials with Alternative 2 would be similar when compared to the proposed Project.

Hydrology and Water Quality

As described in Section 4.9, *Hydrology and Water Quality*, impacts to hydrology and water quality with buildout of the General Plan Update Land Use Element would be less than significant with implementation of mitigation measures.

As with the proposed Project, primary growth within the Planning Area with Alternative 2 would occur within the Opportunity Areas and Gateway Specific Plan. Development of the Gateway Specific Plan would be the same with the proposed Project and Alternative 2. Development of the Gateway Specific Plan would be the same with the proposed Project and Alternative 2.

Similar to the proposed Project, subsequent development and infrastructure projects with Alternative 2 would be evaluated for conformance with the CBSC, Municipal Code, NPDES permit, and other relevant regulations. Through compliance with the Construction General Permit, including the preparation of a SWPPP, implementation of BMPs appropriate for each major phase of construction, and compliance with applicable City grading regulations, construction of subsequent development would not adversely impact water quality standards or degrade surface or groundwater quality during construction activities.

The City has specific requirements for projects to include a low impact development (LID) analysis consistent with adopted regulations. As part of the WQMP preparation, feasibility of applicable LID measures would be assessed, and a component of the LID analysis is the assessment of whether infiltration is feasible. As properties within the Planning Area undergo redevelopment with Alternative 2,

existing properties that do not have water quality BMPs would be replaced with projects incorporating LID BMPs, improving project operational water quality. Therefore, long-term surface water quality of runoff from the Planning Area would be expected to improve over existing conditions as more LID BMPs are implemented.

Alternative 2 would result in less development than the proposed Project and new development would primarily occur within urbanized areas. Thus, like the proposed Project, Alternative 2 would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge, or conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

As specified in the City's Municipal Code, qualifying development projects would be required to incorporate site-specific LID BMPs into the drainage system, slowing on- and off-site flow rates and decreasing flooding. Similar to the proposed Project, subsequent development projects with Alternative 2 would be required to comply with Mitigation Measure HWQ-1 to ensure compliance with the City's CEQA Manual requirements. Mitigation Measure HWQ-1 requires a project applicant to submit a Hydrology Study prepared in accordance with the methodologies, standards, and significance thresholds in the County of Orange Hydrology Manual (as amended locally) and the City's CEQA Manual. The Hydrology Study is required to demonstrate that post-development drainage patterns and stormwater runoff flows are designed so as not exceed to existing conditions and will not result in flooding on or- off-site and to determine if the project site is within a regulatory floodplain and evaluate the potential for the proposed development to impede or redirect flood flows. Compliance with regional and local regulatory requirements and implementation of Mitigation Measure HWQ-1 would reduce potential impacts to less than significant.

Since Alternative 2 would result in similar land uses and the Planning Area is the same with both the proposed Project and Alternative 2, similar hydrology and water quality conditions exist. Thus, impacts associated with hydrology and water quality with Alternative 2 would be similar when compared to the proposed Project.

Land Use and Planning

As described in Section 4.10, *Land Use and Planning*, impacts related to land use and planning with buildout of the proposed General Plan Update Land Use Element would be less than significant.

As described previously, the proposed Project and Alternative 2 would include adoption of the updated policy document, including the Land Use Map (except for the Hospitality Overlay). Similar to the proposed Project, Alternative 2 would include revisions to the existing Land Use Map, which are intended to preserve, protect, and enhance existing residential neighborhoods and open space and recreational areas. The proposed General Plan Update Land Use Element continues to separate Laguna Niguel into 14 Community Profile Areas to facilitate a manageable approach to community planning and land use implementation. The delineation of the Community Profile Areas for planning purposes is a continuation from the existing General Plan and would not physically divide an established community. Similarly, the

proposed modifications to the Circulation Plan and amendments to the MPAH, which would occur with Alternative 2, would not physically divide an established community.

Although Alternative 2 would provide for less development when compared to the proposed Project, the land use designations (except for the Hospitality Overlay) and policy framework would be the same. Thus, similar to the proposed Project, Alternative 2 would not conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Since Alternative 2 would result in similar land uses and the policy framework would be the same with both the proposed Project and Alternative 2, potential impacts associated with land use and planning with Alternative 2 would be similar when compared to the proposed Project.

Noise

As described in Section 4.11, *Noise*, impacts associated with noise with buildout of the proposed General Plan Update Land Use Element would be less than significant with implementation of mitigation measures.

Alternative 2 would result in reduced construction and operational activities when compared to the Project. As with the proposed Project, primary growth within the Planning Area with Alternative 2 would occur within the Opportunity Areas and Gateway Specific Plan. Development of the Gateway Specific Plan would be the same with the proposed Project and Alternative 2.

Similar to the proposed Project, while construction activities would be limited to specific hours of the day in compliance with the City's Municipal Code, there is the potential that subsequent site-specific construction activities with Alternative 2 could generate a temporary increase in ambient noise levels in the vicinity of the project site in excess of the City's standards impacting sensitive land uses. Subsequent projects with Alternative 2 would be required to comply with Mitigation Measure NOI-1, as applicable. Mitigation Measure NOI-1 would require a construction noise assessment based on the screening criteria in the City's CEQA Manual. The assessment would include an analysis of potential construction noise impacts on noise-sensitive land uses and include representative noise measurements, estimates of existing and projected noise levels, and Best Management Practices (BMPs), if necessary, to ensure compliance with the City's noise standards. Potential BMPs may include locating stationary noise sources as far from adjacent properties as possible, limiting construction hours, restricting delivery times, installing temporary noise barriers and/or other BMPs determined effective to minimize construction noise emissions.

The proposed Project would result in a less than significant impact associated with mobile noise. Since Alternative 2 would have less development and as a result, less vehicle trips when compared to the Project, Alternative 2 would also have a less than significant impact related to mobile noise. Additionally, Alternative 2 anticipates similar types of land uses and development to occur within specific areas identified for growth, similar to the proposed Project. The City's CEQA Manual provides the criteria for when specific projects are required to prepare a noise assessment to address potential project operational impacts, including mobile and stationary sources. Similar to the proposed Project, subsequent projects with Alternative 2 would be required to comply with Mitigation Measure NOI-2, which requires applicable

projects meeting the criteria identified in the City's CEQA Manual to prepare an operational noise assessment. The operational noise assessment is required to be prepared in accordance with the methodologies, standards, and significance thresholds in the City's CEQA Manual. The assessment would include representative noise measurements, estimates of existing and projected noise levels, and BMPs, if necessary, to ensure compliance with the City's noise standards. As with the proposed Project, upon compliance with existing regulations, including the City's noise limits established within Division 6 – Noise Control of the City's Municipal Code, and with implementation of Mitigation Measure NOI-2 noise impacts from mobile and stationary noise sources with Alternative 2 would be reduced to a less than significant level.

Like the proposed Project, there is the potential that subsequent construction activities with Alternative 2 would produce vibration that can be felt by adjacent land uses. Subsequent construction activities within the City would be reviewed for the potential to result in construction ground-borne noise and vibration that exceeds the City's standards at the project level. Mitigation Measure NOI-3 would require applicants of subsequent development projects with Alternative 2 prepare a construction vibration assessment in accordance with the methodologies, standards, and significance thresholds in the City of Laguna Niguel CEQA Manual for review and approval by the Laguna Niguel Community Development Department. The assessment would include a detailed plan to avoid potential significant impacts to existing buildings due to groundborne vibrations. If necessary, the plan would identify and incorporate BMPs to ensure consistency with the City's CEQA Manual criteria. With implementation of Mitigation Measure NOI-3, impacts related to construction-related ground-borne vibration would be less than less than significant.

Although Alternative 2 would focus growth within similar urbanized areas as the proposed Project, Alternative 2 would allow for less development resulting in a corresponding reduction in construction and operational noise. Since overall construction and operational noise would be reduced, the noise impacts with Alternative 2 would be less when compared to the proposed Project.

Population and Housing

As described in Section 4.13, *Population and Housing*, impacts associated with population and housing with buildout of the proposed General Plan Update Land Use Element would be less than significant.

Similar to the proposed Project, this Alternative would update the City's environmental baseline conditions and development projections through 2045. With Alternative 2, development would occur within the 14 Community Profile Areas consistent with the MDIs. As shown in Table 6-2, Alternative 2 would allow 1,500 fewer residential units, which could result in 3,645 fewer residents when compared to the proposed Project. Similar to the proposed Project, new development with Alternative 2 would occur in and around existing urbanized areas. The population and household growth with Alternative 2 would also be generally consistent with SCAG growth projections, although Alternative 2 would have fewer residents and dwelling units than projected by SCAG, as compared to the proposed Project which would have fewer residents and greater residential units. Similar to the proposed Project, the policies intended to guide growth to appropriate areas and provide services necessary to accommodate growth, the land uses allowed with Alternative 2, the infrastructure anticipated to accommodate proposed land uses, and

the goal and policy framework would not induce growth that would exceed adopted thresholds, beyond those disclosed and analyzed throughout this EIR.

Similar to the proposed Project, Alternative 2 does not propose the removal or displacement of existing housing or residents. Alternative 2 maintains the existing type and number of residential dwelling units and introduces new policies and land use designations that support additional housing opportunities, although to a lesser extent than the proposed Project. As with the proposed Project, land use designations for parcels located within existing residential communities that are developed with private neighborhood parks, recreation amenities, and landscaped slopes within scenic corridors abutting scenic highways, that have been consistently regulated since initial entitlement to preclude development of residential dwelling units would be redesignated to "Parks and Recreation" and "Open Space" as appropriate.

Although Alternative 2 would result in less development than the proposed Project, it similarly would not induce substantial unplanned population growth or displace substantial numbers of existing people or housing, necessitating the construction of replacement housing. Impacts associated with population and housing would be similar when compared to the proposed Project.

Public Services and Recreation

As described in Section 4.13, *Public Services and Recreation*, impacts to public services and recreation with buildout of the proposed General Plan Update Land Use Element would be less than significant.

Alternative 2 would result in increased demand for public services and recreation, although at a reduced amount when compared to the Project. Similar to the Project, Alternative 2 would not result in any significant adverse impacts related to increased demands on public services such as fire, police, parks, schools, and other public facilities. Additionally, since adequate parkland acreage would be available to serve the population projected with the proposed Project, adequate parkland acreage would also be available to serve the population growth projected with Alternative 2. Similar to the proposed Project, subsequent development with Alternative 2 may result in the construction of new parks or recreational facilities. Any subsequent development of parks and recreational facilities would be subject to project-specific CEQA review and be required to comply with all federal, State, and local laws and regulations. With adherence to the City's development review process and compliance with applicable regulations, impacts related to the provision of new recreational facilities, or the construction or expansion of recreational facilities would be less than significant.

Since Alternative 2 would result in less development potential when compared to the proposed Project, increased demand on public services and recreational facilities would also be less. Impacts to public services and recreation with Alternative 2 would be less when compared to the proposed Project.

Transportation

As described in Section 4.14, *Transportation*, buildout consistent with the General Plan Update Land Use Element, would result in a significant and unavoidable VMT impact. All other impacts would be less than significant with the implementation of mitigation measures.

The Circulation Plan proposed by the Project, including amendments to the MPAH, would be the same as Alternative 2. Similar to the proposed Project, implementation of Mitigation Measure TRA-1 would be required with Alternative 2. Mitigation Measure TRA-1 requires the City coordinate with OCTA amendments to the MPAH for consistency with the proposed Circulation Plan. As previously discussed, the proposed goals and policies for the Project would be the same for Alternative 2. The proposed goals and policies support access to and the performance of bicycle and pedestrian facilities, further reducing potential conflicts, and are consistent with the goals of the City's Draft ATP, which is anticipated to be approved prior to the General Plan Update. As with the proposed Project, Alternative 2 would result in population and jobs growth, which could increase the demand for public transit. However, Alternative 2 would not conflict with a program, plan, ordinance, or policy addressing the public transit system. Further, Alternative 2 includes complimentary policies to support and enhance transit service.

Alternative 2 would result in increased development above existing conditions. As with the proposed Project, primary growth within the Planning Area with Alternative 2 would occur within the Opportunity Areas and Gateway Specific Plan. Development of the Gateway Specific Plan would be the same with the proposed Project and Alternative 2.

Alternative 2 would result in less development within the Opportunity Areas (Community Profile Areas 1 and 14) and the sites (Community Profile Areas 12 and 13) identified for the Hospitality Overlay by the proposed Project. Although overall trips would be less than the proposed Project, since the VMT impacts primarily occur within the Traffic Analysis Zones (TAZs) outside of the growth areas, and growth in these areas would be consistent with the MDIs under both the proposed Project and Alternative 2, Alternative 2 would have similar VMT impacts as the proposed Project. Therefore, reduced development with Alternative 2 would not eliminate the significant and unavoidable VMT impact that would occur with the proposed Project.

Although Alternative 2 would result in less residential and non-residential development as the proposed Project, the proposed changes to existing roadways and intersections to accommodate the future growth would still occur.

Similar to the proposed Project, subsequent projects associated with Alternative 2 could result in new development and intensification of existing development within the Planning Area. As with the proposed Project, primary growth within the Planning Area with Alternative 2 would occur within the Opportunity Areas and Gateway Specific Plan. Development of the Gateway Specific Plan would be the same with the proposed Project and Alternative 2. Site-specific development review would include a review of the proposed development's land use compatibility and review of all on- and off-site improvements to ensure site design, ingress and egress, and site distance standards have been implemented and that no hazardous conditions associated with a geometric design feature or incompatible use occur.

As development with Alternative 2 would primarily occur within the same areas as the proposed Project, Alternative 2 would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Similar to the proposed Project, Alternative 2 would result in a significant and unavoidable VMT impact. Since the overall VMT would be less with Alternative 2, the severity of the transportation impacts with Alternative 2 would be less when compared to the proposed Project.

Tribal Cultural Resources

As described in Section 4.15, *Tribal Cultural Resources*, impacts to related to tribal cultural resources would be less than significant with mitigation incorporated.

Similar to the proposed Project, analysis of potential environmental impacts associated with subsequent development and infrastructure projects with Alternative 2 would occur, consistent with the requirements of CEQA and pursuant to the City's entitlement review process. Subsequent discretionary projects would be subject to the provisions of AB 52 and may require tribal consultation with California Native American tribes that are traditionally and culturally affiliated with the Planning Area and who have previously requested AB 52 consultations with the City. Future AB 52 consultation may identify tribal cultural resources not yet found and formally recorded. Similar to the proposed Project, subsequent development with Alternative 2 would be required to comply with existing regulations and implement Mitigation Measure TCR-1 and CUL-5. Mitigation Measure TCR-1 would require prior to ground disturbing activities, for applicants of qualifying projects to coordinate with all interested tribes to determine if the potential existing for tribal cultural resources to be present. If it is determined that there is the potential for tribal cultural resources to be present, a qualified archaeologist or designated Native American Monitor (Tribal Monitor), shall be present on the project site during all ground-disturbing activities/earthwork to monitor grading activities. If tribal cultural resources are discovered during ground-disturbing activities/earthwork activities, all construction activities will cease around the vicinity of the find, and the qualified archaeologist or Tribal Monitor will perform data recovery and secure the item(s) until the Tribal Monitor determines the best course of action. Preservation in place (i.e., avoidance) is the preferred manner of treatment. If preservation in place is not feasible, treatment may include archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis as determined by the Tribal Monitor. If the find qualifies as a historic archaeological resource deemed significant by a qualified archaeologist as a "historical resource" or "unique archaeological resource" instead of a Native American resource, the protocol established in Mitigation Measure CUL-5 will be implemented.

Since Alternative 2 would result in similar development patterns and the Planning Area is the same with both the proposed Project and Alternative 2, impacts to tribal cultural resources with Alternative 2 would be similar when compared to the proposed Project.

Utilities and Service Systems

As described in Section 4.16, *Utilities and Service Systems*, impacts to utilities and service systems would be less than significant.

Alternative 2 would result in increased demand for utilities and service systems, although at a reduced amount when compared to the Project. Similar to the proposed Project, Alternative 2 would not result in any significant adverse impacts related to increased demands on utilities and service systems such as

water, wastewater, stormwater, electricity, natural gas, and telecommunications facilities. However, both Alternative 2 and the Project would likely require the construction or expansion of new utilities to serve the site-specific development that could occur. Any subsequent development of infrastructure facilities would be subject to project-specific CEQA review and be required to comply with all federal, State, and local laws and regulations. With adherence to the City's development review process and compliance with applicable regulations, impacts related to the provision of new utilities and service systems would be less than significant.

Since Alternative 2 would result in less development potential when compared to the proposed Project, increased demand on utilities and service systems would also be less. Impacts to utilities and service systems with Alternative 2 would be less when compared to the proposed Project.

Wildfire

As described in Section 4.17, *Wildfire*, impacts associated with wildfire would be less than significant with mitigation incorporated.

The Planning Area does not contain any FHSZ in SRA; however, Aliso and Wood Canyons Wilderness Park, located immediately west of the City, is an SRA designated VHFHSZ and Moderate FHSZ. The Planning Area does contain areas mapped as Very High, High, and Moderate FHSZ in LRA. Similar to the proposed Project, Alternative 2 would allow for increased development in the City.

Any subsequent development projects with Alternative 2 would be subject to all applicable City regulations, reviews, and requirements pertaining to emergency response, emergency access, and maintaining emergency evacuation routes, as well as further CEQA analysis of project-specific impacts. The Circulation Plan proposed by the Project, including amendments to the MPAH, would be the same as Alternative 2. Although Alternative 2 would result in less residential and non-residential development as the proposed Project, the proposed changes to existing roadways and intersections to accommodate the future growth would still occur. As development with Alternative 2 would primarily occur within the same areas as the proposed Project, Alternative 2 would not impair an adopted emergency response plan or emergency evacuation plan.

Similar to the proposed Project, Alternative 2 would result in subsequent development projects within the Planning Area. However, Alternative 2 would not include the Hospitality Overlay. The Hospitality Overlay site located at Pacific Island Drive and Camino Del Avion is located within a Very High FHSZ and is currently undeveloped. Alternative 2 would allow for new development consistent with the MDIs for the Planning Area, including this site, which would result in less intensive development than the proposed Project.

Like the proposed Project, Alternative 2 would allow for new development within mapped FHSZs and WUI areas, which could exacerbate wildfire risks and increase exposure to City residents, employees, or visitors to increased pollutant concentrations from wildfire or result in the uncontrollable spread of a wildfire. Subsequent development with Alternative 2 would be required to comply with the provisions of federal, State, and local requirements related to wildland fire hazards, including State fire safety regulations associated with wildland-urban interfaces, fire-safe building standards, and defensible space

requirements. All new construction is required to adhere to standards and requirements set forth in the CBC, including Chapter 7A which specifically addresses wildfire exposure, mandating fire-resistant construction for new buildings and structures in designated high-risk areas, including the WUI, as well as the Laguna Niguel Municipal Code, which incorporates the California Fire Code. Laguna Niguel Municipal Code Section 9-1-54.5, *Fuel Modification Regulations*, establishes fuel modification regulations that apply whenever a fuel modification plan has been required as a condition of development approval or through other requirements. Laguna Niguel Municipal Code Section 9-1-289, *Fire Protection*, requires appropriate fire protection for any subdivision proposed to be located in a high fire hazard area. Additionally, special attention would be given to development in hillside areas in the City per Municipal Code Title 9, Subarticle 8, *Hillside Protection*. The Hillside Protection Ordinance places restrictions on grading on steep slopes and contains other hillside protections to limit development in hillside areas.

Additionally, as with the proposed Project, subsequent development with Alternative 2 would be required to comply with Mitigation Measure WF-1, which would require development projects in High FHSZs and VHFHSZs to prepare a project-specific fire prevention plan for construction and operation of the project. The site-specific plan would incorporate wildfire safety design features intended to reduce the risk of fire ignition, limit fire spread, and facilitate safe and effective emergency response and evacuation. Such features could include the use of ignition-resistant materials for roofs, vents, exterior walls, and windows; provision of adequate emergency evacuation routes, and combustible vegetation management protocols (removal or reduction) within 100 or more feet of habitable structures depending on site conditions. Implementation of local and State requirements, as well as Mitigation Measure WF-1, would ensure that the potential for impacts associated with the exposure of project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire would be reduced to less than significant levels.

As discussed, the Circulation Plan includes proposed changes to existing roadways and intersections to accommodate the future growth. The proposed changes would occur with Alternative 2. Implementation of the proposed improvements would be designed and conducted to comply with standard engineering practices under the purview of the City's Public Works Department and would therefore not exacerbate fire risks.

Additionally, project-specific development would be required to implement Mitigation Measure HWQ-1, which would require preparation of a Hydrology Study to demonstrate that post-development drainage patterns and stormwater runoff flows are designed so as not exceed to existing conditions and will not result in flooding on or- off-site and to determine if the project site is within a regulatory floodplain and evaluate the potential for the proposed development to impede or redirect flood flows. For projects located within High FHSZs, VHFHSZs, or slopes prone to producing debris flows, the Hydrology Study would also be required to analyze both the burned and bulked conditions to determine the appropriate size and location of detention/debris basins, as necessary, based on project site conditions.

Through implementation of Mitigation Measures WF-1 and HWQ-1, and compliance with local, State, and federal regulations, the potential for exacerbated impacts related to flooding and landslides would be less than significant.

Since Alternative 2 would result in less intensive development within areas mapped as FHSZs, impacts associated with wildfires with Alternative 2 would be less when compared to the proposed Project.

Ability to Reduce the Project Impacts

As discussed above, Alternative 2 would eliminate the significant and unavoidable impact that would occur with the proposed Project for the following environmental topic area:

- Cultural Resources

Alternative 2 would not eliminate the significant and unavoidable impacts that would occur with the proposed Project for the following environmental topic areas; however, Alternative 2 would have a slight reduction in the severity of impacts:

- Air Quality
- Greenhouse Gas Emissions
- Transportation

Alternative 2 would also have reduced impacts for the following environmental topic areas when compared to the proposed Project:

- Energy
- Noise
- Public Services and Recreation
- Utilities and Service Systems
- Wildfire

Alternative 2 would result in similar impacts to the proposed Project in the following environmental topic areas:

- Aesthetics
- Biological Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Population and Housing
- Tribal Cultural Resources

Ability To Meet the Project Objectives

The General Plan Update identifies three Opportunity Areas, each serving a distinct role that complements the broader community vision. These Opportunity Areas are targeted for considerable growth through the establishment of area-specific overlays. These “Opportunity Area Overlays,” which may be applied through separate legislative action, provide a pathway for potential redevelopment flexibility in exceedance of the maximum growth permitted by each base land use designation.

The Hospitality Overlay identifies sites that could accommodate future high-quality hotel uses. These sites are located along the southern City limit, including undeveloped or underutilized land with expansive ocean and/or other territorial views. This overlay facilitates the development of high-quality hotels by encouraging greater flexibility regarding land use and development intensity.

To realize the development potential of the Opportunity Area Overlays and Hospitality Overlay, approval of multiple project-specific legislative actions is required.

The goals and policies of the General Plan Update would apply to subsequent development, planning, and infrastructure projects with Alternative 2. Alternative 2 was developed to reduce the severity of potential impacts related to air quality, cultural resources, greenhouse gas emissions, and total vehicle miles traveled, as overall development of residential, commercial and hotel uses within the Planning Area would be less than would be anticipated with the proposed Project.

As shown in Table 6-3, Alternative 2 would result in approximately 1,500 fewer housing units, 57,362 fewer commercial square feet, 240 fewer hotel rooms, 3,645 fewer residents, and 311 fewer jobs within the Planning Area when compared to the proposed General Plan Land Use Map.

Alternative 2 fails to meet the following basic Project objectives:

- Promote residential growth that includes a diverse range of housing development options and densities, ensuring that residents across income levels, age groups, and those with special needs can live within the community; and
- Promote redevelopment in Opportunity Areas that provide economic and community benefits through job creation, enhanced retail and restaurant spaces, and the incorporation of public gathering spaces.

6.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires identification of an environmentally superior alternative among the alternatives analyzed in the EIR. If the No Project Alternative is the environmentally superior alternative, an EIR must also identify an environmentally superior alternative among the other alternatives (CEQA Guidelines Section 15126.6(e)(2)). The environmentally superior alternative is that alternative with the least adverse environmental impacts when compared to the General Plan Update.

A comparative analysis of the proposed Project and each of the Project alternatives is provided in Table 6-3, *Comparison of Alternatives*. Based on the analysis provided above, the Reduced Growth Alternative is the environmentally superior alternative because it would avoid or lessen most of the impacts associated with development of the proposed Project.

Table 6-3
Comparison of Alternatives

Environmental Issue	Alternative 1 No Project/Existing General Plan	Alternative 2 Reduced Growth
Aesthetics	▲	=
Air Quality	▲*	▼*
Biological Resources	=	=
Cultural Resources	▲*	▼
Energy	▲	▼
Geology and Soils	=	=
Greenhouse Gas Emissions	▲*	▼*
Hazards and Hazardous Materials	=	=
Hydrology and Water Quality	=	=
Land Use and Planning	▲	=
Noise	▲	▼
Population and Housing	=	=
Public Services and Recreation	▼	▼
Transportation	▲*	▼*
Tribal Cultural Resources	=	=
Utilities and Service Systems	=	▼
Wildfire	▼	▼

Notes:
▲ Indicates an impact that is greater than the Project (environmentally inferior).
▼ Indicates an impact that is less than the Project (environmentally superior).
= Indicates an impact that is equal to the Project (neither environmentally superior nor inferior).
* Indicates a significant and unavoidable impact.

7.0 EFFECTS FOUND NOT TO BE SIGNIFICANT

7.1 INTRODUCTION

An analysis of the proposed Project's effect on specific environmental topic areas, included as part of the Environmental Checklist form presented in the California Environmental Quality Act (CEQA) Guidelines Appendix G, was conducted as part of the preparation of this Draft EIR. During this evaluation, certain impacts of the Project were found to have no impact or have a less than significant impact due to the inability of a project of this scope to create such impacts or the absence of Project characteristics producing effects of this type. The effects determined not to be significant are not required to be included in primary analysis sections of the Draft EIR. In accordance with CEQA Guidelines Section 15128, the following section provides a brief description of potential impacts found to have no impact or a less than significant impact.

AGRICULTURAL & FORESTRY RESOURCES

Would the Project:

a) Would the project 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?

No Impact. According to the California Department of Conservation, the Planning Area is primarily composed of Urban and Built-Up Land and does not contain any mapped Prime Farmland or Farmland of Statewide Significance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program.[1] As such, the Project would not result in the conversion of the farmland to a non-agricultural use. No impact would occur.

Mitigation Measures: No mitigation measures are required.

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. There is no land within the Planning Area that are currently under a Williamson Act contract. As such, the Project would result in no impact to Williamson Act contracts. The City does not designate any parcels for agriculture uses. Thus, the Project would not conflict with existing zoning for agricultural use or a Williamson Act contract. No impact would occur.

Mitigation Measures: No mitigation measures are required.

[1] California Department of Conservation (DOC), *California Important Farmland Finder*, https://maps.conservation.ca.gov/DLRP/CIFF/, accessed May 17, 2025.

c) Would the project 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))?

d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. The Planning Area does not contain any land dedicated as, or zoned for, timberland use. The majority of the Planning Area is urbanized and developed. As such, the Project would result in no impact to timberland or timberland zoned Timberland Production.

Mitigation Measures: No mitigation measures are required.

e) Would the project 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?

No Impact. Refer to Agriculture and Forestry Resources Responses (a) through (d), above.

Mitigation Measures: No mitigation measures are required.

BIOLOGICAL RESOURCES

f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. The Planning Area is located within the boundaries of the Orange County Natural Community Conservation Plan and Habitat Conservation Plan (NCCP/HCP) for the Central and Coastal Subregion. However, the City of Laguna Niguel is not a participating member of the NCCP/HCP. Therefore, the Project would not conflict with an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan, and no impact would occur.

Mitigation Measures: No mitigation measures are required.

GEOLOGY AND SOILS

e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact. As described in Section 4.16, *Utilities and Service Systems*, wastewater service is provided to the Planning Area by Moulton Niguel Water District (MNWD) and South Coast Water District (SCWD). Local wastewater produced in the City connects to Orange County Sanitation District's regional trunklines. Future development within the Planning Area would be required to connect to the existing sewer system and would not involve the use of septic tanks or alternative wastewater disposal systems. As such, no impact would occur.

Mitigation Measures: No mitigation measures are required.

HAZARDS AND HAZARDOUS MATERIALS

e) 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 be project result in a safety hazard or excessive noise for people residing or working in the project area?

No Impact. There are no airports located within the Project Area. The closest airport to the Project Area is John Wayne Airport, located over 10 miles northwest of the Project Area. According to the Orange County Airport Land Use Commission, the City is not located within an airport influence area. As such, there would be no impact with regard to safety hazards or excessive noise for people residing or working in the Planning Area.

Mitigation Measures: No mitigation measures are required.

MINERAL RESOURCES

a) Would the project 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?

b) Would the project 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?

No Impact. In accordance with California's Surface Mining and Reclamation Act of 1975 (SMARA), the State Geologist, through the California Department of Conservation, California Geological Survey (formerly Division of Mines and Geology), is responsible for identifying and mapping the non-fuel mineral resources of the State. Economically significant mineral deposits are classified based on the known and inferred mineral resource potential of the land using the California Mineral Land Classification System, which includes the following four mineral resource zones.

- MRZ-1: Areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.
- MRZ-2: Areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood exists for their presence.
- MRZ-3: Areas containing mineral deposits, the significance of which cannot be evaluated.
- MRZ-4: Areas where available information is inadequate for assignment to any other zone.

Two mineral resource zones (MRZ-1 and MRZ-3) are present in Laguna Niguel, with the majority of land classified as MRZ-1. There are no existing mineral resource recovery operations within the City,[2] and there are no areas in the City designated by the General Plan or Zoning Code for mineral resources or mineral resource activities. Therefore, the Project would not result in the loss of availability of a known mineral resource considered of value to the region or a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. No impact would occur in this regard.

[2] California Department of Conservation, *Mines Online*, https://maps.conservation.ca.gov/mol/index.html, accessed May 17, 2025.

Mitigation Measures: No mitigation measures are required.

NOISE

c) For a project located within the vicinity of a private airstrip land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise?

No Impact. There are no airports located within the Project Area, and the Project Area is not located within any airport noise contours. The closest airport to the Project Area is John Wayne Airport, located over 10 miles northwest of the Project Area. The noise contours associated with airports do not encroach into the Project Area. As such, no impact would occur.

Mitigation Measures: No mitigation measures are required.

7.2 REFERENCES

California Department of Conservation (DOC), *California Important Farmland Finder*, https://maps.conservation.ca.gov/DLRP/CIFF/, accessed May 17, 2025.

California Department of Conservation (DOC), *Mines Online*, https://maps.conservation.ca.gov/mol/index.html, accessed May 17, 2025

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