



Morro Bay General Plan and LCP Update

Final Environmental Impact Report

SCH#2017111026

prepared by

City of Morro Bay

955 Shasta Avenue

Morro Bay, California 93442

Contact: Scot Graham, Community Development Director

prepared with the assistance of

Rincon Consultants, Inc.

1530 Monterey Street, Suite D

San Luis Obispo, California 93401

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Appendix G Mitigation Monitoring and Reporting Program

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Executive Summary

This document is an Environmental Impact Report (EIR) analyzing the environmental effects of the proposed City of Morro Bay General Plan and Local Coastal Program (LCP) Update, also known as *Plan Morro Bay*. This section summarizes the characteristics of, alternatives to, and the environmental impacts and mitigation measures associated with the proposed General Plan and LCP Update.

Project Synopsis

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Project Description

This EIR has been prepared to examine the potential environmental effects of the General Plan and LCP Update. The following is a summary of the full project description, which can be found in Section 2.0, *Project Description*.

Project Characteristics

The project analyzed in this EIR is the proposed City of Morro Bay General Plan and Local Coastal Program (LCP) Update, also known as *Plan Morro Bay*. The City of Morro Bay is the project proponent and the lead agency for the proposed General Plan and LCP Update. The General Plan and LCP Update is a comprehensive update of the City's 1988 General Plan and 1984 LCP. The land use classifications included in the General Plan and LCP define the basic categories of land use allowed in the city and are the basis for the zoning districts established in the City Municipal Code, which contain more specific regulations and standards governing development on individual properties.

Table ES-1 identifies the development capacity associated with the planned distribution of land uses described in the Land Use Element and summarizes the resulting residential and nonresidential levels of development that can be expected from implementation of land use policies established by the General Plan and LCP Update.

Table ES-1 General Plan and LCP Update Maximum Development Capacity

Land Use Designation	Acres (Approximate)	Total Estimated Dwelling Units (2040)	Total Estimated Households	Population (2040)	Nonresidential Square Feet (2040)
Within City Limits					
Residential	753.4	6,573	–	10,870	–
Commercial	307.6	565	–	934	8,819,081
Industrial	41.5	–	–	–	893,006
Waterfront Commercial/ Industrial	6.3	–	–	–	220,869
Mixed Use	17.6	141	–	233	607,984
Open Space & Agriculture	1,674.1	–	–	–	–
Public/Institutional	336.9	–	–	–	371,651
Outside of City, but in Future SOI and Planning Area					
Open Space & Agriculture	6,079.9	15	–	25	–
Public/Institutional	56.6	–	–	–	–
Total (2040)	9,273.9*	7,295	5,792	12,062	10,912,591**
Existing (2016) Totals	9,273.9*	6,414	5,063	10,714	2,613,654**
Change (2016-2040)	–	881	729	1,348	8,298,937

* Totals may not add up due to rounding

** Does not include square footage of campgrounds

Source: Plan Morro Bay, City of Morro Bay 2018

Zoning Code and Coastal Implementation Plan Amendments

To maintain consistency with the General Plan and LCP Update, the project also includes a comprehensive Zoning Code Update which includes the Coastal Implementation Plan. Amendments included as part of the project include:

- Updating the allowed uses in all zones as necessary for consistency with the General Plan Land Use Designations.
- Establishing new zoning district(s) as necessary to implement the General Plan and LCP Update.
- Updating other development standards as necessary to implement the General Plan and LCP Update. This will include maximum height, setbacks, design standards and other standards.
- Updating administration and permitting to integrate coastal permit processes.

Required Discretionary Approvals

Following recommendations from the Planning Commission, the Morro Bay City Council will need to take the following discretionary actions in conjunction with the project:

- Certify the Final EIR
- Adopt the proposed General Plan and LCP Update
- Adopt the Zoning Code Update and Coastal Implementation Plan

The California Coastal Commission will also need to take the following discretionary actions in conjunction with the project:

- Certify the General Plan and LCP Update
- Certify the Zoning Code Update and Coastal Implementation Plan

Project Objectives

The General Plan and LCP Update is intended to function as a policy document to guide land use decisions within the city planning area through the year 2040. The vision for the city over the next 20 to 30 years was developed with extensive community input. Based on this community input and in recognition of the state's planning priorities, a vision and values supporting the vision for the community were developed and are included in full in Section 2, *Project Description*.

Alternatives

As required by Section 15126.6 of the *CEQA Guidelines*, this EIR examines a range of reasonable alternatives to the proposed General Plan and LCP Update that could feasibly achieve similar objectives but would avoid or substantially lessen significant adverse impacts associated with the General Plan and LCP Update.

The following alternatives are evaluated in this EIR:

- **Alternative 1: No Project/Continue using 1988 General Plan and 1984 LCP.** This alternative is comprised of a land use pattern that reflects the land use identified in the existing 1988 General Plan. Under this alternative, the proposed General Plan and LCP Update would not be adopted and the existing General Plan and LCP, including the land use map and all of the General Plan and LCP goals and policies, would remain in place through the horizon year of 2040.
- **Alternative 2: Proposed General Plan and LCP Update without Morro Bay Power Plant/WWTP Redevelopment.** This alternative would remove Policy LU-5.4 and Policy LU-5.5 from the General Plan and LCP Update, and would revise the land use plan to include the former Morro Bay Power Plant and City WWTP sites in Open Space/Recreation, preserving natural areas and resources, and providing future recreational opportunities, consistent with other goals of the General Plan and LCP Update.
- **Alternative 3: Reduced Commercial Floor Area Ratio.** Under this alternative, approximately 7.5 million square feet of new commercial development could be constructed in the planning area. This would be 1.3 million fewer square feet of new commercial square footage than could be constructed under the General Plan and LCP Update. Additionally, approximately 103 fewer residential units could be constructed within the planning area, as a result of the FAR reduction within the planned mixed-use overlay areas.

Section 15126.6(e)(2) of the *CEQA Guidelines* requires that an analysis of project alternatives identify an environmentally superior alternative among the alternatives evaluated in the EIR.

The No Project Alternative (Alternative 1) would be environmentally superior in comparison to the General Plan and LCP Update because it would continue implementation of the existing 1988 General Plan, which would accommodate less development and growth than the General Plan and LCP Update, Alternatives 2, or Alternative 3. In accordance with *CEQA Guidelines* Section 15126.6(e)(2), if the No Project Alternative is identified as the Environmentally Superior Alternative,

the EIR shall also identify an environmentally superior alternative from among the other alternatives. Based on the information presented in the EIR, Alternative 2 would be the environmentally superior alternative when considering overall environmental impacts relative to the performance metrics.

Refer to Section 7.0, *Alternatives*, for the complete alternatives analysis.

Areas of Known Controversy

The City received seven responses to the NOP including three responses from State, local and non-profit agencies and four responses from public commenters. The responses, included in Appendix A, raise environmental topics including vehicle circulation, pedestrian circulation, Environmentally Sensitive Habitat Area (ESHA), open space, agricultural lands, new housing, the character of Morro Bay, and potential alternatives to the project. These topics are addressed in the analysis contained in the various subsections of Section 4.0, *Environmental Impact Analysis*.

Summary of Impacts and Mitigation Measures

Table ES-2 summarizes the identified environmental impacts for each issue area studied in the EIR, required mitigation measures (if any), and the level of significance after mitigation. Class I impacts are defined as significant and unavoidable adverse impacts, which require a statement of overriding considerations to be made per Section 15093 of the State CEQA Guidelines if the project is approved. Class II impacts are significant, adverse impacts that can be feasibly mitigated to a less than significant level, and which require findings to be made under Section 15091 of the State CEQA Guidelines. Class III impacts are considered less than significant impacts. Potential impacts are listed below in summary form.

Based on comments received during the public hearing and NOP comment period, the City of Morro Bay determined that there was no substantial evidence that the project would cause or otherwise result in significant environmental effects in the resource areas of agricultural resources and mineral resources. The substantiation for determining that these issues would result in no impact or a less-than-significant impact is described in Section 6, Effects Found to be Less than Significant, and in further detail in the NOP in Appendix A.

Class I – Significant and Unavoidable Impacts

- Clean Air Plan consistency
- Cumulative air quality impacts
- Vehicle miles traveled
- Cumulative transportation impacts

Class II – Significant Impacts that Can Be Mitigated to Less than Significant Levels

- Construction air quality emissions
- Special status species
- Wildlife movement
- Cumulative impacts to biological resources
- Archaeological resources
- Cumulative cultural resource impacts

- Groundborne vibration
- Cumulative noise impacts
- Pedestrian and bicycle travel
- Tribal cultural resources
- Cumulative tribal cultural resource impacts

Class III – Less than Significant Impacts

- Scenic vistas and scenic resources
- Visual character
- Light and glare
- Cumulative aesthetic impacts
- Exposure of sensitive receptors to air pollutants emissions
- Odor emissions
- Wetlands and other sensitive natural communities
- Conflict with a Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan
- Disturbance of human remains
- Seismic impacts
- Soil erosion
- Expansive soils
- Septic tanks or alternative wastewater systems impacts to soils
- Paleontological resources
- Cumulative impacts to geologic hazards
- Consistency with GHG reduction plans and regulations
- Cumulative GHG emissions
- Hazardous materials exposure
- Hazardous emissions or handling of hazardous materials, substances, or waste
- Development on listed contaminated sites
- Airport hazards
- Implementation of emergency response/evacuation plans
- Wildland fire hazards
- Cumulative impacts related to hazards and hazardous materials
- Construction impacts to water quality
- Alteration of existing drainage patterns
- Flood hazards and pollution as a result of flooding
- Flooding as a result of levee or dam failure, or inundation by mudflow, tsunami, or seiche
- Cumulative impacts to hydrology and water quality
- Physically dividing an established community
- Consistency with applicable land use plans, policies, and regulations
- Cumulative land use impacts

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- Construction noise
- Long-term traffic noise
- Operational noise
- Airport noise
- Population growth inducement
- Displacement of people or housing
- Cumulative impacts to population and housing
- Fire protection, police protection, school, and emergency medical services and facilities
- Parks and recreational facilities
- Cumulative impacts to public services
- Traffic safety hazards
- Emergency access
- Water supply
- Wastewater treatment facilities and capacity
- Solid waste services and facilities
- Cumulative impacts to utilities and service systems
- Consumption of energy resources
- Conflict with state or local plan for renewable energy or energy efficiency
- Cumulative energy impacts

Table ES-2 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measure(s)	Residual Impact
Class I Impacts (Significant and Unavoidable)		
Air Quality		
<p>AQ-1. The General Plan and LCP Update would result in an increase in VMT that would exceed the projected rate of population growth in Morro Bay, which would be inconsistent with the SLOAPCD Clean Air Plan. This would be a significant and unavoidable impact.</p>	<p>The General Plan and LCP Update would comply with applicable General Plan and LCP Update goals and policies that would reduce VMT to the extent feasible. In addition, individual development projects in the planning area would require project-level environmental review, including evaluation of future projects for consistency with the applicable air quality plan in accordance with the SLOAPCD CEQA Air Quality Handbook, which could result in the implementation of project-specific mitigation measures to reduce VMT. However, no additional policy-oriented mitigation is available that would reduce projected VMT.</p>	<p>Additional policy-oriented mitigation is not available that would reduce the projected VMT increase such that it would not exceed population growth in the region. Therefore, the General Plan and LCP Update would be inconsistent with the 2001 CAP, and this impact would remain significant and unavoidable.</p>
<p>Cumulative. Because the General Plan and LCP Update would be inconsistent with the CAP, the General Plan and LCP Update’s contribution to cumulative regional air quality impacts would be significant and unavoidable.</p>	<p>No additional policy-oriented mitigation is available that would reduce projected VMT.</p>	<p>Additional policy-oriented mitigation is not available that would reduce the projected VMT increase such that it would not exceed population growth in the region. Therefore, the General Plan and LCP Update would be inconsistent with the 2001 CAP, and this impact would remain significant and unavoidable.</p>
Transportation		
<p>T-2. The General Plan and LCP Update anticipates land use growth that would result in a long-term increase in vehicle miles traveled (VMT) within the City’s Sphere of Influence (SOI). The General Plan and LCP Update Circulation Element includes goals and policies that reduce reliance on passenger vehicles, facilitate pedestrian and bicycle transportation, and establish local targets for VMT reduction. However, future development in Morro Bay would result in increased per service population VMT, and no feasible mitigation is available that would fully address the anticipated increase in VMT. This impact would be significant and unavoidable.</p>	<p>Future development in Morro Bay would result in increased long-term VMT, even with implementation of identified goals and policies that would reduce VMT to an extent. No additional feasible mitigation is available that would fully address the anticipated increase in VMT resulting from the General Plan and LCP Update.</p>	<p>Implementation of the goals and policies in the General Plan and LCP Update would contribute to reducing VMT in Morro Bay. However, no additional feasible mitigation is available that would fully address the anticipated increase in VMT. Therefore, impacts associated with increased VMT in the Morro Bay SOI and in San Luis Obispo County would remain significant and unavoidable after implementation of all applicable policies in the General Plan and LCP Update.</p>

Impact	Mitigation Measure(s)	Residual Impact
<p>Cumulative. Cumulative land use growth evaluated under Buildout Plus Project conditions would result in an increase in daily VMT and daily per service population VMT. The individual potential impacts of future development in Morro Bay are speculative; however, the cumulative impact of the increase in VMT in the Morro Bay SOI and in San Luis Obispo County identified for the General Plan and LCP Update would be significant and unavoidable.</p>	<p>Consistent with Policy CIR-3.2 and CIR-3.3, individual development projects in Morro Bay would require focused, project-level environmental review, and would require mitigation to reduce VMT where potential environmental impacts are identified.</p>	<p>Implementation of the goals and policies in the General Plan and LCP Update would contribute to reducing VMT in Morro Bay, but no additional feasible mitigation is available that would fully address the anticipated increase in VMT resulting from the General Plan and LCP Update. Therefore, cumulative transportation impacts would remain significant and unavoidable.</p>
<p>Class II Impacts (Significant but Mitigable)</p>		
<p>Air Quality</p>		
<p>AQ-2. Buildout of the General Plan and LCP Update would result in short-term emissions of criteria pollutants. Construction emissions from future project in the planning area would be quantified once project details are known and evaluated for potential impacts in accordance with SLOAPCD guidance. This impact would be less than significant with mitigation.</p>	<p>AQ-2. Standard Mitigation for Construction Equipment. Proponents of individual land use projects, or other projects requiring grading or building permits, shall require construction contractors to incorporate the following standard mitigation measures, as applicable, to reduce ROG, NO_x, and DPM emissions from construction equipment. Mitigation measures shall be listed on project construction plans and the project proponent shall perform periodic site inspections during construction to ensure that mitigation measures are being implemented.</p> <ul style="list-style-type: none"> ▪ Maintain all construction equipment in proper condition according to manufacturer’s specifications ▪ Fuel all off-road and portable diesel powered equipment with ARB-certified motor vehicle diesel fuel (non-taxed version suitable for use off-road) ▪ Use diesel construction equipment meeting ARB’s Tier 2 certified engines or cleaner off-road heavy-duty diesel engines, and comply with the State Off-Road Regulation ▪ Use on-road heavy-duty trucks that meet ARB’s 2007 or cleaner certification standard for on-road heavy-duty diesel engines, and comply with the State On-Road Regulation ▪ Construction or trucking companies with fleets that that do not have engines in their fleet that meet the engine standards identified in the above two measures (e.g. 	<p>Mitigation Measure AQ-2 would reduce short-term NO_x, ROG, and DPM emissions generated by construction activities associated with future buildout of the project. This impact would be less than significant with mitigation.</p>

Impact	Mitigation Measure(s)	Residual Impact
	<p>captive or NO_x exempt area fleets) may be eligible by proving alternative compliance</p> <ul style="list-style-type: none"> ▪ All on and off-road diesel equipment shall not idle for more than 5 minutes. Signs shall be posted in the designated queuing areas and or job sites to remind drivers and operators of the 5 minute idling limit ▪ Diesel idling within 1,000 feet of sensitive receptors is not permitted ▪ Staging and queuing areas shall not be located within 1,000 feet of sensitive receptors ▪ Electrify equipment when feasible ▪ Substitute gasoline-powered in place of diesel-powered equipment, where feasible <p>Use alternatively fueled construction equipment on-site where feasible, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane or biodiesel.</p>	
Biological Resources		
<p>BIO-1. New development facilitated by the General Plan and LCP Update could impact listed and other individual special status species and foraging and breeding habitat for special status wildlife and habitat for special status plants. This impact would be less than significant with incorporation of mitigation.</p>	<p>BIO-1(a) Avoidance and Minimization during Development. Policy C-1.3 shall be updated to read:</p> <p>Policy C-1.3. Biological Site Assessments. A biological assessment shall be required for any development proposed on sites that include or are within 100 feet of mapped ESHA in Figure C-2, and all other sites with natural vegetation regardless of whether ESHA has been mapped in Figure C-2, and for all other projects for which evidence indicates that ESHA may be present either on or adjacent to the site. The best available information about the location of ESHA in the City shall be used. Such assessment shall be prepared at the owner’s expense by a qualified biologist approved by the City and shall, at minimum:</p> <ol style="list-style-type: none"> a. Identify and confirm the extent of the ESHA, b. Document any site constraints and the presence of sensitive plant or animal species, c. Recommend buffers and development setbacks and standards to protect the ESHA, 	<p>Impacts to special status species would be less than significant with implementation of Measures BIO-1(a) and BIO-1(b), which would update policies in the General Plan and LCP Update to protect listed species and provide direction on resource protection in any future SOI.</p>

Impact	Mitigation Measure(s)	Residual Impact
	<p>d. Recommend mitigation measures to address any allowable impacts <u>If listed species, other special status species, or nesting birds are present or have potential to occur, specify avoidance and minimization measures, including compensatory mitigation, to be implemented to avoid or minimize take of individuals and loss of occupied habitat, and specify the necessary consultation pathway(s) with USFWS, NMFS, and/or CDFW to obtain incidental take coverage, where necessary, and</u></p> <p>e. Include any other information and analyses necessary to understand potential ESHA impacts as well as measures necessary to protect the resource as required by the Local Coastal Program.</p> <p>If the site contains the potential for monarch overwintering or rookeries due to the presence of appropriately sized trees and groves, a seasonally timed survey appropriate for detecting the target species must also be included in the study.</p> <p>BIO-1(b) External Impacts. Policy OS-7.1 shall be updated to read:</p> <p>Policy OS-7.1. Account for External Impacts. If any portion of the area outside the city limits is included in the City’s sphere of influence in the future, prepare and adopt a plan for the affected parcels that includes infrastructure and services provided by the City of Morro Bay. <u>The plan shall also identify policies for the protection of natural resources in the affected areas.</u></p>	

Impact	Mitigation Measure(s)	Residual Impact
<p>BIO-3. New development facilitated by the General Plan and LCP Update may remove trees, encroach on rookeries and breeding sites, impede movement of terrestrial and aquatic wildlife, and otherwise interfere with the movement of wildlife. Impacts to wildlife corridors, rookeries, and nest sites would be less than significant with incorporation of mitigation.</p>	<p>BIO-3. Wildlife Movement Corridors Protection. The following policy shall be added to the Conservation Element.</p> <p><u>Policy C-1.17. Project Design for Wildlife Connectivity.</u> <u>Design new stream crossing structures and extensions or modifications of existing structures to accommodate wildlife movement. At a minimum, structures within steelhead streams must be designed in consultation with a fisheries biologist and shall not impede movement. New projects with long segments of fencing and lighting shall be designed to minimize impacts to wildlife. Fencing or other project components shall not block wildlife movement through riparian or other natural habitat. Where fencing or other project components that may disrupt wildlife movement is required for public safety concerns, they shall be designed to permit wildlife movement.</u></p>	<p>Impacts to wildlife movement corridors would be less than significant with implementation of Measure BIO-3 to add a General Plan and LCP Update policy to preserve wildlife movement corridors.</p>
<p>Cumulative. Implementation of the land use development patterns under the General Plan and LCP Update could result in impacts on special-status species, riparian, wetland, or other sensitive natural communities, as well as wildlife movement in the planning area, and contribute to cumulative impacts to these resources within the greater cumulative impact area (adjacent communities, including San Luis Obispo county). As a result, cumulative impacts to sensitive biological resources would be potentially significant.</p>	<p>Mitigation Measures BIO-1(a), BIO-1(b), and BIO-3 would require additional policy language in the General Plan and LCP Update to protect biological resources that have potential to be impacted by development facilitated by the General Plan and LCP Update.</p>	<p>The contribution of the proposed General Plan and LCP Update to cumulative impacts would not be cumulatively considerable with implementation of applicable General Plan and LCP Update goals and policies and required mitigation.</p>

Impact	Mitigation Measure(s)	Residual Impact
Cultural Resources		
<p>CR-1. Development facilitated by the General Plan and LCP Update has the potential to impact historical and unique archaeological resources. Implementation of applicable General Plan and LCP Update goals and policies would minimize or avoid potential adverse impacts to historical and archaeological resources. This impact would be less than significant with incorporation of mitigation.</p>	<p>CR-1(a). Avoidance or Minimization of Historic, Cultural, and Archaeological Resources Impacts. Policy C-2.3 of the General Plan and LCP Update shall be revised to read:</p> <p>Policy C-2.3. Protection of Cultural Resources. Ensure the protection of <u>historic, cultural, and archeological resources during development, construction, and other similar activities. Development shall avoid, to the maximum extent feasible, adversely impacting historic, cultural, and/or archaeological resources, and shall include adequate BMPs to address any such resources that may be identified during construction, including avoidance, minimization, and mitigation measures sufficient to allow documentation, preservation, and other forms of mitigation. If the resource(s) in question are of Native American origin, develop avoidance or minimization measures in consultation with appropriate Native American tribe(s).</u></p> <p>CR-1(b). Cultural Resources Study Implementation Action. The following implementation action for Goal C-2 shall be added to the General Plan and LCP Update:</p> <p><u>Require all discretionary proposals within the cultural resources overlay to consider the potential to disturb cultural resources. If preliminary reconnaissance suggests that cultural resources may exist, a Phase I cultural resources study shall be performed by a qualified professional meeting the Secretary of the Interior’s (SOI) Professional Qualification Standard (PQS) for archaeology and/or architectural history, as appropriate (NPS 1983).</u></p> <p><u>A Phase I cultural resources study shall include a pedestrian survey of the project site and sufficient background research and field sampling to determine whether subsurface prehistoric or historic remains may be present. Archival research should include a records search at the Central Coast Information Center (CCIC) and a Sacred Lands File (SLF) search with the Native</u></p>	<p>Impacts to cultural and historic resources would be less than significant with implementation of Measures CR-1(a) and CR-1(b).</p>

Impact	Mitigation Measure(s)	Residual Impact
	<p><u>American Heritage Commission (NAHC). Where identified or potential resources are of Native American origin, the appropriate Native American tribe(s) will participate with the qualified professional. The technical report documenting the study shall include recommendations to avoid or, if avoidance is not feasible, reduce impacts to cultural resources.</u></p>	
<p>Cumulative. The increase in growth in previously undisturbed areas would contribute to regional impacts on existing and previously undisturbed and undiscovered historical and archaeological resources. Compliance with applicable regulations and implementation of General Plan and LCP Update goals and policies would minimize cumulative impacts to cultural resources. Therefore, the General Plan and LCP Update would contribute to potentially significant impacts to cultural resources.</p>	<p>Implementation of Measures CR-1(a) and CR-1(b) would be required to update the General Plan and LCP Update to include implementation actions to address potential impacts to cultural resources on a project-by-project basis.</p>	<p>Implementation of Mitigation Measures CR-1(a) and CR-1(b) would ensure that potential impacts to cultural resources would not be cumulatively considerable, and cumulative impacts to such resources would be reduced to a less than significant level.</p>
Noise		
<p>N-2. Construction of individual projects facilitated by the General Plan and LCP Update could temporarily generate groundborne vibration, potentially affecting adjacent sensitive land uses. Although the Morro Bay Municipal Code’s timing restrictions on construction activity would limit vibration disturbance, high vibration levels during working construction hours could potentially disturb people or damage fragile buildings. This impact would be less than significant with mitigation.</p>	<p>N-2. Construction Vibration Control Measures and Notification. The following new policies shall be added to the Noise Element under Goal NOI-3:</p> <p><u>Policy NOI-3.5. Vibration Control. Control construction vibration by avoiding the use of vibratory rollers near vibration-sensitive receptors and scheduling construction activities with the highest potential to produce vibration to hours with the least potential to affect sensitive land uses.</u></p> <p><u>Policy NOI-3.6. Construction Vibration Notification. Developers shall notify neighbors of scheduled construction activities that would generate vibration.</u></p>	<p>The avoidance of vibratory rollers in close proximity to vibration-sensitive receptors would prevent potential structural damage from vibration. In addition, the appropriate scheduling of construction activities and notification of neighbors would minimize disturbance of people from vibration-generating equipment. Compliance with the vibration control and notification measures in Mitigation Measure N-2 would reduce temporary vibration impacts to a less than significant level.</p>

Impact	Mitigation Measure(s)	Residual Impact
<p>Cumulative. Site-specific cumulative impacts related to exposure of existing and planned future receptors to construction and stationary noise sources would be similar to General Plan and LCP Update impacts and less than significant with the incorporation of mitigation. Implementation of General Plan and LCP Update policies for transportation-related noise would reduce noise and avoid generation of excessive noise from the local highways and city streets, which would minimize the exposure of sensitive receptors to traffic noise. Therefore, the overall contribution of the General Plan and LCP Update to cumulative traffic noise would not be cumulatively considerable.</p>	<p>Mitigation Measure N-2 would be required.</p>	<p>Cumulative noise impacts would be less than significant with the incorporation of mitigation.</p>
<p>Transportation</p>		
<p>T-1. Implementation of the General Plan and LCP Update would increase vehicle traffic volumes, which have the potential to interfere with pedestrian and bicycle travel on or along roadways. The General Plan and LCP Update includes goals and policies to improve safety, access, and performance of public transit, bicycle, and pedestrian transportation modes. Implementing specific pedestrian circulation improvement measures at affected facilities would further improve the performance of pedestrian transportation modes. Therefore, impacts to pedestrian operations would be reduced to a less than significant level with mitigation.</p>	<p>T-1. Pedestrian Facility Improvements. The following pedestrian facility improvements shall be added to the list of “Planned Circulation Improvements” in the General Plan and LCP Update Circulation Element.</p> <ul style="list-style-type: none"> ▪ Embarcadero North of Beach Street: Provide sidewalks and a vehicular connection shifting traffic away from Beach Street for the redeveloped Morro Bay Power Plant site. ▪ Morro Bay Boulevard: Provide a landscaped buffer at least two feet wide between the sidewalk and travel lanes. ▪ Main Street south of Radcliffe Drive: Provide continuous sidewalks to provide acceptable pedestrian operations. ▪ SR 41 east of Main Street: Provide sidewalks with a landscaped buffer when adjacent properties are redeveloped. <p>In addition, Policy CIR-1.8 shall be revised as follows: Policy CIR-1.8. Capital Improvement Program. Use the City's Capital Improvement Program (CIP) process to prioritize, fund, and build roadway, and <u>bikeway, and pedestrian</u> improvements, and to address phasing and construction of traffic infrastructure throughout the city.</p>	<p>Mitigation Measure T-1 and applicable policies in the General Plan and LCP Update would improve pedestrian operations at affected roadway segments. Therefore, impacts to pedestrian operations would be reduced to a less than significant level after implementation of Mitigation Measure T-1 and all applicable policies in the General Plan and LCP Update.</p>

Impact	Mitigation Measure(s)	Residual Impact
Tribal Cultural Resources		
<p>TC-1. Development facilitated by the General Plan and LCP Update has the potential to impact tribal cultural resources. Implementation of the goals and policies of the General Plan and LCP Update would minimize the potential for impacts to previously unidentified tribal cultural resources. This impact would be less than significant with incorporation of mitigation.</p>	<p>Mitigation Measures CR-1(a) and CR-1(b) are required to address potential impacts to tribal cultural resources. As individual development projects are proposed, project-level environmental review may be required, which could result in the implementation of project-specific mitigation measures to reduce impacts to tribal cultural resources.</p>	<p>Impacts to tribal cultural resources would be less than significant with implementation of Mitigation Measures CR-1(a) and CR-1(b).</p>
<p>Cumulative. Development in the city would increase under buildout of the General Plan and LCP Update by increasing mobility and growth. The increase in growth in previously undisturbed areas would contribute to regional impacts on tribal cultural resources. The potential for cumulative impacts related to tribal cultural resources is potentially significant.</p>	<p>Implementation of the goals and policies listed under Impact TC-1, as well as implementation of Mitigation Measures CR-1(a) and CR-1(b) would minimize potential impacts to tribal cultural resources as a result of development facilitated by the General Plan and LCP Update.</p>	<p>Cumulative impacts to tribal cultural resources would be less than significant with implementation of Mitigation Measures CR-1(a) and CR-1(b).</p>
Class III Impacts (Less than Significant)		
Aesthetics		
<p>AES-1. Compliance with the General Plan and Local Coastal Program Update policies, Title 17 of the Morro Bay Municipal Code, and the City’s Residential Design Guidelines would protect visual and aesthetic resources in the planning area from potential impacts resulting from development facilitated by the General Plan and LCP Update. This impact would be less than significant.</p>	<p>No additional policy-oriented mitigation would be required to address this impact. As individual development projects are proposed, focused, project-level environmental review may be required, which could result in the implementation of project-specific mitigation measures.</p>	<p>n/a</p>
<p>AES-2. Compliance with existing standards and General Plan and LCP Update goals and policies would ensure that redevelopment or new development complements the existing visual character and quality of Morro Bay. Therefore, the project would have a less than significant impact on visual character and quality.</p>	<p>No additional policy-oriented mitigation would be required to address this impact. As individual development projects are proposed, focused, project-level environmental review may be required, which could result in the implementation of project-specific mitigation measures.</p>	<p>n/a</p>

Impact	Mitigation Measure(s)	Residual Impact
<p>AES-3. New development facilitated by the General Plan and LCP Update would be subject to existing regulations in the City’s Zoning Code, and General Plan and LCP Update policies, to protect skyward nighttime views and to lessen or prevent glare. Therefore, the project would result in a less than significant impact associated with new sources of light and glare.</p>	<p>No additional policy-oriented mitigation would be required to address this impact. As individual development projects are proposed, focused, project-level environmental review may be required, which could result in the implementation of project-specific mitigation measures.</p>	<p>n/a</p>
<p>Cumulative. The General Plan and LCP Update’s contribution to cumulative impacts associated with night sky lighting and changes in the visual environment would not be cumulatively considerable.</p>	<p>No additional policy-oriented mitigation would be required to address this impact. As individual development projects are proposed, focused, project-level environmental review may be required, which could result in the implementation of project-specific mitigation measures.</p>	<p>n/a</p>
Air Quality		
<p>AQ-3. The General Plan and LCP Update would allow for development of new residences and other sensitive receptors in proximity to industrial uses, which could result in exposure of sensitive receptors to elevated concentrations of TACs. The General Plan and LCP Update would not generate levels of traffic that would expose sensitive receptors to substantial pollutant concentrations, or result in new development that would expose sensitive receptors to hazards associated with naturally occurring asbestos. This impact would be less than significant.</p>	<p>No additional policy-oriented mitigation would be required to address this impact. As individual development projects are proposed, focused, project-level environmental review may be required, which could result in the implementation of project-specific mitigation measures.</p>	<p>n/a</p>
<p>AQ-4. Implementation of the General Plan and LCP Update would not create objectionable odors that would impact a substantial number of people, and future projects would be required to comply with SLOAPCD regulations prohibiting nuisance emissions (including odors). This would be a less than significant impact.</p>	<p>No additional policy-oriented mitigation would be required. As individual development projects are proposed, focused, project-level environmental review may be required, which could result in the implementation of project-specific mitigation measures to reduce potential odor conflicts.</p>	<p>n/a</p>

Impact	Mitigation Measure(s)	Residual Impact
Biological Resources		
<p>BIO-2. The General Plan and LCP Update would not facilitate development that would directly impact riparian and wetland habits and other sensitive natural communities. However, future development may have adverse indirect impacts on wetlands and areas under the jurisdiction of the CDFW, RWQCB and/or USACE, as well as for both within and outside the City's Coastal Zone. Compliance with existing regulations and implementation of applicable General Plan and LCP Update policies would avoid or minimize, potential impacts to riparian and wetland habits and other sensitive natural communities. This impact would be less than significant.</p>	<p>No additional policy-oriented mitigation would be required to address this impact. As individual development projects are proposed, focused, project-level environmental review may be required, which could result in the implementation of project-specific measures.</p>	<p>n/a</p>
<p>BIO-4. Development facilitated by the General Plan and LCP Update would not conflict with applicable local policies protecting biological resources or an approved local, regional, or state habitat conservation plan. This impact would be less than significant.</p>	<p>projects are proposed, focused, project-level environmental review may be required, including evaluation of individual development projects for consistency with applicable local policies protecting biological resources, which could result in the implementation of project-specific mitigation measures.</p>	<p>n/a</p>
Cultural Resources		
<p>CR-2. Development facilitated by the General Plan and LCP Update has the potential to adversely affect previously unknown human burials but would be required to adhere to existing regulations regarding the treatment of human remains. This impact would be less than significant.</p>	<p>No mitigation measures are required.</p>	<p>n/a</p>

Impact	Mitigation Measure(s)	Residual Impact
Geology and Soils		
<p>GEO-1. Construction and occupancy of new buildings under the General Plan and LCP Update could result in exacerbated hazards associated with geologic hazards. adherence to requirements of the California Building Code and Implementation of the goals and policies of the General Plan and LCP Update would minimize the potential for loss, injury, or death following a seismic event, landslide, liquefaction, or other geologic hazards. This impact would be less than significant.</p>	<p>No additional policy-oriented mitigation would be required to address this impact. As individual development projects are proposed, focused, project-level environmental review may be required, which could result in the implementation of project-specific mitigation measures.</p>	n/a
<p>GEO-2. Construction of new development under the General Plan and LCP Update would include ground disturbance that would result in loose or exposed soil that could be eroded by wind or during a storm event, resulting in the loss of topsoil. Compliance with applicable regulations, including the Clean Water Act, and implementation of the goals and policies of the General Plan and LCP Update would minimize the potential for erosion and loss of topsoil and would ensure this impact would remain less than significant.</p>	<p>No additional policy-oriented mitigation would be required to reduce this impact. As individual development projects are proposed, focused, project-level environmental review may be required, which could result in the implementation of project-specific mitigation measures.</p>	n/a
<p>GEO-3. Development facilitated by the General Plan and LCP Update could result in construction of structures on expansive soils. Compliance with the requirements of the California Building Code, as well as applicable Municipal Code requirements and General Plan and LCP Update goals and policies, would ensure that potential impacts associated with expansive soils would remain less than significant.</p>	<p>No additional policy-oriented mitigation would be required to address this impact. As individual development projects are proposed, focused, project-level environmental review may be required, which could result in the implementation of project-specific mitigation measures.</p>	n/a
<p>GEO-4. New development facilitated by the General Plan and LCP Update would occur where existing sewer systems are in place, minimizing the need for development of new wastewater disposal systems. The Municipal Code prohibits dumping or discharging from septic tanks. Therefore, the project would not result in a significant impact to soils that are incapable of supporting septic tanks or alternative wastewater disposal systems.</p>	<p>No mitigation measures are required.</p>	n/a

Impact	Mitigation Measure(s)	Residual Impact
<p>GEO-5. Development facilitated by the General Plan and LCP Update has the potential to impact paleontological resources. Fossil-bearing sediments in the Morro Bay area are predominantly located on State parks land and offshore. Implementation of applicable General Plan and LCP Update goals and policies would minimize or avoid potential adverse impacts to paleontological resources. This impact would be less than significant.</p>	<p>No mitigation measures are required.</p>	<p>n/a</p>
<p>Cumulative. Existing regulations, such as the CBC, specify mandatory actions that must occur during project development, which minimize effects from construction and operation of new structures related to geology, soils, and seismicity as discussed above. Therefore, the General Plan and LCP Update would not make a cumulatively considerable contribution to cumulative geology, soils, or seismicity impacts.</p>	<p>No mitigation measures are required.</p>	<p>n/a</p>
<p>Greenhouse Gas Emissions</p>		
<p>GHG-1. Buildout of the General Plan and LCP Update under business as usual conditions would result in new GHG emissions that may exceed applicable GHG thresholds on a project-by-project basis. The General Plan and LCP Update establishes policies to reduce GHG emissions, including setting reduction targets consistent with Statewide GHG reduction goals, and updating the Climate Action Plan to ensure future development is consistent with Statewide targets. This impact would be less than significant.</p>	<p>No mitigation would be required. As individual development projects are proposed, focused, project-level environmental review may be required, which could result in the implementation of project-specific mitigation measures to reduce GHG emissions.</p>	<p>n/a</p>
<p>Cumulative. The General Plan and LCP Update would establish GHG reduction goals consistent with the State’s 2030 and 2050 greenhouse gas emissions reduction goals, and would be consistent with regional and State plans, policies, and regulations adopted for the purpose of reducing GHG emissions. Therefore, the project’s contribution to cumulative GHG and climate change impacts would be less than significant.</p>	<p>No mitigation would be required.</p>	<p>n/a</p>

Impact	Mitigation Measure(s)	Residual Impact
Hazards and Hazardous Materials		
<p>HAZ-1. Implementation of the General Plan and LCP Update could result in an incremental increase in the overall routine transport, use, storage, and disposal of hazardous materials in the planning area, and increase the risk of release of hazardous materials. Compliance with applicable regulations related to the handling, Transport, disposal, and storage of hazardous materials and adherence to proposed General Plan and LCP Update policies would minimize the risk of spills and the public’s potential exposure to these substances and reduce the risk of adverse impacts of hazardous materials. This impact would be less than significant.</p>	<p>No mitigation would be required.</p>	<p>n/a</p>
<p>HAZ-2. New development of residential, industrial, and commercial uses facilitated by the General Plan and LCP Update could result in increased use and storage of hazardous materials within one quarter mile of existing or proposed schools. Compliance with regulatory requirements of the San Luis Obispo County EHS and existing applicable State and federal regulations would ensure that risks from hazardous emissions or handling of hazardous materials, substances, or waste near existing or proposed schools would remain less than significant.</p>	<p>No mitigation would be required.</p>	<p>n/a</p>
<p>HAZ-3. Implementation of the General Plan and LCP Update could result in development of sites contaminated with hazardous materials. However, compliance with applicable regulations relating to site cleanup and adherence to the General Plan and LCP policies would minimize impacts related to development on listed contaminated sites. This impact would be less than significant.</p>	<p>No mitigation would be required.</p>	<p>n/a</p>

Impact	Mitigation Measure(s)	Residual Impact
HAZ-4. The planning area is outside of the airport land use planning area and associated safety zones for the San Luis Obispo county airport and Paso Robles Municipal Airport and is not located near any other airports. There would be no impacts associated with airport-related hazards.	No mitigation would be required.	n/a
HAZ-5. Population growth and increased development in coastal areas could impact evacuation routes and increase the number of residents susceptible to coastal hazards in the planning area as a result of the General Plan and LCP Update. Proposed policies and mapped evacuation routes in the General Plan and LCP Update would ensure effective emergency response following a natural or human-caused disaster. Therefore, the General Plan and LCP Update would not result in interference with an adopted emergency response plan or emergency evacuation plan. This impact would be less than significant.	No mitigation would be required.	n/a
HAZ-6. The General Plan and LCP Update planning area includes a designated very high fire hazard area. However, land use designations would limit new development within designated very high fire hazard areas to recreational uses. Additionally, goals and policies included in the General Plan and LCP Update would minimize exposure of people or structures to risk of loss, injury, or death involving wildland fires. This impact would be less than significant.	No additional policy-oriented mitigation would be required to address this impact. As individual development projects are proposed, focused, project-level environmental review may be required, which could result in the implementation of project-specific mitigation measures to reduce impacts associated with wildland fires.	n/a
Cumulative. Cumulative impacts related to the transport, use, storage, or disposal of hazardous materials, upset conditions, hazardous emissions near schools, project locations on known or unknown hazardous materials sites, airport hazards, emergency response, and fire hazards would be less than significant	No mitigation would be required.	n/a

City of Morro Bay
 Morro Bay General Plan and LCP Update

Impact	Mitigation Measure(s)	Residual Impact
Hydrology and Water Quality		
<p>HWQ-1. Development facilitated by the General Plan and LCP Update could result in an increase in pollutants in stormwater and wastewater, and alter drainage patterns. Compliance with NPDES permit requirements, Morro Bay Municipal Code requirements, and General Plan and LCP Update goals and policies would prevent substantial erosion and siltation, and discharges of pollutants, including pollution associated with drainage, erosion, and stormwater, and minimize adverse effects on water quality. This impact would be less than significant.</p>	<p>No mitigation would be required to address this impact. As individual development projects are proposed, focused, project-level environmental review may be required, which could result in the implementation of project-specific measures.</p>	<p>n/a</p>
<p>HWQ-2. Development facilitated by the General Plan and LCP Update would incrementally increase the amount of impervious surface in the City, which could reduce the potential for groundwater recharge from infiltration. Compliance with the Morro Bay Municipal Code and the Central Coast RWQCB's post-construction requirements for stormwater management would ensure that new impervious surfaces would not substantially interfere with groundwater recharge. This impact would be less than significant.</p>	<p>No mitigation measures are required.</p>	<p>n/a</p>
<p>HWQ-3. Development facilitated by the General Plan and LCP Update could be subject to flood hazards and could impede or redirect flood flows to adjacent areas. Compliance with applicable provisions of the Morro bay Municipal Code would require new development to be designed and constructed such that the risk and damage of flooding is not exacerbated by implementation of the General Plan and LCP Update. Impacts related to flooding and flood hazards would be less than significant.</p>	<p>No mitigation measures are required.</p>	<p>n/a</p>

Impact	Mitigation Measure(s)	Residual Impact
<p>HWQ-4. Development facilitated by the General Plan and LCP Update may occur in areas exposed with potential for inundation by seiche, tsunami, and/or mudflow. Compliance with applicable Municipal Code requirements would ensure development within areas subject to tsunami, seiche, and mudflow would be sited, designed, and constructed so as to not exacerbate risks to life and property. The General Plan and LCP Update would not increase exposure of people or structures to significant risk or loss, injury, or death involving inundation by seiche, tsunami, or mudflow. These impacts would be less than significant.</p>	<p>No mitigation measures are required.</p>	<p>n/a</p>
<p>Cumulative. Compliance with these existing requirements would reduce impacts associated with pollutants discharged during construction and operation of project and adverse changes to water quality throughout the cumulative impact area. Therefore, cumulative impacts related to water quality would be less than significant. Development of individual projects throughout the cumulative impact area would increase impervious surfaces and reduce groundwater recharge in the planning area, but compliance with applicable policies related to impervious surfaces would reduce impacts throughout the cumulative impact area.</p>	<p>No mitigation measures are required.</p>	<p>n/a</p>
<p>Land Use</p>		
<p>LUP-1. Implementation of the proposed General Plan and LCP Update would provide for orderly development in Morro Bay and would not physically divide an established community. This impact would be less than significant.</p>	<p>No mitigation is required</p>	<p>n/a</p>

City of Morro Bay
Morro Bay General Plan and LCP Update

Impact	Mitigation Measure(s)	Residual Impact
<p>LUP-2. With a comprehensive update to the City’s Zoning Ordinance and Zoning Map in conjunction with the General Plan and LCP Update, implementation of the General Plan and LCP Update would be consistent with applicable regional land use plans, policies, and regulations, such as the SLOCOG 2019 RTP and City zoning districts and standards. This impact would be less than significant.</p>	<p>Mitigation measures identified throughout this EIR would serve to reduce identified environmental impacts and further improve consistency of the project with applicable regional land use plans, policies, and regulations. No additional mitigation for this impact is required.</p>	<p>n/a</p>
<p>Cumulative. The General Plan and LCP Update would not contribute to a significant cumulative impact related to the physical division of any established community, and the cumulative impacts resulting from the implementation of the proposed General Plan and LCP Update would be less than significant.</p>	<p>Mitigation measures identified throughout this EIR would serve to reduce identified environmental impacts and further improve consistency of the project with applicable regional land use plans, policies, and regulations. No additional mitigation for this impact is required.</p>	<p>n/a</p>
<p>Noise</p>		
<p>N-1. Construction of individual projects facilitated by the General Plan and LCP Update would temporarily produce high noise levels, potentially affecting nearby noise-sensitive land uses. Compliance with existing standards and General Plan and LCP Update goals and policies would ensure construction activity associated with redevelopment or new development would limit noise disturbance at noise-sensitive receptors in the city. Therefore, this impact would be less than significant.</p>	<p>No mitigation would be required.</p>	<p>n/a</p>
<p>N-3. Development facilitated by the General Plan and LCP Update could incrementally increase traffic and associated noise levels along roadways in Morro Bay, exposing noise-sensitive land uses located near roadways to incrementally greater noise levels. However, implementation of policies in the General Plan and LCP Update would ensure that traffic noise would have a less than significant impact.</p>	<p>No mitigation would be required.</p>	<p>n/a</p>

Impact	Mitigation Measure(s)	Residual Impact
N-4. New development facilitated by the General Plan and LCP Update would introduce new operational noise sources associated with residential, commercial, Industrial, and mixed-use land uses. The continued regulation of on-site noise, consistent with the Morro Bay Municipal Code, would minimize disturbance to adjoining uses. Therefore, operational noise from the project would have a less than significant impact.	No mitigation would be required.	n/a
N-5. The General Plan and LCP Update planning area is located 17 miles from the nearest airport. Therefore, there would be no impacts associated with airport noise in the planning area.	No mitigation would be required.	n/a
Population and Housing		
PH-1. The General Plan and LCP Update would not result in growth in the planning area that is substantially greater than projected in the SLOCOG regional growth forecast. This impact would be less than significant.	Mitigation measures are not required.	n/a
PH-2. Implementation of the General Plan and LCP Update would not displace substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere. Impacts would be less than significant.	No additional policy-oriented mitigation would be required to address this impact. As individual development projects are considered for construction, separate environmental review may be required, which could result in the implementation of project-specific mitigation measures.	n/a
Cumulative. The General Plan and LCP Update would not contribute to cumulative impacts related to displacement in the greater cumulative impact analysis area (San Luis Obispo County), and would not result in significant cumulative population growth impacts beyond the planning area and the incremental population impacts of the proposed General Plan and LCP Update would not be cumulatively considerable.	Mitigation measures are not required.	n/a

City of Morro Bay
 Morro Bay General Plan and LCP Update

Impact	Mitigation Measure(s)	Residual Impact
Public Services and Recreation		
<p>PUB-1. Development facilitated by the General Plan and LCP Update would result in an increase in the city’s population. This would increase demand for fire, police, school, and emergency medical services and potentially create the need for new police, fire, school, or other service facilities. However, compliance with policies in the General Plan and LCP Update, payment of City-required public facilities impact fees, and management of future growth would avoid adverse environmental effects associated with the provision of new or physically altered fire, police, school, and other public facilities. This impact would be less than significant.</p>	<p>No mitigation would be required.</p>	<p>n/a</p>
<p>PUB-2. Development facilitated by the General Plan and LCP Update would increase the City’s population with commensurate increases in demand for parks and recreation facilities. Additional parkland has been planned such that the park service ratio would satisfy the City’s requirement to provide a minimum of three acres or parkland per 1,000 residents, consistent with Quimby Act requirements. This impact would be less than significant.</p>	<p>No mitigation would be required.</p>	<p>n/a</p>
<p>Cumulative. The General Plan and LCP Update would result in less than significant impacts to fire, police, school, public parks and recreation, and other public services and facilities. Therefore, the General Plan and LCP Update would result in less than significant cumulative impacts to these resources.</p>	<p>No mitigation would be required.</p>	<p>n/a</p>

Impact	Mitigation Measure(s)	Residual Impact
Transportation and Traffic		
<p>T-3. The General Plan and LCP Update is a programmatic guide to transportation in Morro Bay and does not include project-level design features. Future roadway improvements, site access, and other roadway design features would be designed and reviewed in accordance with all applicable federal, State, and City standards. This impact would be less than significant.</p>	<p>As individual development projects are proposed, focused, project-level environmental review may be required, which could result in the implementation of project-specific mitigation measures. Compliance with applicable regulations, as well as the identified goals and policies regarding infrastructure safety, would ensure that potential impacts associated with transportation hazards or incompatible uses would remain less than significant.</p>	<p>n/a</p>
<p>T-4. Due to the programmatic nature of the General Plan and LCP Update and the policies to create an integrated, multi-modal transportation system the General Plan and LCP Update would not result in inadequate emergency access. This impact would be less than significant.</p>	<p>As individual development projects are proposed, focused, project-level environmental review may be required, which could result in the implementation of project-specific mitigation measures. Compliance with applicable State and City requirements, as well as the identified goals and policies to minimize impacts related to emergency access, would ensure that potential impacts related to emergency response would remain less than significant.</p>	<p>n/a</p>
Utilities		
<p>U-1. Development facilitated by the General Plan and LCP Update would increase the demand for water supply. However, the City of Morro Bay projects that city water supply is sufficient to meet the projected water demand under buildout associated with the General plan And LCP Update. This impact would be less than significant</p>	<p>Mitigation measures are not required.</p>	<p>n/a</p>
<p>U-2. Development facilitated by the General Plan and LCP Update would increase demand for wastewater collection and treatment, and the Morro Bay-Cayucos Wastewater Treatment Plant would not have treatment capacity to meet this demand. However, the city is constructing a new Water Reclamation Facility, which is designed to meet existing needs and future demand. Development of the new Water Reclamation Facility, and implementation of the goals and policies of the General Plan and LCP Update would ensure sufficient wastewater treatment capacity. This impact would be less than significant.</p>	<p>Mitigation measures are not required.</p>	<p>n/a</p>

Impact	Mitigation Measure(s)	Residual Impact
<p>U-3. Development facilitated by the General Plan and LCP Update would increase solid waste sent to area landfills. However, Cold Canyon Landfill would have capacity to serve the development envisioned in the General Plan and LCP Update. Goals and policies in General Plan and LCP Update would increase the amount of waste that is diverted from the landfill and encourage reuse and recycling. This impact would be less than significant.</p>	<p>Mitigation measures are not required.</p>	<p>n/a</p>
<p>Cumulative. Cumulative impacts to utilities and service systems as a result of General Plan and LCP Update implementation would be less than significant.</p>	<p>Mitigation measures are not required.</p>	<p>n/a</p>
<p>Energy</p>		
<p>E-1. The General Plan and LCP Update is based on a land-use strategy that would promote greater energy efficiency in community and municipal operations. General Plan and LCP Update policies and implementation programs would ensure that development under the General Plan and LCP Update would comply with existing energy efficiency regulations. Wasteful, inefficient, or unnecessary consumption of energy would not occur and this impact would be less than significant.</p>	<p>No mitigation is required.</p>	<p>n/a</p>
<p>E-2. The General Plan and LCP Update would not conflict with energy efficiency goals contained in the City of Morro Bay Climate Action Plan. Construction and operation of projects facilitated by the General Plan and LCP Update would comply with relevant provisions of the State’s CALGreen Program and Title 24 of the California Energy Code. This impact would be less than significant.</p>	<p>No mitigation is required.</p>	<p>n/a</p>

Impact	Mitigation Measure(s)	Residual Impact
Cumulative. The General Plan and LCP Update would not be expected to contribute substantially to a cumulative increase in energy demand, result in wasteful, inefficient, or unnecessary consumption of energy, or result in the need for construction of new major facilities or substantial alteration of existing facilities to meet projected energy demands and cumulative impacts would be less than significant.	No mitigation is required.	n/a

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1 Introduction

This Environmental Impact Report (EIR) examines the potential environmental effects of the proposed City of Morro Bay General Plan and Local Coastal Program (LCP) Update, also known as *Plan Morro Bay*. The General Plan and LCP Update is defined as the proposed project for purposes of this environmental review. The environmental review process for the proposed project, and legal basis for preparing an EIR, are described below.

1.1 Environmental Impact Report Background

This document is a Final EIR that evaluates the potential environmental impacts associated with implementation of the City of Morro Bay General Plan and LCP Update. The General Plan and LCP Update establishes the community's vision for the future development of the city and provides comprehensive policies for the city relating to land use and community design, economic development, housing, mobility, parks and open space, sustainability, quality of life, resources, services and infrastructure, and health and safety.

This section of the EIR:

1. Provides an overview of the background behind the General Plan Update;
2. Describes the purpose of and legal authority of the EIR;
3. Summarizes the scope and content of the EIR;
4. Lists lead, responsible, and trustee agencies for the EIR;
5. Describes the intended uses of the EIR;
6. Provides a synopsis of the environmental review process required under CEQA.

The contents of other EIR sections are as follows:

- Section 2, Project Description, provides a detailed discussion of the proposed project.
- Section 3, Environmental Setting, describes the general environmental setting for the City of Morro Bay.
- Section 4, Environmental Impact Analysis, describes the potential environmental effects associated with development facilitated by the proposed project.
- Section 5, Other CEQA Required Sections, discusses issues such as growth inducement, energy and significant irreversible environmental effects.
- Section 6, Effects Found to be Less than Significant, describes the environmental effects of the project that were found to be less than significant during the initial scoping and notice of preparation process for the project.
- Section 7, Alternatives, discusses alternatives to the proposed project, including the CEQA-required "no project" alternative.
- Section 8, References and Report Preparers, lists informational sources for the EIR and persons involved in the preparation of the document.

1.2 Overview of the General Plan and LCP Update

State law (Government Code Section 65300) requires that each city and county adopt a comprehensive general plan. The California Coastal Act requires that the LCP be reviewed at least once every five years after certification to determine if the LCP is being effectively implemented in conformity with the policies of the Coastal Act. The LCP consists of the City's LUP, Local Implementation Plan (LIP), portions of the Zoning Code, land use and zoning maps, and implementing actions. As a package, these documents implement the Coastal Act at the local level in Morro Bay.

The General Plan and LCP Update is a comprehensive update of the City's 1988 General Plan and 1984 LCP that requires review and recommendation for adoption by the City's Planning Commission, and the discretionary approval by the City Council. The General Plan and LCP Update presents the community's vision for Morro Bay through 2040 and establishes overarching City policies and priorities that describe how the community intends to use and manage its physical, social, and economic resources.

As described in Section 2.1 of Section 2.0, *Project Description*, State law requires that a General Plan contain the following mandatory subject areas, or "elements," including Land Use, Circulation, Housing, Open Space, Conservation, Noise, Safety, and Environmental Justice. State law also allows for optional elements that can be organized or combined at the City's discretion. The General Plan and LCP Update is divided into the following seven sections and elements: 1) Introduction; 2) Vision; 3) Blueprint including six General Plan elements; 4) Greenprint including four general plan elements; 5) Implementation; 6) Glossary and Acronyms; and 7) Appendices. The six General Plan elements in the Blueprint include: Land Use, Community Design, Economic Development, Circulation, Noise, and Housing. The four General Plan elements in the Greenprint include: Conservation, Open Space, Public Safety, and Environmental Justice. Specific requirements for each Coastal Act topic are identified within each element. As shown in Tables 2-1 and 2-2 in Section 2.0, *Project Description*, the ten General Plan sections and elements cover all of the topics that are required to be included in a General Plan and an LCP under State law.

Morro Bay adopted its current (6th cycle) Housing Element in August 2020, covering the period from 2020-2028. The 6th cycle Housing Element was certified by the California Department of Housing and Community Development (HCD) in September 2020. The Housing Element serves as a tool to identify and provide for the housing needs of the community and identifies recent demographic and employment trends that may affect existing and future housing demand and supply. The Housing Element addresses the City's ability to meet the regional housing needs as determined by the State of California.

The General Plan and LCP Update is intended to function as a policy document to guide land use decisions within the planning area through 2040. The General Plan and LCP Update was developed through an extensive public outreach and involvement process and following careful analysis by an advisory committee, commissions, City staff, elected officials, and the community. Each element of the plan addresses different aspects of the community and identifies measurable actions to guide residents, decision-makers, businesses, and City staff toward achieving the vision. Goals established within the General Plan and LCP Update are intended to help the community enhance and maintain its identity as a seaside community that values its charming, artistic town character, working waterfront, and healthy environment and lifestyle, while guiding the city toward a more sustainable future. Due to its location on the coast, Morro Bay is vulnerable to climate change, such as sea level rise and coastal flooding, drought, and related water supply deficiencies. The General Plan and LCP

Update identifies both areas that are vulnerable to hazards and impacts of climate change, as well as resiliency and adaptation strategies to help Morro Bay withstand future climate change impacts. The General Plan and LCP Update establishes overarching City policies and priorities that describe how the community intends to use and manage its physical, social, and economic resources.

1.3 Purpose and Legal Authority

This EIR has been prepared in accordance with CEQA and the *CEQA Guidelines*. In accordance with Section 15121 (a) of the *CEQA Guidelines* (California Code of Regulations, Title 14, Division 6, Chapter 3), the purpose of an EIR is to:

Inform public agency decision-makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project.

This EIR fulfills the requirements for a Program EIR. Although the legally required contents of a Program EIR are the same as those of a Project EIR, Program EIRs are by necessity more conceptual and may contain a more general discussion of impacts, alternatives, and mitigation measures than a Project EIR. As provided in Section 15168 of the *CEQA Guidelines*, a Program EIR may be prepared on a series of actions that may be characterized as one large project. Use of a Program EIR provides the City of Morro Bay (as Lead Agency) with the opportunity to consider broad policy alternatives and program-wide mitigation measures and provides the City with greater flexibility to address environmental issues and/or cumulative impacts on a comprehensive basis. Agencies generally prepare Program EIRs for programs or a series of related actions that are linked geographically, are logical parts of a chain of contemplated events, rules, regulations, or plans that govern the conduct of a continuing program, or are individual activities carried out under the same authority and having generally similar environmental effects that can be mitigated in similar ways. By its nature, a Program EIR considers the broad effects associated with implementing a program (such as a General Plan or Specific Plan) and does not, and is not intended to, examine the specific environmental effects associated with specific projects that may be accommodated by the provisions of General or Specific Plans.

Once a Program EIR has been prepared, subsequent activities within the program must be evaluated to determine what, if any, additional CEQA documentation needs to be prepared. If the Program EIR addresses the program's effects as specifically and comprehensively as possible, many subsequent activities could be found to be within the Program EIR scope and additional environmental documentation may not be required (*CEQA Guidelines* Section 15168[c]). When a Lead agency relies on a Program EIR for a subsequent activity, it must incorporate applicable mitigation measures and alternatives developed in the Program EIR into the subsequent activities (*CEQA Guidelines* Section 15168(c)(3)). If a subsequent activity would have effects not contemplated or not within the scope of the Program EIR, the Lead Agency must prepare a new Initial Study leading to a Negative Declaration, Mitigated Negative Declaration, or a project level EIR. In this case, the Program EIR still serves a valuable purpose as the first-tier environmental analysis. The *CEQA Guidelines* (Section 15168[b]) encourage the use of Program EIRs, citing five advantages:

1. Provision of a more exhaustive consideration of impacts and alternatives than would be practical in an individual EIR.
2. Focus on cumulative impacts that might be slighted in a case-by-case analysis.
3. Avoidance of continual reconsideration of recurring policy issues.

4. Consideration of broad policy alternatives and programmatic mitigation measures at an early stage when the agency has greater flexibility to deal with them.
5. Reduction of paperwork by encouraging the reuse of data (through tiering).

As a wide-ranging environmental document, the Program EIR uses expansive thresholds as compared to the project-level thresholds that might be used for an EIR on a specific development project. It should not be assumed that impacts determined not to be significant at a program level would not be significant at a project level. In other words, determination that implementation of the proposed project as a program would not have a significant environmental effect does not necessarily mean that an individual project would not have significant effects based on project-level CEQA thresholds, even if the project is consistent with the General Plan and LCP Update.

This EIR has been prepared to analyze potentially significant environmental impacts associated with future development resulting from implementation of the General Plan and LCP Update, and also addresses appropriate and feasible mitigation measures or project alternatives that would minimize or eliminate these impacts. Additionally, this EIR will provide the primary source of environmental information for the City of Morro Bay to use when considering the proposed project.

This EIR is intended to provide decision-makers and the public with information that enables intelligent consideration of the environmental consequences of the proposed project. This EIR identifies significant or potentially significant environmental effects, as well as ways in which those impacts can be reduced to less-than-significant levels, whether through the incorporation of mitigation measures or through the implementation of specific alternatives to the proposed project. In a practical sense, this document functions as a tool for fact-finding, allowing concerned citizens and agency staff an opportunity to collectively review and evaluate baseline conditions and project impacts through a process of full disclosure.

1.4 Scope and Content

In accordance with the *CEQA Guidelines*, a Notice of Preparation (NOP) of a Draft EIR was circulated to potentially interested parties from November 8, 2017 to December 7, 2017. The NOP, included in Appendix A, indicated that all of the following issues listed in the CEQA Checklist Appendix G would be discussed in the EIR. These include:

- Aesthetics, Light, and Glare
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use
- Noise
- Population and Housing
- Public Services
- Transportation
- Utilities and Service Systems
- Tribal Cultural Resources
- Energy Conservation and Other Required CEQA Topics

This EIR evaluates potential impacts in each of these areas.

The focus of this EIR is to:

- Provide information about the General Plan and LCP Update for review and consideration by the City Council and the California Coastal Commission in their selection of the proposed General Plan and LCP Update, an alternative to the proposed General Plan and LCP Update, or a combination of various elements from the proposed General Plan and LCP Update and its alternatives, for approval.
- Review and evaluate the potentially significant environmental impacts that could occur as a result of the growth and development envisioned in the proposed General Plan and LCP Update.
- Identify feasible mitigation measures that may be incorporated into the proposed General Plan and LCP Update in order to reduce or eliminate potentially significant effects.
- Disclose any potential growth-inducing and/or cumulative impacts associated with the proposed General Plan and LCP Update.
- Examine a reasonable range of alternative growth scenarios (such as “no growth”/growth according to the existing General Plan, reduced growth, or growth in alternative locations) that could feasibly attain the basic objectives of the proposed General Plan and LCP Update, while eliminating and/or reducing some or all of its potentially significant adverse environmental effects.

The City received seven responses to the NOP including three responses from State, local and non-profit agencies and four responses from public commenters. The responses, included in Appendix A, are addressed, as appropriate, in the analysis contained in the various subsections of Section 4.0, *Environmental Impact Analysis*. The City also held a public scoping meeting for the EIR on November 21, 2017 in the Facility Room of the Veteran’s Memorial Building, located at 209 Surf Street in Morro Bay. Table 1-1 summarizes the comments received, by topic, in the comment letters and at the scoping meeting.

Table 1-1 NOP Comments and EIR Response

Commenter	Comment/Request	Where Addressed in the EIR
Agency Comments		
Cayucos Sanitary District	Requests that the City consider detaching a portion of APN 073-075-016, north of Toro Creek. No specific comments about the environmental analysis	N/A
California Department of Transportation (Caltrans)	Notes that Caltrans will review the Draft Plan, specifically the Land Use and Circulation elements, re: key interchanges with SR 1 and SR 41	Section 4.12, <i>Transportation</i>
The Trust for Public Lands	Requests that EIR include a project alternative that involves conservation of the approximately 2,600 acres of land owned by Chevron, which separates Cayucos and Morro Bay and runs along Toro Creek Road	Section 7, <i>Alternatives</i>

Commenter	Comment/Request	Where Addressed in the EIR
Public Comments		
Lynda Merrill, Friends of Wildlife	<ul style="list-style-type: none"> ▪ Preserve open space ▪ Create pedestrian friendly roadways ▪ Keep Morro Bay a small town ▪ Protect the surrounding City and State parks ▪ Resist major changes 	Section 4.3, <i>Biological Resources</i> , Section 6.0, <i>Effects Found to be Less than Significant</i>
Rigmor	<ul style="list-style-type: none"> ▪ Asked the definition of SOI ▪ Asked what the City’s plan is for the hatched area on the proposed land use map 	Section 2, <i>Project Description</i>
Bill Martony	<ul style="list-style-type: none"> ▪ Asked whether the intent is for agricultural land in the SOI to remain agricultural ▪ Asked whether the identified ESHA in the Bay is proposed to be removed from ESHA. If so, what is the purpose or reasoning of that removal? ▪ Stated that the maps showing Special Area B (20 lots) show the incorrect zoning, and that the updated Zoning Code should correct this ▪ Asked if the property at the Tri-W property east of the Morro Bay Blvd off-ramp would be changed from commercial to residential 	Section 2, <i>Project Description</i> , Section 4.3, <i>Biological Resources</i> , Section 6.0, <i>Effects Found to be Less than Significant</i>
Betty Winholtz	<ul style="list-style-type: none"> ▪ Asked whether biological resources and agricultural resources would be addressed in the EIR ▪ Asked whether the EIR will evaluate the required No Project Alternative ▪ Asked where 900 new homes would go ▪ Stated that agricultural land shouldn’t be included in the planning area if the plan is not to develop it ▪ Asked that if agricultural land would be removed from SOI, what would be the percentage of the city in each land use category 	Section 2, <i>Project Description</i> , Section 4.3, <i>Biological Resources</i> , Section 6.0, <i>Effects Found to be Less than Significant</i> , Section 7, <i>Alternatives</i>

1.5 Lead, Responsible, and Trustee Agencies

The City of Morro Bay is the lead agency under CEQA for this EIR because it has primary discretionary authority to determine whether or how to approve the proposed General Plan and LCP Update.

Section 15381 of the *CEQA Guidelines* defines responsible agencies as other public agencies that are responsible for carrying out/implementing a specific component of a proposed project or for approving a project (such as an annexation) that implements the goals and policies of a General Plan. The California Coastal Commission would be a responsible agency for certification of the General Plan and LCP Update, Zoning Code Update, and Coastal Implementation Plan included in the project.

Although not responsible agencies under CEQA, several other agencies have review authority over aspects of the proposed project or approval authority over projects that could potentially be implemented in accordance with various objectives and policies included in the General Plan and LCP Update. These agencies and their roles are listed below.

- The State Geologist is responsible for the review of the City’s program for minimizing exposure to geologic hazards and for regulating surface mining activities.
- The California Department of Transportation (Caltrans) has responsibility for approving future improvements to the state highway system, including State Route 1 (SR 1) and State Route 41 (SR 41) West.
- The California Department of Fish and Wildlife (CDFW) has responsibility for issuing take permits and streambed alteration agreements for any projects with the potential to affect plant or animal species listed by the State of California as rare, threatened, or endangered or that would disturb waters of the State.

Trustee agencies have jurisdiction over certain resources held in trust for the people of California but do not have a legal authority over approving or carrying out the project. *CEQA Guidelines* Section 15386 designates four agencies as trustee agencies:

1. CDFW with regard to the fish and wildlife of the state, to designated rare or endangered native plants, and to game refuges, ecological reserves, and other areas administered by the department;
2. The State Lands Commission with regard to state owned “sovereign” lands such as the beds of navigable waters and state school lands;
3. The California Department of Parks and Recreation, with regard to units of the State park System; and
4. The University of California, with regard to sites within the Natural Land and Water Reserves System.

1.6 Intended Uses of the EIR

This EIR is as an informational document for use in the City’s review and consideration of the proposed General Plan and LCP Update. This document is a Program EIR. *CEQA Guidelines* Section 15168(a) states that:

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 a 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.

As a programmatic document, this EIR presents and discloses a region-wide assessment of the environmental impacts of the General Plan and LCP Update. The information and analysis in this EIR will be used by the Morro Bay Planning Commission and City Council, trustee agencies, and the general public.

The General Plan and LCP Update will guide subsequent actions taken by the City in its review of new development projects and the establishment of new and/or revised citywide or area-specific programs. This program EIR serves as a first-tier environmental document under CEQA, supporting second-tier environmental documents for projects with detailed designs that have been developed for implementation within the city. Analysis of site-specific impacts of individual projects is not the intended use of a Program EIR. Many specific projects are not currently defined to the level that

would allow for such an analysis at this time. Individual and specific environmental analysis of each project will be undertaken as necessary in the future by the City prior to each project being considered for approval. Therefore, the City, acting as the Lead Agency, would be able to prepare subsequent environmental documents that incorporate by reference the appropriate information from this Program EIR regarding secondary effects, cumulative impacts, broad alternatives, and other relevant factors. If the City finds that implementation of a later activity would have no new effects and that no new mitigation measures would be required, that activity would require no additional CEQA review. Where subsequent environmental review is required, such review would focus on significant effects specific to the project, or its site that have not been considered in this Program EIR.

The LCP forms the legal standard of review for issuance of Coastal Development Permits (CDP) within the city's coastal zone.

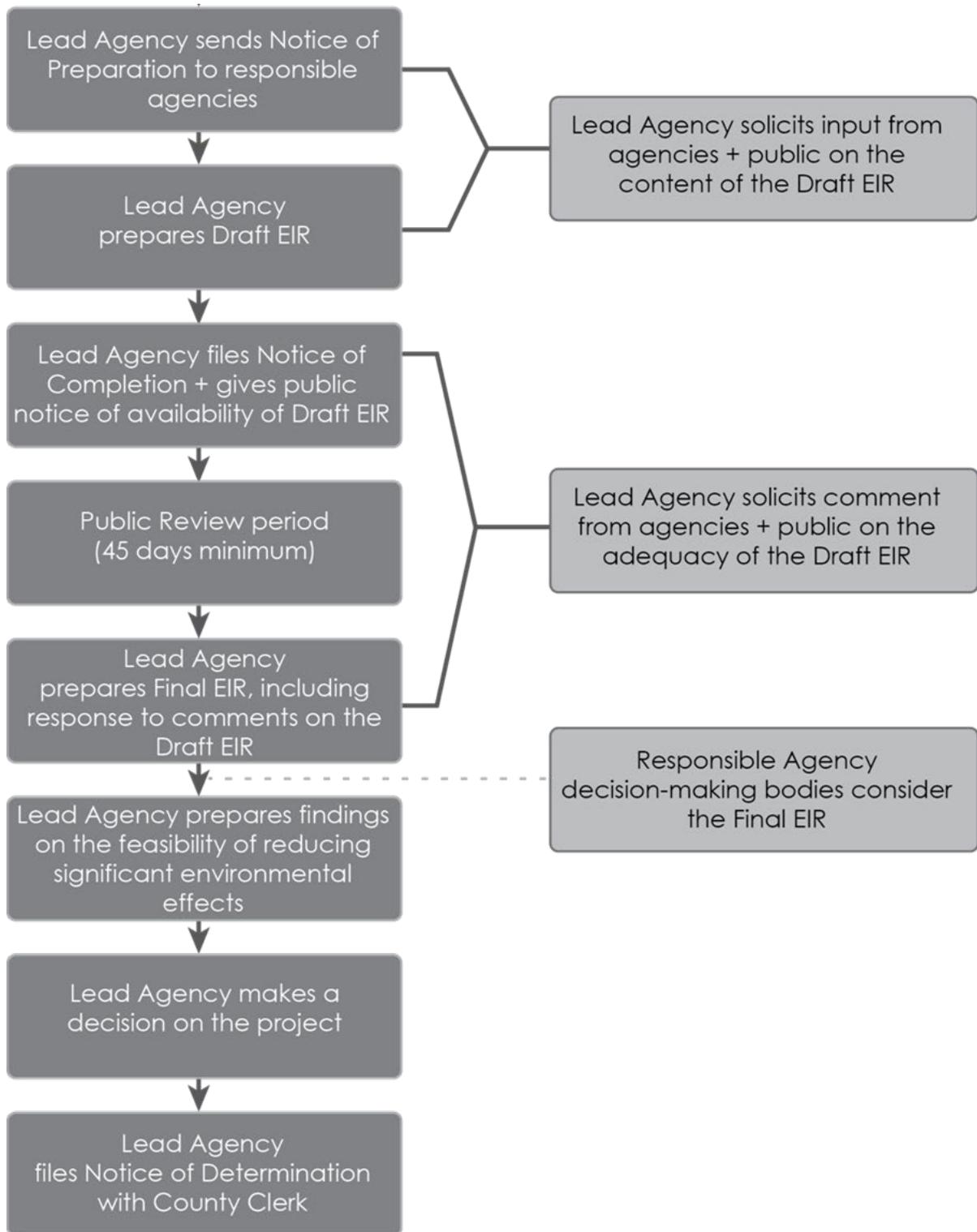
1.7 Environmental Review Process

The environmental impact review process required under CEQA is summarized below. The steps appear in sequential order.

1. **Notice of Preparation (NOP) Distributed.** Immediately after deciding that an EIR is required, the lead agency must file a NOP soliciting input on the EIR scope to "responsible," "trustee," and involved federal agencies; to the State Clearinghouse, if one or more state agencies is a responsible or trustee agency; and to parties previously requesting notice in writing. The NOP must be posted in the County Clerk's office for 30 days. A scoping meeting to solicit public input on the issues to be assessed in the EIR is not required but may be conducted by the lead agency. The NOP public comment period for the General Plan and LCP Update EIR was from November 8, 2017 to December 7, 2017 and a scoping meeting was held on November 21, 2017. A total of seven public comments were received in response to the NOP and scoping process (refer to Table 1-1).
2. **Draft EIR Prepared.** The Draft EIR must contain: a) table of contents or index; b) summary; c) project description; d) environmental setting; e) significant impacts (direct, indirect, cumulative, growth inducing and unavoidable impacts); f) alternatives; g) mitigation measures; and h) irreversible changes.
3. **Public Notice and Review.** A lead agency must prepare a Public Notice of Availability of an EIR. The Notice must be placed in the County Clerk's office for 30 days (Public Resources Code Section 21092) and sent to anyone requesting it. Additionally, public notice of Draft EIR availability must be given through at least one of the following procedures: a) publication in a newspaper of general circulation; b) posting on and off the project site; and c) direct mailing to owners and occupants of contiguous properties. The lead agency must consult with and request comments on the Draft EIR from responsible and trustee agencies, and adjacent cities and counties. The minimum public review period for a Draft EIR is 30 days. When a Draft EIR is sent to the State Clearinghouse for review, the public review period must be 45 days, unless a shorter period is approved by the Clearinghouse (Public Resources Code 21091). Distribution of the Draft EIR may be required through the State Clearinghouse.
4. **Notice of Completion.** A lead agency must file a Notice of Completion with the State Clearinghouse as soon as it completes a Draft EIR.

5. **Final EIR.** A Final EIR must include: a) any revisions to the Draft EIR; b) copies of comments received during public review; c) list of persons and entities commenting; and d) responses to comments.
6. **Certification of Final EIR.** The lead agency shall certify that: a) the Final EIR has been completed in compliance with CEQA; b) the Final EIR was presented to the decision-making body of the lead agency; and c) the decision making body reviewed and considered the information in the Final EIR prior to approving a project.
7. **Lead Agency Project Decision.** A lead agency may: a) disapprove a project because of its significant environmental effects; b) require changes to a project to reduce or avoid significant environmental effects; or c) approve a project despite its significant environmental effects, if the proper findings and statement of overriding considerations are adopted.
8. **Findings/Statement of Overriding Considerations.** For each significant impact of the project identified in the EIR, the lead or responsible agency must find, based on substantial evidence, that: a) the project has been changed to avoid or substantially reduce the magnitude of the impact; b) changes to the project are within another agency's jurisdiction and such changes have or should be adopted; or c) specific economic, social, or other considerations make the mitigation measures or project alternatives infeasible. If an agency approves a project with unavoidable significant environmental effects, it must prepare a written Statement of Overriding Considerations that set forth the specific social, economic or other reasons supporting the agency's decision.
9. **Mitigation Monitoring Reporting Program.** When an agency makes findings on significant effects identified in the EIR, it must adopt a reporting or monitoring program for mitigation measures that were adopted or made conditions of project approval to mitigate significant effects.
10. **Notice of Determination (NOD).** An agency must file a Notice of Determination after deciding to approve a project for which an EIR is prepared. A local agency must file the Notice with the County Clerk. The Notice must be posted for 30 days and sent to anyone previously requesting notice. Posting of the Notice starts a 30-day statute of limitations on CEQA challenges.

Figure 1-1 Environmental Review Process



2 Project Description

The project analyzed in this EIR is the proposed City of Morro Bay General Plan and Local Coastal Program (LCP) Update, also known as *Plan Morro Bay*. This section of the EIR describes the key characteristics of the General Plan and LCP Update, including the project proponent/lead agency, the geographic extent of the plan, project objectives, required approvals and types and extent of development forecasted under the General Plan and LCP Update.

2.1 Purpose of the General Plan and LCP Update

The General Plan and LCP Update is a comprehensive update of the City's 1988 General Plan and 1984 LCP and presents the community's vision for Morro Bay through 2040. The General Plan and LCP Update was developed through an extensive public outreach and involvement process, including careful analysis by an advisory committee, commissions, City staff, elected officials, and the community. Each element of the plan addresses different aspects of the community and identifies measurable actions to guide residents, decision-makers, businesses, and City staff toward achieving the vision. Goals established within the General Plan and LCP Update are intended to help the community enhance and maintain its identity as a seaside community that values its charming, artistic town character, working waterfront, and healthy environment and lifestyle, while guiding the city toward a more sustainable future. The General Plan and LCP Update establishes overarching City policies and priorities that describe how the community intends to use and manage its physical, social, and economic resources.

The LCP consists of the City's Land Use Plan (LUP), Local Implementation Plan (LIP), portions of the Zoning Code, land use and zoning maps, and implementing actions. As a package, these components implement the Coastal Act at the local level in Morro Bay. The adopted and certified LCP forms the legal standard of review for issuance of Coastal Development Permits (CDP) within the city's coastal zone and is legally binding on the City. The LCP may be amended to stay up to date with State laws and to continue to reflect the vision of the community.

The California Governor's Office of Planning and Research recognizes the relationship between General Plans and LCPs for coastal cities and recommends that both requirements be addressed by integrating the General Plan and the LCP. An integrated plan allows the community to apply the vision and requirements for both documents in a comprehensive manner, facilitating a unified and efficient approach to complying with both California general plan law and the California Coastal Act. Approximately 13.5 acres of the city are located outside of the coastal zone, with the remainder and majority of the city located in the coastal zone. Therefore, the City has found it appropriate to follow OPR's recommendation and integrate the updated General Plan and LCP.

State law (Government Code Sections 65300 through 65303.4) sets forth the requirement for each municipality to adopt and periodically update its General Plan, and sets the requirement that a General Plan contain the following mandatory subject areas, or "elements", including Land Use, Circulation, Housing, Open Space, Conservation, Noise, Safety, and Environmental Justice. California adopted Senate Bill 1000 on September 24, 2016 requiring cities to develop an Environmental Justice element, or related environmental justice goals and policies to reduce the unique or compounded health risks in "disadvantaged communities." Cities are required to incorporate environmental justice goals and policies into their general plan when they update two or more

general plan elements on or after January 1, 2018. State law also allows for optional elements that can be organized or combined at the City’s discretion. The General Plan and LCP Update includes the required subjects/elements as well as two additional elements, Community Design and Economic Development, as detailed in Section 2.4.2, General Plan and LCP Update Organization. The environmental justice content required by SB 1000 is included in the Environmental Justice Element of the General Plan and LCP Update.

2.2 Project Proponent/Lead Agency

The City of Morro Bay is the project proponent and the lead agency for the proposed General Plan and LCP Update. The City’s Community Development Department, located at 955 Shasta Avenue in the City of Morro Bay, prepared this EIR with the assistance of Rincon Consultants, Inc.

2.3 Project Location

2.3.1 Geographic Location

The City of Morro Bay is located on the Central Coast of California, midway between San Francisco and Los Angeles. The city is surrounded by a buffer of undeveloped land on the north, east, and south and by the Pacific Ocean on the west. The city’s local neighbors are the City of San Luis Obispo 13 miles to the southeast, the community of Cayucos to the north, and the community of Los Osos to the south. The planning area for Morro Bay includes all area within the city boundaries (approximately 3,137 acres), as well as approximately 6,137 acres beyond the city limits. A portion of the planning area beyond the city limits, approximately 100 acres consisting of part of the estuary and a small area on the northern beachfront, is in the city’s existing Sphere of Influence (SOI). Another 1,077 acres of the planning area beyond the city limits is identified as a future extension of Morro Bay’s SOI. Both the current and potential future SOI areas are under County of San Luis Obispo jurisdiction. Figure 2-1 depicts a regional map of the city’s relationship to nearby cities, communities, and the State highway system. Figure 2-2 shows the planning area for Morro Bay.

2.3.2 Access and Transportation Network

Regional access to the Morro Bay area is provided by State Route (SR 1), the primary regional motor-vehicle facility that follows the Pacific coastline from Los Angeles to near the Oregon border, as well as SR 41 West, which extends from the city to California’s Central Valley. The segment of SR 1 that runs through Morro Bay is a four-lane divided highway connecting Morro Bay with nearby cities such as San Luis Obispo and communities such as Cayucos.

Within the city limits, motor vehicle traffic circulation is provided for by the city’s roadway network. Major elements of the roadway network include SR 1, Main Street, Morro Bay Boulevard, and South Bay Boulevard. Morro Bay’s bicycle route network is comprised of approximately 10 miles of bicycle routes, including 3.3 miles of off-street Class I bikeways and 7.1 miles of Class II bike lanes. Pedestrian facilities consist of sidewalks, Class I paths, and crosswalks. Sidewalks are provided along the Embarcadero and along most streets in the Downtown area. Most single-family residential areas in the city lack sidewalks. Recreational hiking trails are provided in Morro Bay State Park and include the Black Hill hiking areas and walking paths along the estuary near the State Park marina.

Figure 2-1 Regional Location

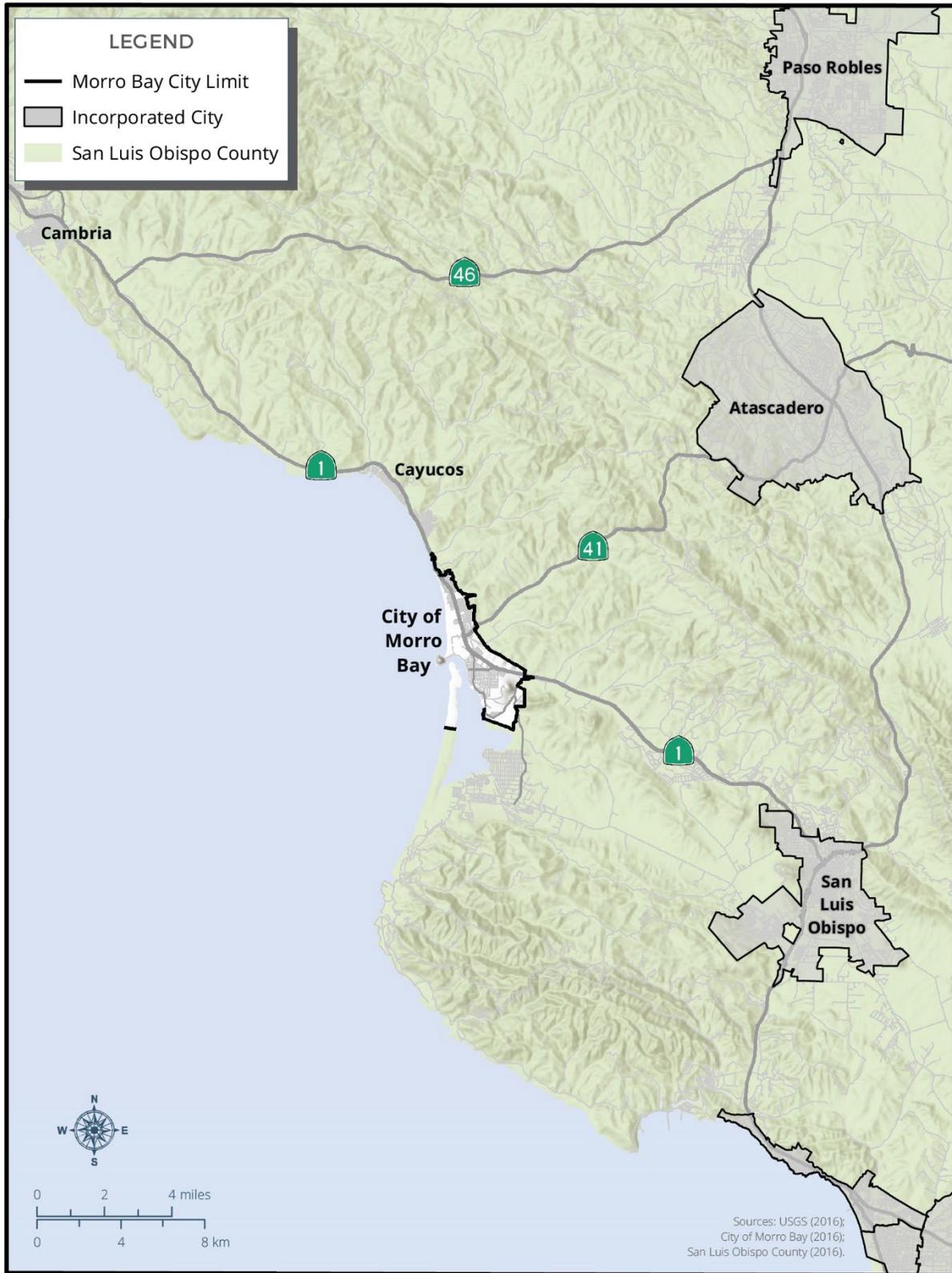
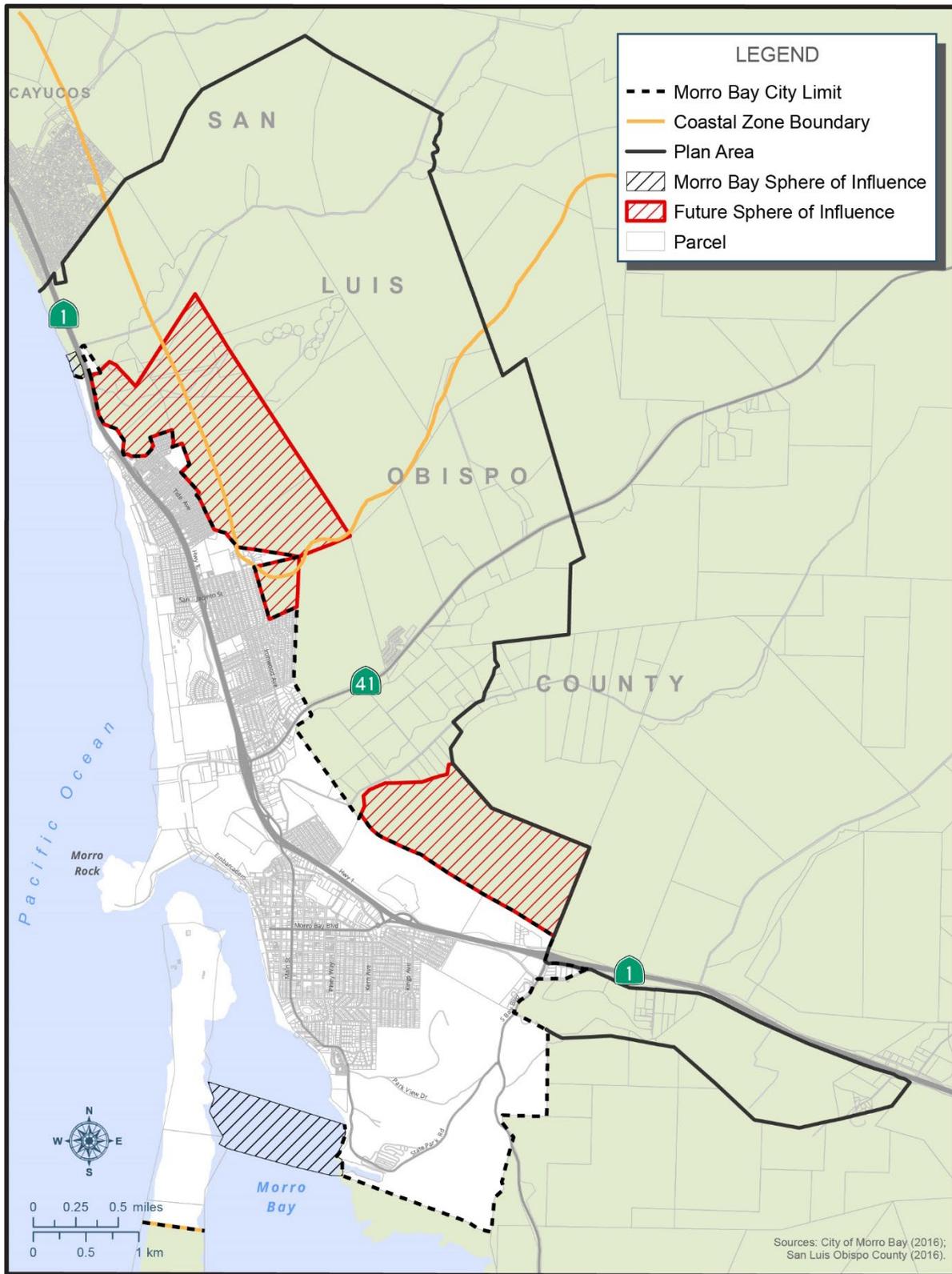


Figure 2-2 General Plan and LCP Update Planning Area



The San Luis Obispo Regional Transit Authority (RTA) is a joint powers authority providing fixed-route regional service from the Morro Bay Transit Center on Harbor Street. RTA Route 12 runs from Morro Bay to San Luis Obispo with stops in Los Osos, Cuesta College, and Cal Poly and RTA Route 15 runs from Morro Bay to San Simeon with stops in Cayucos and Cambria. The City operates Morro Bay Transit, which provides fixed-route local transit service to the city's major campgrounds, high school, senior center, grocery store, and neighborhoods throughout the city. The Morro Bay Trolley operates from Memorial Day weekend through the first weekend in October, with stops at the State Park campground, Downtown, the Embarcadero, Morro Rock, and Morro Strand campground.

2.4 Characteristics of the General Plan and LCP Update

The General Plan and LCP Update is a comprehensive update of the City's 1988 General Plan and 1984 LCP. The land use classifications included in the General Plan and LCP define the basic categories of land use allowed in the city and are the basis for the zoning districts established in the City Municipal Code, which contain more specific regulations and standards governing development on individual properties.

Under State law, a property's zoning is required to be consistent with its General Plan land use classification (Government Code §65860). Section 65860(c) of the Government Code requires that when a General Plan is amended in a way that makes the Zoning Code inconsistent with the General Plan, "the zoning ordinance shall be amended within a reasonable time so that it is consistent with the general plan as amended."

2.4.1 Objectives of the General Plan and LCP Update

The General Plan and LCP Update is intended to function as a policy document to guide land use decisions within the city planning area through the year 2040. The vision for the city over the next 20 to 30 years was developed with extensive community input. Based on this community input and in recognition of the state's planning priorities, a vision and values supporting the vision for the community were developed. The vision and values of the General Plan and LCP Update are contained in Chapter 2, Vision, and are summarized below.

2.4.1.1 *Community Vision*

The Community Vision is included in the General Plan as follows:

In 2040, Morro Bay remains a small oceanfront town and thriving year-round destination, known for its natural beauty, creative people, outdoor recreation, working waterfront, and welcoming community spirit. It is a friendly, safe, resilient, and healthy place where people of all ages and economic levels live, work, play, and visit.

The natural environment and wildlife are cherished and conserved and are essential elements that integrate with and define our urban landscape. Our healthy wetlands, iconic Morro Rock, and bustling harbor are complemented by expansive parks, connected bicycle lanes, safe streets, and pathways that are accessible to people of all ages and abilities.

We have a deep appreciation for nature and honor our native, cultural, and maritime heritage. We maintain and support our working waterfront and carefully preserve our estuary,

watershed, natural shoreline, and surrounding open space. We adapt to changes in the climate, economy, and culture without compromising our small-town character.

Our vibrant economy is strengthened by sustainable resource practices, a responsive city government, and leading-edge technology that empowers local business owners and attracts new businesses and investors. We are a diverse, multigenerational community where head-of-household jobs, sustainable living wages, and affordable housing options serve as a foundation that allows people of all ages and income levels to thrive.

Modern, well-maintained public amenities and supportive community services nurture our residents, community organizations, and neighborhood groups. We actively participate in government decisions and take pride in volunteerism. We welcome personal expression and creativity, as reflected in our varied visitor attractions, bustling dining scene, vibrant arts culture, community events, public art, and outdoor activities. Our diverse housing, safe and eclectic neighborhoods, and reliable transit system are enhanced through suitable urban infill and mixed-use development that accommodates modest residential and commercial growth.

Mindful of our rich heritage, we take great pride in our community and work together toward a bright future.

2.4.1.2 *Community Values*

In order to realize the community's vision for Morro Bay, the City will focus on the following values identified in the General Plan and LCP Update:

- **Natural Environment.** Our estuary, shoreline, and open green spaces are sustainably conserved, and our parks and recreation spaces are healthy, resilient, and accessible to all.
- **Heritage & Identity.** We welcome visitors while maintaining our small-town character and honoring our maritime heritage.
- **Jobs & Housing.** A range of affordable housing options and living wage jobs provide for a high quality of life.
- **Economic Vitality.** Our diverse and sustainable economy supports both new and existing locally owned businesses, including community-supporting tourism.
- **Infrastructure & Amenities.** We have modern, resilient infrastructure and public amenities.
- **Mobility & Access.** Safe and accessible streets, trails, and multimodal transportation options conveniently connect people and places throughout town and to surrounding destinations.
- **Good Governance.** Our government is supportive, collaborative, equitable, and responsive to the needs of all segments of the population.
- **Resident Services.** We provide a range of public services that support a diverse and multigenerational community.

2.4.2 General Plan and LCP Update Organization

State law (Government Code Sections 65300-65303.4) requires a General Plan, a City policy document, to include subject matter for the following State-required elements or topics: Land Use, Circulation, Housing, Open Space, Conservation, Noise, Safety, and Environmental Justice. State law also allows for optional elements that can be organized or combined at the City's discretion. The Local Coastal Program must address priority issues for the California Coastal Commission including public access, recreation and visitor serving facilities, water quality protection, Environmentally

Sensitive Habitat Areas (ESHA) and other natural resources, agricultural resources, new development and cultural resources, scenic and visual resources, coastal hazards, shoreline erosion and protective devices, and energy and industrial development.

As shown in Table 2-1, the General Plan and LCP Update is divided into 15 sections and elements, which address the topics mandated by the State law and Coastal Commission, as well as additional topics of interest to the City. The 10 elements are grouped into a Blueprint and a Greenprint. The sections and elements of the General Plan and LCP Update are summarized as follows:

1. **Introduction.** Addresses the purpose and scope of the General Plan and Local Coastal Program; background on Morro Bay’s history, current demographics, and economic conditions; planning context (other local and regional plans); the relationship of the General Plan and Local Coastal Program to other plans and documents, including the City’s Municipal Code; and the geographic area and topics covered in the General Plan/Local Coastal Program.
2. **Vision.** The Community Vision section of the General Plan and LCP Update establishes a Vision & Values statement for the city. This statement sets forth a comprehensive vision for Morro Bay in the future and identifies the community’s key priorities. This statement guides each element of the General Plan and LCP Update to achieve the goals of the community.
3. **Blueprint.** The Blueprint serves as a framework for development decisions in the city through 2040. This section will guide actions for residents, businesses, decision-makers, City staff members, and project developers in Morro Bay.
 - a. **Land Use Element.** The Land Use Element represents the foundation of the Blueprint and the City’s guide to the evolution of development patterns in Morro Bay. This element guides future development and designates appropriate locations for land uses in the city. Land Use Element goals and policies serve as a road map for the future physical development of the community by identifying the general location, distribution, and intensity for a range of residential, commercial, industrial, and institutional land uses in Morro Bay. Land Use Element goals and policies also address coastal-dependent and coastal-related uses.
 - b. **Community Design Element.** The Community Design Element outlines a vision for the aesthetic development of the community and character of Morro Bay. This element establishes the City’s long-term community design and development goals to maintain a unique city culture and identity with respect to community form, layout, and community character areas.
 - c. **Economic Development Element.** The Economic Development Element includes goals and policies to maintain and improve job development and retention and to promote economic resiliency. This element addresses the economic implications of future development relative to housing affordability, market surplus and leakage, and demographic trends in Morro Bay through 2040.
 - d. **Circulation Element.** The Circulation Element defines the local and regional transportation networks and describes how community members get around the city using streets, sidewalks, transit routes, and bicycle paths. The transportation network is a major determinant of development form and land use. Traffic patterns, congestion, access to transit, ease and safety of walking or bicycling, and other factors help to determine where people decide to live, work, or visit in Morro Bay. This element

facilitates the mobility of people and goods throughout Morro Bay using multiple travel modes to promote practices aligned with City goals.

- e. **Noise Element.** The Noise Element addresses existing and future noise conditions in Morro Bay, identifies noise problems and their sources, describes how noise affects community safety, health, and comfort, and establishes policies and programs that limit excessive noise levels and improve noise/land use compatibility. Noise conflicts may affect the desirability of specific regions or neighborhoods within the community, which may interfere with the development goals for the city. Through established noise standards, community form will be preserved and maintained in accordance with City goals.
 - f. **Housing Element.** The Housing Element serves as a tool to identify and provide for the housing needs of the community. It identifies recent demographic and employment trends that may affect existing and future housing demand and supply. California law requires the Housing Element to establish policies and programs that will support the provision of an adequate housing supply for citizens of all income levels. The Housing Element is the only element that requires review by the State. The element addresses the City's ability to meet the regional housing needs as determined by the State of California. Morro Bay adopted its current (6th cycle) Housing Element in August 2020, covering the period from 2020-2028. The 6th cycle Housing Element was certified by the California Department of Housing and Community Development (HCD) in September 2020.
4. **Greenprint.** The Greenprint serves as a framework for how the City can use and manage its resources to benefit the community and guide it toward a more resilient and sustainable future. This section links open space, agricultural, and natural resource preservation with the development plans described in the Blueprint. The chapter is grounded in a shared vision from the community, boards and commissions, and City staff and officials for a sustainable community that sets policies and programs to achieve this shared vision. It is implemented by City ordinances, specific plans, programs, and ongoing activities.
- a. **Conservation Element.** The Conservation Element addresses the use and preservation of natural resources to improve the environmental quality of Morro Bay for years to come. Topics covered in this element include important biological communities, air quality, greenhouse gas emissions, water resources and conservation, energy resources, waste management, visual resources and viewsheds, and coastal resources. Conservation Element goals and policies promote a resilient, sustainable community offering a balance of open spaces, coastal access, and a quality built environment both along the coastline and inland.
 - b. **Open Space Element.** The Open Space Element outlines a vision for facilitating coastal access and providing a range of community facilities, parks, and recreation opportunities. This element addresses the protection of natural habitat and wildlife by designating open space areas throughout the community. Open Space Element goals and policies include specific steps to protect and improve Morro Bay's coastal trails, parks, and facilities and to enhance and maintain open spaces in the coastal zone.
 - c. **Public Safety Element.** The Public Safety Element minimizes community risks associated with natural and man-made hazards. This element identifies hazards that could be made more severe by the city's location on the coast and anticipated climate change impacts.

Public Safety Element goals and policies address natural hazards, coastal adaptation, and emergency response to protect residents, visitors, and wildlife from anticipated impacts.

- d. **Environmental Justice Element.** The Environmental Justice Element serves as the State-required Environmental Justice Element and addresses the community's unique population's health and wellness needs, in addition to environmental equity. Morro Bay has a diverse, multigenerational demographic spread with potential to affect the city's future resiliency. Environmental Justice Element goals and policies assess the local quality of life and population vulnerabilities to help plan for an evolving community.
- 5. **Implementation.** Sets forth specific actions and tools for implementation of the General Plan and LCP Update, along with a detailed work program. Describes the process for maintaining and monitoring progress in implementing the General Plan and LCP Update.
- 6. **Glossary and Acronyms.** Provides a list of acronyms and definitions for key terms used in the General Plan and LCP Update.
- 7. **Appendices.** A series of background reports and technical appendices.

Table 2-2 shows the topics required by the California Coastal Act that must be addressed in the sections and elements of the General Plan and LCP Update.

Table 2-1 General Plan and LCP Update Sections/Elements and State Required General Plan Elements

Plan Morro Bay Sections/Elements	State Required Elements								
	Land Use	Open Space	Circulation	Conservation	Noise	Safety	Housing	Environmental Justice*	Not Required
Land Use	<input checked="" type="checkbox"/>								
Community Design									<input checked="" type="checkbox"/>
Economic Development									<input checked="" type="checkbox"/>
Circulation			<input checked="" type="checkbox"/>						
Noise					<input checked="" type="checkbox"/>				
Environmental Justice								<input checked="" type="checkbox"/>	
Housing							<input checked="" type="checkbox"/>		
Conservation				<input checked="" type="checkbox"/>					
Open Space		<input checked="" type="checkbox"/>							
Public Safety						<input checked="" type="checkbox"/>			
Implementation Actions	<input checked="" type="checkbox"/>								

*The SB 1000-required environmental justice content is included in the Environmental Justice Element.

Table 2-2 General Plan and LCP Update Sections/Elements and Coastal Act Required Topics

Plan Morro Bay Sections/Elements	Coastal Act Required Topics									
	Public Access	Recreation and Visitor Serving Facilities	Water Quality Protection	ESHA and Other Natural Resources	Agricultural Resources	New Development and Cultural Resources	Scenic and Visual Resources	Coastal Hazards	Shoreline Erosion and Protective Devices	Energy and Industrial Development
Land Use	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>
Community Design										
Economic Development										
Circulation	<input checked="" type="checkbox"/>									
Noise										
Environmental Justice										
Housing										
Conservation			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
Open Space		<input checked="" type="checkbox"/>								
Public Safety								<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

2.4.3 General Plan and LCP Update Goals

Based on the vision statement, guiding principles, identified major strategies and physical improvements, and input from the community, the General Plan and LCP Update includes goals in each chapter to address a specific need, concern, opportunity, or desire. Goals are broad in both purpose and aim but are designed specifically to establish positions or directions. The goals in each chapter are listed in Table 2-3.

Table 2-3 General Plan and LCP Update Goals

General Plan Chapter	Goals
Land Use	Goal LU-1 The community form of Morro Bay reflects its vision and values, promoting a strong economy and high quality of life.
	Goal LU-2 Land use patterns improve community health and resiliency.
	Goal LU-3 Morro Bay grows in a manner that maintains community identity and well-being.
	Goal LU-4 Coastal-dependent uses are prioritized within appropriate locations in the coastal zone.
	Goal LU-5 Coastal priority uses are viable, protected, and contribute to the economy and character of Morro Bay.
	Goal LU-6 Visitors to Morro Bay have access to a variety of lower-cost lodging options to meet their needs.
	Goal LU-7 All residents and visitors have unimpeded and convenient public access to and along the coast.
	Goal LU-8 Morro Bay’s downtown and waterfront areas are active and welcoming locations for shopping, recreation, public access, visitor-serving needs, and coastal services.
Community Design	Goal CD-1 The individual identity of each of Morro Bay’s character areas is embraced and represented by new and renovated development.
	Goal CD-2 The community is designed to be resilient to future climate conditions, weather events, and economic and social change.
Economic Development	Goal ED-1 A strong, resilient local economy.
	Goal ED-2 Morro Bay is widely known as a destination location.
	Goal ED-3 Local businesses and employment options are high quality, diverse, and environmentally sustainable.
	Goal ED-4 Employment provides a range of head-of-household jobs that pay living wages and support living in Morro Bay.
Circulation	Goal CIR-1 Residents and visitors can easily move about the city in a variety of safe and active ways.
	Goal CIR-2 Morro Bay is a pleasant and safe place to walk and bike.
	Goal CIR-3 Traffic monitoring considers all methods of travel, with emphasis on active and sustainable transportation methods.
	Goal CIR-4 Morro Bay has convenient parking that enables access to the downtown and waterfront areas and the coast while enhancing the city’s character.
Noise	Goal NOI-1 A healthy and safe noise environment for Morro Bay residents, businesses, and visitors.
	Goal NOI-2 Minimize transportation-related noise.
	Goal NOI-3 Noise from construction activities associated with maintenance vehicles, special events, and other nuisances is minimized in residential areas and near noise-sensitive land uses.

General Plan Chapter	Goals	
Environmental Justice	Goal EJ-1	Morro Bay residents enjoy a high quality of life that contributes to their mental, physical, and social well-being.
	Goal EJ-2	Morro Bay residents of all ages, cultures, and lifestyles enjoy a community that is inclusive, enjoyable, and meets all physical, emotional, and mental needs.
	Goal EJ-3	Residents and visitors in Morro Bay are healthy and have access to essential services.
	Goal EJ-4	Morro Bay recognizes and is prepared for increased health risks due to current and anticipated future climate change effects.
Conservation	Goal C-1	Sensitive habitats are protected from potential negative impacts of land use and development.
	Goal C-2	Cultural and historic resources are identified for protection and showcased as a vital part of Morro Bay history.
	Goal C-3	Air quality in Morro Bay continues to improve through local actions and interagency cooperation.
	Goal C-4	Greenhouse gas emissions in Morro Bay are reduced and consistent with state goals.
	Goal C-5	Morro Bay is a leader in energy innovation and sustainable usage.
	Goal C-6	Energy available to Morro Bay residences, businesses, and public buildings is renewable and sustainable.
	Goal C-7	Morro Bay water is safe, available, and used in an environmentally responsible manner.
	Goal C-8	Morro Bay is a zero waste community.
	Goal C-9	The aesthetic and visual natural resources in Morro Bay are protected to preserve the community's identity.
Open Space	Goal OS-1	The public has access to plentiful and well-maintained parks, beaches, and recreational activities throughout Morro Bay.
	Goal OS-2	The multigenerational community has access to a wide variety of recreational opportunities throughout Morro Bay.
	Goal OS-3	The City coordinates effectively with other public and private entities to support an active community with a diverse range of interconnected open spaces and recreation facilities to promote a healthy, engaged public.
	Goal OS-4	Coastal and marine habitat wildlife and resources are protected while maintaining the cultural identity of the habitat.
	Goal OS-5	Natural resources are preserved to balance the use of open space for outdoor recreation opportunities.
	Goal OS-6	Open spaces are preserved through adaptation strategies to mitigate the effects of sea level rise and promote community resiliency.
	Goal OS-7	Portions of the planning area outside the city limits are planned in a way that preserves their rural nature while providing essential services and infrastructure.
Public Safety	Goal PS-1	Damage from natural disasters is minimized and repaired quickly.
	Goal PS-2	Development is protected from natural disasters and hazards to the greatest extent possible.
	Goal PS-3	Morro Bay is prepared for and responsive to the effects of sea level rise and other coastal hazards in both the short and longer term future.
	Goal PS-4	Response to emergencies is quick, efficient, and effective.

General Plan Chapter	Goals	
Environmental Justice	Goal EJ-1	Morro Bay residents enjoy a high quality of life that contributes to their mental, physical, and social well-being.
	Goal EJ-2	Morro Bay residents of all ages, cultures, and lifestyles enjoy a community that is inclusive, enjoyable, and meets all physical, emotional, and mental needs.
	Goal EJ-3	Residents and visitors in Morro Bay are healthy and have access to essential services.
	Goal EJ-4	Morro Bay recognizes and is prepared for increased health risks due to current and anticipated future climate change effects.

Source: *Plan Morro Bay*, City of Morro Bay 2020.

2.4.4 General Plan Land Use Map

The General Plan Land Use Map establishes the general pattern of uses in the planning area. The maximum permitted land use densities and intensities are identified in the General Plan and LCP Update for these land uses. As the density and intensity standards for each land use designation are applied to future development projects and land use decisions, properties will gradually transition from one use to another, and land uses and intensities will gradually shift to align with the intent of the General Plan and LCP Update. Within the future SOI area identified on the Land Use Map, future uses may be developed subject to annexation to the City of Morro Bay in compliance with procedures identified by the San Luis Obispo County Local Agency Formation Commission (LAFCO). Figure 2-3 shows the existing, on-the-ground distribution of land use in Morro Bay. Table 2-4 shows the proposed Land Use Map, which illustrates the distribution of the proposed land use designations in correlation to the street network and natural landscapes in the planning area. Table 2-4 provides a brief description of the General Plan land use designations.

Figure 2-4 Proposed Land Use Map

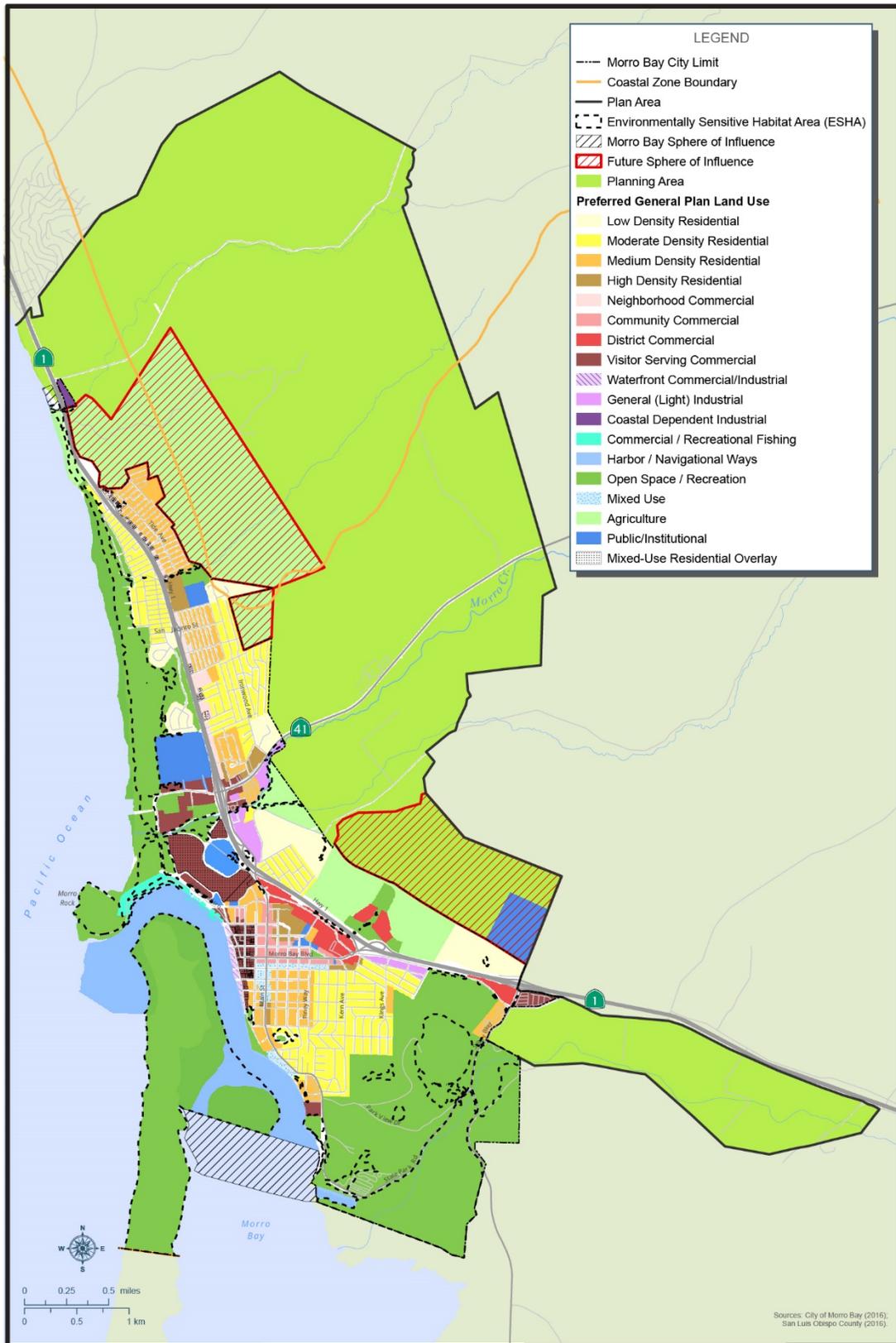


Table 2-4 Land Use Designations

Designation	Description	Density/Intensity
Low Density	Detached single-family homes and some group housing uses.	0-4.0 du/ac
Moderate Density	Detached or attached single-family homes and some group housing uses.	4.1-7.0 du/ac
Medium Density	Detached or attached single-family homes, townhomes, duplexes, apartments, condominiums, and some group housing uses.	7.1-15.0 du/ac
High Density	Multifamily housing, including apartments, townhomes, condominiums, and some group housing uses. Single-family homes are allowed where the sites' characteristics, such as size or topography, would preclude multi-family development.	15.1-27.0 du/ac
Community Commercial	Community-oriented uses including retail stores, restaurants, professional and medical offices, and personal services. Residential uses are allowed both above and behind commercial uses with discretionary approval.	1.25 FAR for nonresidential component 15.1-27.0 du/ac for residential component
District Commercial	Retail, commercial, and service uses that meet local and regional demand. This designation is intended for larger-scale development that is appropriate in an auto-oriented environment.	0.5 FAR
Neighborhood Commercial	Smaller-scale commercial uses that provide for the daily needs and services of nearby residents. Residential uses are allowed both above and behind commercial uses with discretionary approval.	1.0 FAR for nonresidential component 4.1-15.0 du/ac for residential component
Visitor-Serving Commercial	Visitor-oriented services and uses located at easily accessible locations and tourist destinations within the coastal zone. In general, ground-floor development should be reserved for retail shops, restaurants and bars, and visitor accommodations, with the upper floors reserved for additional visitor accommodations and offices.	1.25 FAR
Commercial/Recreational Fishing	Implements Measure D, which protects the tidelands area between Beach Street and Target Rock. Development and use permits are limited to fishing activities only.	0.5 FAR
Waterfront Commercial/Industrial	A mixture of visitor-serving commercial uses and harbor-dependent land uses located in the coastal zone.	1.25 FAR
General (Light) Industrial	Light industry uses which are generally not compatible with residential or most commercial uses. Existing residential buildings are permitted and are considered conforming.	0.5 FAR
Coastal-Dependent Industrial	Uses within the coastal zone which must be located near the coast to function, and are thereby given priority pursuant to the California Coastal Act.	0.65 FAR
Mixed Use	Implemented by the zoning code, any combination of commercial uses; offices; attached single-family housing, multiple-family housing, and live-work units; institutional uses; cultural facilities; developments including an open space component; visitor-serving uses; and/or civic facilities. Mixing of these uses may occur in a vertical and/or horizontal orientation. Mixed-use development is required within the constraints of parcel size, context/adjacent uses, and access to transportation.	1.0 FAR for nonresidential component 15.1-27.0 du/ac for residential component
Public/Institutional	Facilities which serve the public, including government buildings and service facilities; or quasi-public facilities such as hospitals and cultural or civic resources.	0.5

Designation	Description	Density/Intensity
Harbor/Navigational Ways	Areas of the city covered by seawater and used for boating, fishing, and visitor-serving uses.	N/A
Open Space/Recreation	Areas of improved and unimproved park facilities, open space areas, natural resource areas, and outdoor recreation.	N/A
Agriculture	Land for cultivating crops and raising animals.	N/A
Overlays		
Mixed-Use Residential	For Visitor-Serving Commercial, the overlay allows residential uses in addition to the base allowed uses. For Neighborhood Commercial, the overlay allows residential on the whole lot.	Same as underlying base designation for nonresidential component When paired with Neighborhood Commercial, residential density is the same as for the base designation When paired with Visitor-Serving Commercial, 15.1-27.0 du/ac for residential component
Environmentally Sensitive Habitat Areas	Protected areas within the coastal zone which serve as habitat for rare or especially valuable plant or animal life that could be easily disturbed or degraded by human activity.	N/A

Source: *Plan Morro Bay*, City of Morro Bay 2018

2.4.5 Key Updates

The proposed General Plan and LCP Update includes the following key updates to the existing General Plan and LCP to achieve the community’s vision for Morro Bay through 2040:

- Updated ESHA map and updated approach to identifying ESHA;
- Streamlined/greater organization of uses on the City’s land use map, particularly in the downtown area;
- Addressing sea level rise and resiliency throughout;
- Encouraging mixed-use, particularly in the downtown area;
- Updates to comply with current State law;
- Inclusion of vehicle miles traveled (VMT) and level of service (LOS) for traffic analysis;
- Addressing planning area outside of city limits;
- Integration of separately managed City water plans into “OneWater Morro Bay Plan,” a single cohesive document to address all water issues;
- Establishes character areas and calls for design guidelines for additional character areas of the city;
- Increased focus on requirements for lateral access along the water; and
- Specified citywide threshold for lower-cost, visitor-serving accommodations.

2.4.6 City Growth/General Plan Buildout

Table 2-5 identifies the development capacity associated with the planned distribution of land uses described in the Land Use Element and summarizes the resulting residential and nonresidential levels of development that can be expected from implementation of land use policies established by the General Plan and LCP Update. As shown in Table 2-5, Morro Bay's population is estimated to be approximately 12,062 people in the year 2040. This represents an increase of 1,348 people (12.6 percent) from the estimated 2016 population as shown in Table 2-5. The General Plan and LCP Update does not specify a maximum population for Morro Bay. However, any growth in Morro Bay must be consistent with Measure F, a voter-approved growth management ordinance that limits the city to 12,200 residents. Measure F limits the amount of water for commercial and industrial building permits to no more than 130 percent of the residential allocation. Therefore, to exceed the current growth limit, Morro Bay must secure additional water resources and a majority of voters must elect to remove the limit.

Table 2-5 General Plan and LCP Update Maximum Development Capacity

Land Use Designation	Acres (Approximate)	Total Estimated Dwelling Units (2040)	Total Estimated Households	Population (2040)	Nonresidential Square Feet (2040)
Within city limits					
Residential	753.4	6,573	—	10,870	—
Commercial	307.6	565	—	934	8,819,081
Industrial	41.5	—	—	—	893,006
Waterfront Commercial/ Industrial	6.3	—	—	—	220,869
Mixed Use	17.6	141	—	233	607,984
Open Space & Agriculture	1,674.1	—	—	—	—
Public/Institutional	336.9	—	—	—	371,651
Outside of city, but in Future SOI and planning area					
Open Space & Agriculture	6,079.9	15	—	25	—
Public/Institutional	56.6	—	—	—	—
Total (2040)	9,273.9*	7,295	5,792	12,062	10,912,591**
Existing (2016) Totals	9,273.9*	6,414	5,063	10,714	2,613,654**
Change (2016-2040)	—	881	729	1,348	8,298,937

* Totals may not add up due to rounding

** Does not include square footage of campgrounds

Source: Plan Morro Bay, City of Morro Bay 2018

As shown in Table 2-5, full buildout of the General Plan and LCP Update would result in an estimated 881 new dwelling units in the city. The maximum possible number of residential units is determined by the maximum densities allowed for each land use designation and the amount of land area within that designation. However, this maximum number of units is unlikely to be reached because every residential parcel in Morro Bay would need to be developed to its maximum potential density, which is not anticipated for all parcels under actual buildout conditions due to site constraints and other factors. As with housing, job growth will be limited in part by the lack of undeveloped land in Morro Bay. 1.25 percent of the city is undeveloped, with the rest of the city occupied by

development or open space. Morro Bay's current (2017) ratio of jobs to households is approximately 1.07.

2.5 Zoning Code and Coastal Implementation Plan Amendments

To maintain consistency with the General Plan and LCP Update, the project also includes a comprehensive Zoning Code Update which includes the Coastal Implementation Plan. Amendments included as part of the project include:

- Updating the allowed uses in all zones as necessary for consistency with the General Plan Land Use Designations.
- Establishing new zoning district(s) as necessary to implement the General Plan and LCP Update.
- Updating other development standards as necessary to implement the General Plan and LCP Update. This will include maximum height, setbacks, design standards and other standards.
- Updating administration and permitting to integrate coastal permit processes. Additional coastal-specific issues to be addressed include:
 - Parking and transportation demand management
 - Coastal access, beach use, and special events
 - Visitor-serving uses and tourism
 - Sea-level rise and coastal resilience
 - Stormwater management and water quality

The Zoning Code Update also addresses other issues, such as neighborhood compatibility and economic development, consistent with direction in the General Plan and LCP Update.

2.6 Required Discretionary Approvals

Following recommendations from the Planning Commission, the Morro Bay City Council will need to take the following discretionary actions in conjunction with the project:

- Certify the Final EIR
- Adopt the proposed General Plan and LCP Update
- Adopt the Zoning Code Update and Coastal Implementation Plan

The California Coastal Commission will also need to take the following discretionary actions in conjunction with the project:

- Certify the General Plan and LCP Update
- Certify the Zoning Code Update and Coastal Implementation Plan

3 Environmental Setting

According to *CEQA Guidelines* Section 15125, an EIR must include a description of the existing physical environmental conditions in the vicinity of a project to provide the baseline condition against which project-related impacts are compared. This section provides a general overview of the environmental setting for the proposed City of Morro Bay General Plan and Local Coastal Program (LCP) Update, also known as *Plan Morro Bay*. More detailed descriptions of the environmental setting for each environmental issue area can be found in Section 4.0, *Environmental Impact Analysis*.

3.1 Regional Setting

Morro Bay is located along the Pacific Ocean in western San Luis Obispo County, approximately thirteen miles northwest of the City of San Luis Obispo. San Luis Obispo County is located in the central coast region of California. The city is surrounded by a buffer of undeveloped land on the north, east, and south and by the Pacific Ocean on the west. The General Plan addresses all land within the city limits and surrounding areas, including the sphere of influence (SOI), that relate to Morro Bay's planning activities, coastal resiliency, and overall community values. The City of Morro Bay has a total planning area of over 14 square miles. The area inside the city limits is approximately 5 square miles. The remaining nine square miles in the planning area are not currently part of the city. While properties outside the city limits are currently under the jurisdiction of the County of San Luis Obispo, they relate to Morro Bay's identity and character, and are therefore included in the General Plan and LCP Update planning area.

The coastal zone areas are also addressed specifically in the LCP to ensure that the community protects coastal resources and access. Nearly the entire city is inside the coastal zone. However, a significant portion of the northeastern end of the planning area (2,794 acres) is outside the coastal zone.

3.2 Physical Setting

3.2.1 General Geographic Setting

Morro Bay occupies a coastal terrace, framed on the west by the Pacific Ocean and on the east by the Coast Range and Los Osos Valley. Regional access to the city is provided by State Route (SR 1), which runs east-west and north through the community, connecting Central Morro Bay to North Morro Bay, as well as SR 41 West, which extends east from the city to U.S. Highway 101 then to California's Central Valley. Local elevations range from sea level to approximately 600 feet above mean sea level. The city is located in the Morro Bay Watershed, which covers approximately 46,600 acres in the central, coastal area of San Luis Obispo County (Appendix B). The community of Cayucos is located to the north, and the community of Los Osos is located to the south, with a buffer of undeveloped land between both communities and Morro Bay. Figure 2-1 in Section 2.0, *Project Description*, shows the regional location of the planning area.

For the purposes of this section, the planning area is limited to all of the General Plan and LCP Update components as outlined in Section 2.0, *Project Description*. The planning area for Morro Bay includes all area within the city boundaries (approximately 3,137 acres), as well as approximately

6,137 acres beyond the city limits. A portion of the planning area beyond the city limits, approximately 100 acres, consisting of part of the estuary and a small area on the northern beachfront, is in the city's existing SOI. Another 678 acres of the planning area beyond the city limits is identified as a future extension of the city's SOI. Both the current and potential future SOI areas are under County of San Luis Obispo jurisdiction. Figure 2-2 in Section 2.0, *Project Description*, shows the planning area for Morro Bay.

3.2.2 Geologic Setting

The Morro Bay planning area is located at the tectonically active southern end of the Coast Ranges geomorphic province. This area contains geologic units ranging in age from Jurassic-aged to present-aged (Appendix B). A list of the geologic units mapped at the surface within Morro Bay is presented in Table 4.5-1 and mapped in Figure 4.5-1 in Section 4.5, *Geology and Soils*.

Morro Bay and Morro Rock are the dominant geomorphic features within the project vicinity. Wide beaches and tall sand dunes are present in southern Morro Bay. Northern Morro Bay has a wide sloping beach and a series of small sand dunes. The beach and dunes can be eroded by storms, but they are generally replenished during the summer through natural processes (City of Morro Bay 2006).

3.2.3 Hydrologic Setting

The Morro Bay planning area is located on the central coast of California within the Morro Bay and Cayucos-Whale Rock Watersheds. Much of the Morro Bay Watershed remains open space and is used primarily for agriculture and a range of public uses, including parks, golf courses, nature preserves, a military base, and university-owned rangeland. The Morro Bay Watershed drains east to west through the Chorro and Los Osos Creeks into the bay. The Cayucos Creek-Whale Rock Watershed drains into Morro Creek and discharges into the Pacific Ocean. Several creeks dissect the planning area, including the Chorro, Morro, Little Morro, and Alva Paul Creeks. The watershed boundaries and primary creeks providing drainage are detailed in Section 4.8, *Hydrology and Water Quality*, of this report (refer to Figure 4.8-1).

3.2.4 Natural Setting

Morro Bay's key natural features include its coastline, estuary, and woodlands comprising diverse shrub, herbaceous, terrestrial, and aquatic habitats. Wetlands, shrublands, and forests are located primarily in south Morro Bay, and herbaceous and riparian habitats are located throughout the planning area. There is one agricultural region in eastern central Morro Bay, where primarily tree crops like avocado and annual row crops are located. However, the majority of Morro Bay's land area is urbanized. The City has identified environmentally sensitive habitats, which include aquatic resources and wetland habitats; non-wetland sensitive natural communities, including foredune, backdune/dune scrub, coastal bluff, and coastal strand environments; and other breeding and overwintering sites, such as Morro Rock. Natural features and habitats in Morro Bay are described in detail in Section 4.3, *Biological Resources*, of this report (refer to Figures 4.3-1, 4.3-2, and 4.3-3, which depict vegetation communities, wetlands, and environmentally sensitive habitat areas in Morro Bay).

3.2.5 Climate

The planning area is characterized by a typical Mediterranean coastal climate, which is generally dry in the summer with mild, wet winters. The climate is moderated by the marine influence of the Pacific Ocean, which can bring persistent periods of wind and fog, especially during spring and summer months. The U.S. Climate Data Center maintains average weather data for the city, within the General Plan and LCP Update planning area. According to data collected at this weather station the warmest month of the year is September and October with an average maximum temperature of 71 degrees Fahrenheit, while the coldest month of the year is December with an average minimum temperature of 44 degrees Fahrenheit. Rainfall is concentrated in the winter months with the wettest months of the year being January, February, and March, with average monthly rainfall totals of 3.6, 3.8, and 3.3 inches, respectively (U.S. Climate Data 2018).

3.3 Baseline and Cumulative Project Setting

3.3.1 EIR Baseline

Section 15125 of the *CEQA Guidelines* states that an EIR “must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation [NOP] is published.” Section 15125 states that this approach “normally constitute[s] the baseline physical conditions by which a lead agency determines whether an impact is significant.”

This EIR evaluates impacts against existing conditions, which are generally conditions existing at the time of the release of the NOP (November 2017). It was determined that a comparison to current, existing baseline conditions would provide the most relevant information for the public, responsible agencies and City decision-makers. For some issue areas, this EIR also includes consideration of impacts against a forecast future baseline condition in addition to the current baseline conditions, controlling for impacts caused by population growth and other factors that would occur whether or not the General Plan and LCP Update is adopted. For certain issue areas (including air quality, greenhouse gas emissions/climate change, energy, noise and transportation/circulation), impacts would occur as a result of background population growth, urbanization and volume of average daily traffic increases in the region that would occur by 2040, with or without implementation of the General Plan and LCP Update. Thus, for these issue areas, a comparison to a future 2040 baseline is provided for informational purposes. However, all impact determinations are based on a comparison to existing 2016 baseline conditions.

On March 4, 2020 the Governor proclaimed a State of Emergency in California as a result of the threat of Coronavirus 2019 (COVID-19). On March 18, 2020 the Emergency Services Director for San Luis Obispo County issued a Shelter at Home Order for the County of San Luis Obispo. The threat of COVID-19, as well as the subsequent State and County proclamations and orders, have resulted in temporary changes to the existing economic and physical conditions in California and San Luis Obispo County regionally and in Morro Bay locally. Temporary changes to existing environmental conditions have included reduced vehicle traffic and associated noise and pollutant emissions, reduced electricity consumption. In addition, the timing and likelihood of cumulative development and regional buildout assumptions may be affected during or after the threat of COVID-19. The magnitude and duration of the State of Emergency and associated State and County orders, or future orders related to the threat of COVID-19 cannot be ascertained. Accordingly, the effect of COVID-19 on baseline and future environmental conditions effects of COVID-19 is currently speculative. CEQA Guidelines §15064(d)(3) states that:

An indirect physical change is to be considered only if that change is a reasonably foreseeable impact which may be caused by the project. A change which is speculative or unlikely to occur is not reasonably foreseeable.

Furthermore, CEQA Guidelines §15154 states that:

If, after thorough investigation, a Lead Agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact.

It would be speculative for the EIR to assume what changes to baseline or cumulative baseline conditions might occur as a result of COVID-19 or the subsequent State and County proclamations and orders. Therefore, this topic is not discussed further in the EIR.

3.3.2 Approach for Direct Impact Analysis

The programmatic nature of the General Plan and LCP Update necessitates a general approach to the evaluation of existing conditions and impacts associated with the proposed project. As a programmatic document, this EIR presents a regionwide assessment of the impacts of the General Plan and LCP Update. Because the EIR is a long-term document intended to guide actions over 20 years into the future, analysis relies on program-level and qualitative evaluation. Quantitative analyses are provided where applicable with available information. During future stages in planning and implementation of specific elements of the General Plan and LCP Update, project-specific CEQA documents will be prepared by the appropriate project implementation agency.

For analytical purposes, the baseline year examined throughout this EIR is 2017, except where specifically noted, as described in Section 3.3.1 above.

3.3.3 Approach for Cumulative Analysis

CEQA defines cumulative impacts as “two or more individual effects which, when considered together, are considerable, or which can compound or increase other environmental impacts.” Section 15130 of the *CEQA Guidelines* requires that an EIR evaluate environmental impacts that are individually limited but cumulatively considerable. These impacts can result from the proposed project alone, or together with other projects. The *CEQA Guidelines* state: “The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects” (*CEQA Guidelines*, Section 15355). A cumulative impact of concern under CEQA occurs when the net result of combined individual impacts compounds or increases other overall environmental impacts (*CEQA Guidelines*, Section 15355). In other words, cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time. CEQA does not require an analysis of incremental effects that are not cumulatively considerable nor is there a requirement to discuss impacts which do not result in part from the project evaluated in the EIR.

Cumulative Impact Methodology

The General Plan and LCP Update addresses cumulative conditions by design. The planning area for Morro Bay includes all area within the city boundaries (approximately 3,137 acres), as well as approximately 6,137 acres beyond the city limits. The General Plan and LCP Update is a comprehensive update of the City’s 1988 General Plan and 1984 LCP and presents the community’s vision for Morro Bay through 2040. As such, the environmental analysis of the General Plan and LCP

Update presented throughout this EIR is a cumulative analysis consistent with CEQA policies. Furthermore, this EIR contains detailed analysis of regional (cumulative) impacts, which are differentiated from localized impacts that may occur at the city level.

The cumulative impact analyses included in each of the environmental issue areas addressed in Section 4 of this EIR examine impacts associated with implementation of the General Plan and LCP Update, in addition to implementation of projected development for San Luis Obispo County, which surrounds Morro Bay, to address cumulative effects from growth extending beyond the planning area.

When evaluating cumulative impacts, CEQA allows the use of either a list of past, present and probable future projects, including projects outside the control of the lead agency, or a summary of projections in an adopted planning document, or a combination of the two approaches. The cumulative analysis presented below uses a projections-based approach. (See *CEQA Guidelines* Section 15130B)(1). Land use and growth projections for the city, which are the subject of analysis throughout this EIR, are combined with the growth projections for the adjoining County. San Luis Obispo County adjoins the city to the north, south, and east. The County is largely agricultural, with population concentrated in four regions: North County, North Coast, San Luis Obispo and South County (San Luis Obispo County 2015). Therefore, San Luis Obispo County is referred to in this analysis as the “cumulative impact analysis area.” Table 3-1 shows the estimated 2016 population and projected population and housing units for the planning area as well as the cumulative impact analysis area.

Table 3-1 Population and Housing Projections of Cumulative Analysis Area, 2016-2040

	Population		Housing Units	
	2016 ^a	2040	2016 ^a	2040
City of Morro Bay	10,714	12,062 ^b	6,414	7,295 ^b
San Luis Obispo County	278,141	315,922 ^c	120,308	136,657 ^c

Sources:

^a California Department of Finance [DOF] 2018.

^b Draft Plan Morro Bay (General Plan and LCP Update). This projection was developed for the General Plan and LCP Update buildout model using Traffic Analysis Zone (TAZ) data which differs slightly from the corresponding estimate in the 2020-2028 Housing Element (12,092), which is based on the 2017 SLOCOG 2050 Regional Growth Forecast.

^c San Luis Obispo Council of Governments (SLOCOG) 2017.

As shown in Table 3-1, in the cumulative impact analysis area the city comprises approximately 3.9 percent of the existing County population and 5.3 percent of the existing number of housing units in the County. By 2040, this proportion is expected to remain similar (3.8 percent of the County population and 5.3 percent of housing units in the County). Thus, under both current and forecasted future conditions, the city represents a relatively small portion of the growth in the cumulative analysis impact area.

Analysis of the cumulative effects of the General Plan and LCP Update for each environmental issue area is presented at the ends of Sections 4.1 through 4.15.

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4 Environmental Impact Analysis

This section discusses the possible environmental effects of the General Plan and LCP Update for the specific issue areas that were identified through the scoping process as having the potential to experience significant effects. “Significant effect” is defined by the *CEQA Guidelines* Section 15382 as:

a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment but may be considered in determining whether the physical change is significant.

The assessment of each issue area begins with a discussion of the environmental setting related to the issue, which is followed by the impact analysis. In the impact analysis, the first subsection identifies the methodologies used and the “significance thresholds,” which are those criteria adopted by the City and other agencies, universally recognized, or developed specifically for this analysis to determine whether potential effects are significant. The next subsection describes each impact of the proposed project, mitigation measures for significant impacts, and the level of significance after mitigation. Each effect under consideration for an issue area is separately listed in bold text with the discussion of the effect and its significance. Each bolded impact statement also contains a statement of the significance determination for the environmental impact as follows:

- **Significant and Unavoidable.** An impact that cannot be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the project is approved per Section 15093 of the *CEQA Guidelines*.
- **Less than Significant with Mitigation Incorporated.** An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires findings under Section 15091 of the *CEQA Guidelines*.
- **Less than Significant.** An impact that may be adverse but does not exceed the threshold levels and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.
- **No Impact.** The proposed project would have no effect on environmental conditions or would reduce existing environmental problems or hazards.

Following each environmental impact discussion is a list of mitigation measures (if required) and the residual effects or level of significance remaining after implementation of the measure(s). In cases where the mitigation measure for an impact could have a significant environmental impact in another issue area, this impact is discussed and evaluated as a secondary impact.

The Executive Summary of this EIR summarizes all impacts and mitigation measures that apply to the proposed project.

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4.1 Aesthetics

The analysis in this section describes current visual conditions in and around Morro Bay and evaluates the potential aesthetic and visual impacts of the General Plan and LCP Update, including impacts to scenic vistas, scenic resources, visual character and quality, and light and glare.

4.1.1 Setting

a. Existing Visual Conditions

The City of Morro Bay is situated adjacent to the Pacific Ocean in northwestern San Luis Obispo County. Views west of State Route (SR) 1 (also referred to as Highway 1) include Morro Rock, Morro Bay, sand spit and beaches of Morro Bay State Park, and cityscape of Morro Bay. East of SR 1, the surrounding hillsides provide a backdrop for Morro Bay. Montana de Oro State Park can be seen from Main Street and Embarcadero, providing a viewshed for the city. The city contains large areas of open space along the coast. Much of the beaches and coastal lands west and south of downtown Morro Bay are designated as permanent open space for conservation and recreation, under the jurisdiction of the California State Parks System.

b. Scenic Resources

Most communities identify scenic resources as important assets that form community identity. Scenic resources can be natural or man-made features such as trees, rock formations, historic buildings, and public art. As described in the Community Baseline Assessment for the General Plan and LCP Update (refer to Appendix B), scenic resources in Morro Bay include:

- Morro Rock
- Del Mar Park
- Cloisters Park
- Former Morro Bay Power Plant
- Downtown
- Black Mountain
- Morro Bay Sandspit
- State Museum of Natural History
- Morro Bay salt marsh
- Atascadero Beach tract
- Cloisters neighborhood
- The beach
- Coleman park
- Embarcadero
- Morro Heights
- Morro Bay Golf Course
- State Boat Marina

c. Scenic Vistas and Views

A scenic vista provides views of an aesthetically valued landscape that benefits the public. The term “vista” generally implies an expansive view, usually from an elevated point or open area. This designation may be officially designated or unofficially defined by a set of criteria. The criteria used for assessing views and scenic vistas in Morro Bay are described in the Community Baseline Assessment for the General Plan and LCP Update (refer to Appendix B). These include: the enhancement of the city’s character through the use of building materials and scale of the structures; the compatibility with surrounding structures; the compatibility with the natural features of the area (i.e., topography); the preservation of public views; the enhancement and definition of the city’s image; the uniqueness of the city’s image; maintenance of scenic highway conditions; and

any additional view considerations as requested by regulatory agencies. There are no officially designated scenic vistas in the planning area. However, as described in the Community Baseline Assessment for the General Plan and LCP Update, views northward toward Morro Rock, southward toward Morro Bay Estuary and the sandspit, southward toward Los Osos and the Irish Hills, and northward toward Cayucos both along the coastline and looking northeast toward the hills, as illustrated in Figure 4.1-1, serve as scenic vistas in the city. Views east of Morro Bay along the SR 41 corridor and surrounding foothills are also an important scenic vista for the community outside of the city limits. Figure 4.1-2 provides a map of scenic views in the planning area. As shown in Figure 4-1.2, these views typically include a cityscape with the Morro Bay and Montana de Oro State Park in the background and are either seen from residential neighborhoods east of SR 1 or from westward and southward-oriented streets that provide a direct line of sight to the Morro Bay and Montana de Oro State Park. Unlike scenic vistas, which are expansive views from a particular point, scenic views are visible from multiple areas. For example, scenic views of the coastline are visible from many areas within Morro Bay.

San Luis Obispo County's Estero Area Plan (2009) includes a policy to protect scenic vistas of the Morros, which is a chain of unique volcanic peaks, connecting ridges and associated hills that stretch from San Luis Obispo to Morro Bay and separate the Los Osos and Chorro Valleys. The Morros in and near the city include Morro Rock, Black Hill, Cerro Cabrillo, Parker Ridge, and Hollister Peak. Morro Rock and Black Hill are prominently visible from various locations throughout the city. Cerro Cabrillo, Parker Ridge, and Hollister Peak are visible from only a small portion of the planning area.

d. Scenic Corridors

Scenic corridors provide an opportunity for the public to take advantage of the natural environment's aesthetic value and typically pertain to roadways and visible lands outside the roadway right-of-way. California's Scenic Highway Program designates scenic highways with the intention of protecting these corridors from change that would diminish the aesthetic value of adjacent lands. A highway is designated as an eligible scenic highway when the California Department of Transportation (Caltrans) determines that it qualifies for official status. The status of an officially designated scenic highway changes when the local governing body (City or County) applies to Caltrans for scenic highway approval, adopts a Corridor Protection Program, and receives notification that the highway has been officially designated (Caltrans 2016). Scenic highways must have an approved Corridor Protection Program and remain in compliance to maintain scenic highway status.

According to the Caltrans State Scenic Highway Mapping System, SR 1 is an officially designated State Scenic Highway and All American Road in the planning area. SR 41 between SR 1 and U.S. 101 is eligible for State Scenic Highway designation but has not been officially designated (Caltrans 2018).

e. Visual Character

As described in the Community Baseline Assessment for the General Plan and LCP Update the existing visual character is organized by neighborhood or corridor, also referred to as "community character areas." The character-defining features of Morro Bay vary by area of the city and generally include density, building height, building bulk, the location of buildings on a lot, lot size, architectural style, exterior colors and materials, similarities and differences between neighboring structures, and the year in which structures were built. Figure 4.103 shows the community character areas in the city that are defined by their unique features.

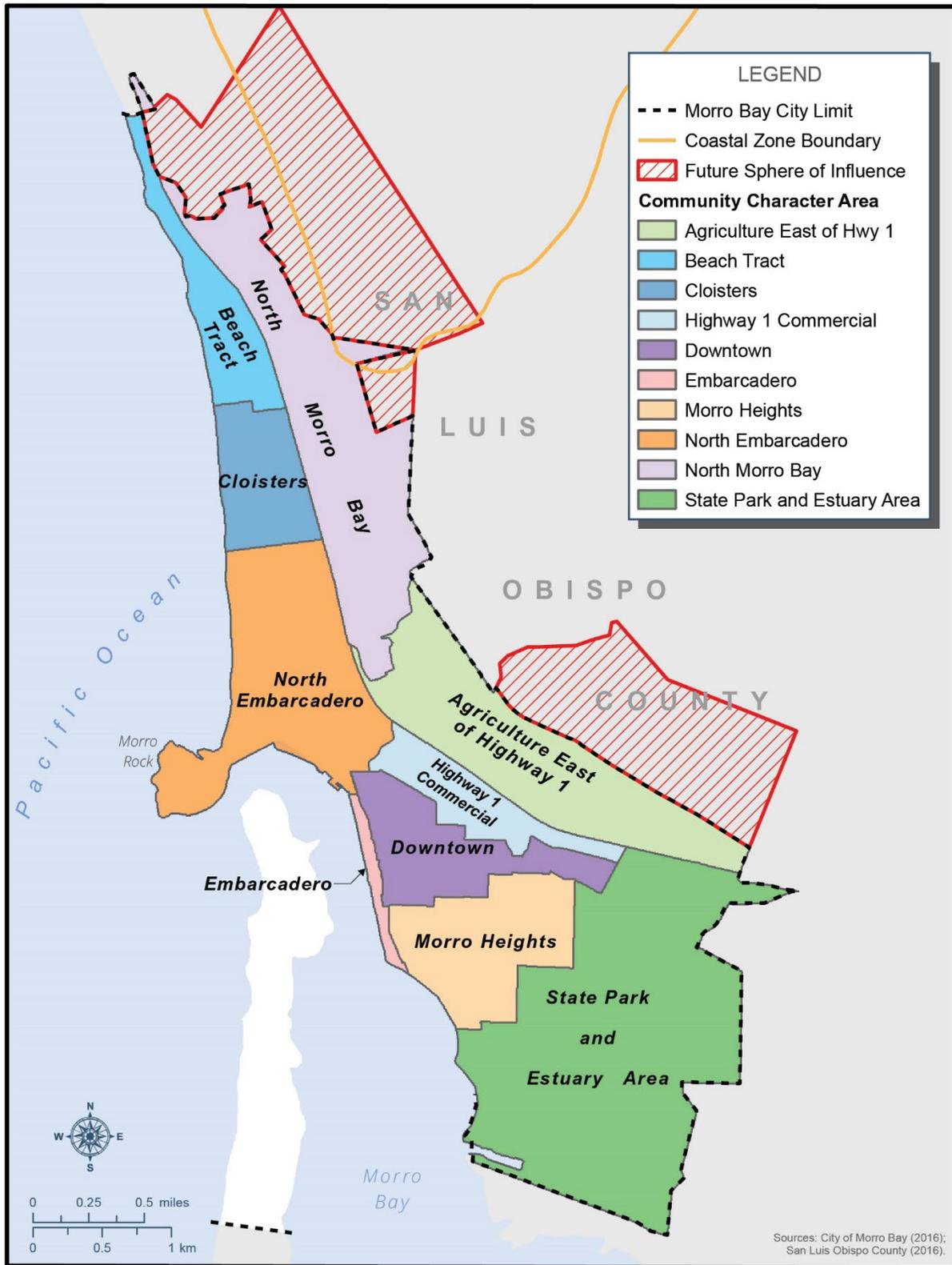
Figure 4.1-1 Scenic Vistas in the Planning Area



Figure 4.1-2 Scenic Views in the Planning Area



Figure 4.1-3 Community Character Areas



The community character areas shown in Figure 4.1-3 are described as follows:

North Morro Bay

The North Morro Bay character area spans much of the length of the city on the east side of SR 1. Nearly all of North Morro Bay is residential with a single commercial strip along Main Street (frontage road on the east side of SR 1) that includes retail and office uses. The area slopes gradually, then more steeply, away from SR 1. The homes at the eastern edge of this area are located on relatively steep hills and have views of the ocean and Morro Rock.

Beach Tract

The Beach Tract character area is located on the west side of SR 1 west of North Morro Bay area and north of the Cloisters area. Morro Strand campground (State Park) is located in this area west of the SR 1 along the beach. The area west of SR 1 is nearly flat with limited vegetation. Some large eucalyptus trees are located near the intersection of SR 1 and San Jacinto Street. Alva Paul Creek runs east to west through this area and North Point Natural Area is located just north of this neighborhood. The area consists of single-family residential development and offers beach access.

Cloisters

The Cloisters character area is located on the west side of SR 1, south of the Beach Tract area. This area is one of the most recently developed areas in the city and consists of single-family residential development, natural habitat, Morro Bay High School, two RV parks, two motels, and Cloisters Community Park, which includes trails and a wetland area. The homes in the neighborhood are clustered to protect the sensitive dune habitat in the area. The area is generally flat and offers beach access. Trees have been planted at Morro Bay High School, giving this area a wooded feel.

North Embarcadero

The North Embarcadero character area includes the North Embarcadero waterfront as well as adjacent industrial areas that include the former Morro Bay Power Plant site, Lila Keiser Park, the City wastewater treatment plant, the commercial fishermen's dry storage and repair facility, and Morro Rock, with limited residentially zoned parcels in this area. The area is mostly paved and has minimal vegetation, except along Morro Creek and at Lila Keiser Park. Three prominent smokestacks at the power plant are the visually dominant feature of this area. North Embarcadero offers a clear view of Morro Rock. This area represents the largest concentration of working waterfront uses in Morro Bay, with restaurants, retail stores, piers, docks, commercial fishing offloading facilities, and other related commercial fishing infrastructure located along the waterfront. The topography in this area is flat and the only beaches are located north and south of Morro Rock. The area between the waterfront and Morro Rock is undeveloped, used for recreation and includes Coleman Park.

The Embarcadero

The Embarcadero is the most iconic character area in the city. The area has an urban and maritime feel, characterized by low-rise one- to two-story buildings and pedestrian-friendly streets. The Embarcadero combines working waterfront commercial and recreational uses with tourist-serving retail. This area is adjacent to the ocean and extends east to a bluff that serves as the dividing line between the Embarcadero and Downtown. This area runs from North Embarcadero to the State Park area at the south end of the city. The bayside of the Embarcadero is completely developed and includes both old and poorly maintained buildings and some of the city's newest development. A

number of underdeveloped properties are located on the land side of the Embarcadero. The bayside of the Embarcadero provides numerous coastal access points including formal piers, seating areas, and pathways, with some of the parcels offering lateral access along the bay. Residential development to the west of The Embarcadero is prohibited, and development to the east of the Embarcadero is limited and requires a conditional use permit. The topography is flat and there are no beaches inside the harbor. Vegetation is limited in this area.

Downtown

The Downtown character area is uphill from the Embarcadero between the waterfront and the Highway 1 Commercial area. This area includes a variety of uses including residential, retail, office, service commercial, tourist-serving, and mixed uses, with the greatest concentration of hotels, motels, and two-story buildings in the city. This area contains the oldest buildings in the city intermixed with newer buildings. There is great variety in the building styles, and most streets have large, prominent trees. The topography of this area slopes gently uphill toward SR 1.

Highway 1 Commercial

The Highway 1 Commercial character area is situated between Downtown and SR 1. This area of the planning area contains the majority of City government buildings and highway commercial development including City Hall, the Veterans Hall, and the Community Center. Highway commercial development in this area is mostly strip commercial and includes a grocery store, gas station, and other service commercial uses. The topography in this area is variable with Morro Bay Boulevard serving as the high point. The triangular City Park is located near the roundabout on Morro Bay Boulevard. There is little vegetation in this part of the city.

Agriculture East of Highway 1

This character area east of SR 1 and south of North Morro Bay (at Morro Road) is predominantly designated and used for agriculture. The northern portion of the area is primarily used for crop farming and the southern portion of the area is used for grazing and covered by annual grasses. One single-family residential neighborhood is located adjacent to SR 1 in this area. The topography slopes uphill east of SR 1. Most of the agricultural land is in large parcels of tens or hundreds of acres.

Morro Heights

The Morro Heights character area is a single-family residential neighborhood located on a hill overlooking the bay near the south end of the city. There are more irregular lots and home design variations in Morro Heights than in other residential areas of the city. The south end of this neighborhood is planted with tall eucalyptus and cypress trees and includes a very large rock outcropping.

State Park and Estuary Area

The State Park and Estuary character area is located at the south end of the city. Morro Bay State Park covers most of this area and includes a golf course, campground, marina, boat launch, hiking trails, and other uses. In this area, the Morro Bay Natural History Museum is situated on a rocky outcropping overlooking the bay, the Inn at Morro Bay is located on the water, and Chorro Creek flows along the southern end of this area. This is the most wooded residential area of Morro Bay. Black Hill, the next Morro in the volcanic chain inland of Morro Rock, is in Morro Bay State Park.

Residential development is extremely limited. The area is characterized by large eucalyptus and cypress trees, native habitat and wildlife, and hilly topography. The terrain along the water is relatively flat and this area is surrounded by Morro Bay Estuary.

f. Light and Glare Conditions

Light and glare from indoor or outdoor uses can reduce visibility of the night sky, create potential hazards to drivers, and be a nuisance to residential areas. The planning area has typical light conditions found in suburban areas (e.g., roadway lighting, commercial parking lot and building lighting, residential buildings, headlights from motor vehicles). Sources of daytime glare include direct beam sunlight and reflections from windows, architectural coatings, glass, and other shiny reflective surfaces. Nighttime lighting and associated glare is produced by both stationary and mobile sources. Stationary sources of nighttime light include structure illumination, decorative landscape lighting, lighted signs, and streetlights. The primary source of mobile nighttime light is motor vehicle headlights, particularly from SR 1 and other high traffic roadways. Sources of light and glare in residential areas include street lighting along major roads, highways, and in large parking lots. In commercial and industrial areas, large parking lots, lit signage, and strip mall development are sources of light pollution. Nighttime lighting at Morro Bay High School in the northern portion of the city also creates light and glare. Nighttime glare issues are particularly important for light sources on elevated ground, as the light can be visible from a greater distance and thus affect a larger section of the community.

g. Regulatory Setting

Federal

No existing federal regulations pertain to the visual resources in the General Plan and LCP Update planning area.

State

California Coastal Act and California Coastal Commission

The California Coastal Act of 1976 (Coastal Act; Public Resources Code Section 30000) and the California Coastal Commission, the State's coastal protection and planning agency, were established by voter initiative to plan for and regulate new development, and to create policies to protect public access to and along the shoreline. Section 30251, *Scenic and Visual Qualities*, of the Coastal Act mandates that scenic and visual qualities of coastal areas be considered and protected as resources of public importance. Pursuant to the Coastal Act, permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural landforms, to be visually compatible with the character of surrounding areas, and where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas designated in the Department of Parks and Recreation California Coastline Preservation and Recreation Plan (CCPRP) and by local government shall be subordinate to the character of its setting.

Caltrans Scenic Highways

Caltrans defines a scenic highway as any freeway, highway, road, or other public right-of-way, that traverses an area of exceptional scenic quality. Suitability for designations as a State scenic highway

is based on the vividness, intactness, and unity of their view corridors, as described in Caltrans' Scenic Highway Guidelines (Caltrans 2008):

- *Vividness* is the extent to which the landscape is memorable. This is associated with the distinctiveness, diversity, and contrast of visual elements. A vivid landscape makes an immediate and lasting impression on the viewer.
- *Intactness* is the integrity of visual order in the landscape and the extent to which the natural landscape is free from visual intrusions (e.g., buildings, structures, equipment, grading).
- *Unity* is the extent to which development is sensitive to and visually harmonious with the natural landscape.

Local

Local Coastal Program and Coastal Land Use Plan

To ensure maximum public access to the coast and public recreation areas, the Coastal Act directs each local government lying within the Coastal Zone to prepare an LCP consistent with Section 30501 of the Coastal Act, in consultation with the Coastal Commission, and with public participation. Until an LCP has been adopted by the local jurisdiction and certified compliant with the Coastal Act, the Coastal Commission retains permitting authority within the portion of a local jurisdiction located in the Coastal Zone. Section 30519(a) of the Coastal Act specifies that once an LCP has been developed for a municipality, development review authority is delegated to that local government.

The Morro Bay LCP and Coastal Land Use Plan (LUP) was certified in 1982, the LCP zoning ordinances were certified in 1984, and the General Plan was adopted in 1988 (City of Morro Bay 1982; City of Morro Bay 1988). The LCP has since been updated periodically and is currently undergoing a comprehensive update in tandem with the General Plan update. The LCP and LUP govern the coastal zone in the city to implement the California Coastal Act. Among others, visual resources and neighborhood character is one of the major topics addressed in the City's LUP, pursuant to the Coastal Act.

General Plan

California Government Code Section 65300 describes the scope and authority of local jurisdictions to prepare, adopt, and amend general plans. Communities prepare general plans to guide the long-term physical development of the jurisdiction, and any land within the jurisdiction's SOI. At a minimum, the California Government Code requires general plans to address land use, circulation, housing, noise, conservation, open space, and safety issues. The existing General Plan was adopted in 1988 and includes a Visual Resources and Scenic Highway element. The General Plan is currently undergoing a comprehensive update that includes a Community Design element. This element outlines the vision for the aesthetic development of the community and character of Morro Bay and to establish the City's long-term community design and development goals to maintain a unique city culture and identity with respect to community form, layout, and community character areas.

Morro Bay Municipal Code – Title 17 (Zoning)

The Zoning Code (Title 17) of the City of Morro Bay Municipal Code implements the General Plan, particularly the Land Use Element. While General Plan designations are more generalized in nature, the Zoning Code and zoning districts provide specific controls on land use, density or intensity of development, and development standards to implement the City's General Plan goals and policies.

Section 17.48.190 of the Zoning Code provides standards for the protection of visual resources and compatible design for new development in the city. Additionally, Section 17.68.030 of the Zoning Code provides a list of prohibited signage in the city. Lighting, illumination, and glare in the city are regulated by Sections 17.52.080, 17.68.050, and 17.68.120 of the Zoning Code. To maintain consistency with the General Plan and LCP Update, the Zoning Code is currently undergoing a comprehensive update including development standards as necessary to implement the General Plan and LCP Update. This will include maximum height, setbacks, design standards and other standards, which may involve updates to existing standards effecting visual resources and lighting and glare in the city (City of Morro Bay 2017).

Interim Residential Design Guidelines

In July 2015, the City adopted interim residential design guidelines, which were re-authorized in October 2016. The guidelines address the following residential design issues:

- Scale and mass
- Surface articulation
- Building orientation
- Garage placement and design
- Building materials
- Architectural elements
- Additions to existing homes
- Privacy
- Landscaping

The design guidelines were developed to provide objective guidelines for use in reviewing proposed residential projects to achieve consistency with the look and feel of the existing neighborhood (City of Morro Bay 2015).

4.1.2 Impact Analysis

a. Methodology

The assessment of aesthetic impacts involves qualitative analysis that is inherently subjective in nature. Different viewers react to views and aesthetic conditions differently. This evaluation measures the existing visual environment of the planning area, described above, against the proposed action (implementation of the General Plan and LCP Update), analyzing the nature of the anticipated change. It is important to underscore that the General Plan and LCP Update is an update to existing plans and does not contain specific development proposals. Therefore, this analysis focuses on land use changes envisioned under the General Plan and LCP Update and the aesthetic impacts on the community in terms of arrangement of built to open space, density and intensity of development, and height, according to the thresholds of significance discussed below.

b. Significance Thresholds

The following thresholds of significance are based on Appendix G to the *CEQA Guidelines*. For purposes of this EIR, implementation of the General Plan and LCP Update may have a significant adverse impact if it would do any of the following:

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

c. Project Impacts and Mitigation Measures

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

Threshold 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 AES-1 COMPLIANCE WITH THE GENERAL PLAN AND LOCAL COASTAL PROGRAM UPDATE POLICIES, TITLE 17 OF THE MORRO BAY MUNICIPAL CODE, AND THE CITY'S RESIDENTIAL DESIGN GUIDELINES WOULD PROTECT VISUAL AND AESTHETIC RESOURCES IN THE PLANNING AREA FROM POTENTIAL IMPACTS RESULTING FROM DEVELOPMENT FACILITATED BY THE GENERAL PLAN AND LCP UPDATE. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

There are no officially designated scenic vistas in the planning area. However, views northward toward Morro Rock, southward toward Morro Bay Estuary and the sandspit, southward toward Los Osos and the Irish Hills, and northward toward Cayucos both along the coastline and looking northeast toward the hills, function as scenic vistas in the city. Views east of Morro Bay along the SR 41 corridor and surrounding foothills also serve as an important scenic vista for the community outside of the city limits.

The General Plan and LCP Update would largely preserve the existing pattern of land uses and, thus, scenic views from these vistas in the planning area. However, the General Plan and LCP Update calls for redevelopment of the former Morro Bay Power Plant and existing wastewater treatment plant properties in the North Embarcadero area. It is possible that some of the existing power plant buildings would be reused, including the three prominent smokestacks that serve as a visually dominant feature of this area, under the General Plan and LCP Update. Given the location of the former Morro Bay Power Plant and wastewater treatment plant, redevelopment of these sites in the North Embarcadero neighborhood could affect views of scenic resources such as Morro Rock and the Morro Bay Power Plant smokestacks.

In addition, downtown Morro Bay and the North Morro Bay neighborhood, which are visible from the SR 1 scenic highway corridor, are identified as prime areas for intensifying infill development and redevelopment. Depending on the location, orientation, and height of new infill development and redeveloped properties, scenic vistas and scenic resources, including trees, rock outcroppings, and historic buildings, could be blocked or otherwise adversely affected in these areas as a result of the General Plan and LCP Update. Implementation of the goals and policies in the General Plan and LCP Update Conservation and Community Design Elements listed below would minimize adverse effects on scenic vistas and resources, including historic buildings.

Goal C-2 Cultural and historic resources are identified for protection and showcased as a vital part of Morro Bay history.

- Policy C-2.1 Historic and Cultural Resources Strategy.** Develop a plan to address historic and cultural resource issues in Morro Bay, which may include conducting and updating inventories, exploring certification options, and developing context statements.
- Policy C-2.2 Interagency Cooperation.** Work with the Historical Society of Morro Bay and other local groups on historic preservation objectives.
- Policy C-2.3 Protection of Cultural Resources.** Ensure the protection of cultural and archeological resources during development, construction, and other similar activities. Development shall avoid, to the maximum extent feasible, adversely impacting cultural and/or archaeological resources, and shall include adequate BMPs to address any such resources that may be identified during construction, including mitigation measures sufficient to allow documentation, preservation, and other forms of mitigation.
- Policy C-2.4 Cultural Resources Overlay.** Develop a cultural resources overlay to protect cultural, archaeological and paleontological resources in Morro Bay.

Goal C-9 The aesthetic and visual natural resources in and around Morro Bay are protected to preserve the community's identity.

- Policy C-9.2 Public View Protection.** Public views to and along the ocean and scenic coastal areas shall be protected and enhanced, and alteration of natural landforms shall be minimized. Additionally, development in visually prominent settings, including all development seen from Highway 1, shall be sited and designed to avoid blocking or having a significant adverse impact on public views. Methods to achieve this may include building and road siting, building size, design and lighting that is integrated with the environment, and clustering of development.
- Policy C-9.4 Viewshed Protection Guidelines.** Designate and protect official viewsheds through viewshed protection design guidelines. The guidelines shall include special siting and design criteria including placing accessory development such as fences away from public view as much as possible, height and story limitations, bulk and scale limitations, screening and landscaping requirements, natural materials and color requirements, minimizing lighting that spills into nighttime public views, avoiding glares from windows and reflective surfaces, and requirements to prepare landscaping plans using drought-tolerant and native plants that protect and enhance scenic resources; minimizing land coverage, grading, and structure height; and maximizing setbacks from adjacent open space areas.
- Policy C-9.7 Massing, Height, and Orientation Requirements.** Require massing, height, and orientation of new development or construction to be sited and designed to preserve public coastal views to and along the ocean and scenic areas.
- Policy C-9.9 Infrastructure, and Utility Requirements.** Encourage infrastructure and utilities that do not block or detract from views of scenic vistas. All new utilities shall be

located underground or outside of public view if feasible. If undergrounding is not possible, an in-lieu fee shall be paid toward future undergrounding.

Policy C-9.10 Signage Requirements. Prohibit all commercial signs within the Highway 1 right-of-way. Require commercial signs to be of a size, location, and appearance so they do not detract from the area's scenic qualities and cause visual clutter and blight.

Policy C-9.12 Public and Private Landscaping. Ensure new public or private landscaping considers public views and vistas, and encourage landscape installations that protect or enhance those views and vistas, including ensuring that such landscaping does not obstruct public scenic views and vistas at maturity.

The policies identified in the General Plan and LCP Update would help preserve existing scenic vistas by requiring identification, designation, and protection of viewsheds and scenic vistas and by requiring new development to incorporate design features that protect or enhance existing scenic views and vistas. Section 17.48.190 of the Zoning Code provides standards for the protection of visual resources and compatible design for new development in the city. Section 17.68.030 of the Zoning Code provides a list of prohibited signage in the city. New development or redevelopment facilitated by the General Plan and LCP Update would also be subject to the updated standards in the City Zoning Code, in association with the General Plan and LCP Update, relating to signage, design, and protection of visual resources in the city.

Compliance with City's updated Zoning Code requirements and the goals and policies proposed in the General Plan and LCP Update would protect scenic resources, including historic buildings, upon development and redevelopment facilitated by the project. Therefore, the General Plan and LCP Update would not result in adverse effects on scenic vistas or scenic resources in the planning area and impacts would be less than significant.

Mitigation Measures

No additional policy-oriented mitigation would be required to address this impact. As individual development projects are proposed, focused, project-level environmental review may be required, which could result in the implementation of project-specific mitigation measures.

Threshold 3: 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).

Impact AES-2 COMPLIANCE WITH EXISTING STANDARDS AND GENERAL PLAN AND LCP UPDATE GOALS AND POLICIES WOULD ENSURE THAT REDEVELOPMENT OR NEW DEVELOPMENT COMPLEMENTS THE EXISTING VISUAL CHARACTER AND QUALITY OF MORRO BAY. THEREFORE, THE PROJECT WOULD HAVE A LESS THAN SIGNIFICANT IMPACT ON VISUAL CHARACTER AND QUALITY.

Morro Bay is a small-town coastal community with much of the land use pattern already established by existing development. Most housing in the city was built before 1970 and most buildings are one to two stories in height, with small lot sizes and a mixture of styles and colors. Vegetation is typically native and drought-tolerant, with large eucalyptus, cypress, melaleuca, and blue gum trees throughout the city. Large trees are concentrated in certain parts of the city, while some areas have few large trees, typical of a coastal plain in this part of California. The wetlands, agricultural areas, and coastline frame the city's neighborhoods, providing landscape views from nearly every part of

the city. As shown in Figure 4.1-3 and described in Section 4.1.1(e), the aesthetic character of Morro Bay is a result of the combined individual characteristics of the ten community character areas, each of which have distinctive physical and social characteristics.

Many local businesses are located in the downtown and the waterfront Embarcadero areas, within close proximity to the surrounding residential neighborhoods. As described in the discussion of key updates to the General Plan and LCP in Section 2, *Project Description*, the General Plan and LCP Update encourages mixed-uses in the downtown area, and includes greater organization of uses in these areas on the City's land use map (refer to Figure 2-4) to guide future development and designate appropriate locations for land uses.

The General Plan and LCP Update would facilitate development for housing and mixed uses on the remaining vacant parcels in the Downtown area, as well as allow for an increase in allowable building height. The General Plan and LCP Update would also facilitate redevelopment of existing built-out parcels in the North Embarcadero area to allow for visitor-serving commercial uses largely, but also for housing and mixed uses with the residential mixed use overlay. Such development and redevelopment could affect the visual character of these areas of the city. The most substantial changes would occur on the former Morro Bay Power Plant and City wastewater treatment plant sites in the North Embarcadero character area, where existing paved lots and industrial uses are planned to be replaced by Mixed-Use, Public/Institutional, and Visitor-Serving uses. The General Plan and LCP Update anticipates that the triangular parking lot portion of the site near the southern end of the character area would become a boatyard and haul-out and house a maritime museum during the life of the General Plan and LCP Update, connecting it to the other harbor-related uses on the opposite side of Embarcadero. The existing aquaculture and commercial fishing businesses in Morro Bay are identified as coastal priority uses in the General Plan and LCP Update and the General Plan and LCP Update aims to maintain and protect these resources. Therefore, aside from improvements to lateral access and additional fishing industry facilities, the General Plan and LCP Update does not anticipate substantial changes to the character of the commercial fishing area on the west side of Embarcadero.

The vision for other character areas under the General Plan and LCP Update is summarized as follows:

- **North Morro Bay.** The design vision for the North Morro Bay area includes increased shopping and services opportunities along North Main Street in neighborhood-scale, walkable centers or clusters in order to create a more pedestrian friendly environment and areas where commercial development is prioritized over residential. The character of the residential area behind Main Street is not envisioned to change.
- **Beach Tract.** The character of the Beach Tract is expected to remain relatively the same over the life of the General Plan and LCP Update as a single-family residential neighborhood along the beach.
- **Cloisters.** The residential portion of the Cloisters character area is expected to remain relatively the same over the life of the General Plan and LCP Update as a clustered single-family residential neighborhood adjacent to wetlands and the beach.
- **North Embarcadero.** The character of this area is anticipated to change substantially by 2040 due to the expected redevelopment of the Vistra power plant site. It is possible some of the existing power plant buildings may be reused. However, with or without building reuse, the site is expected to house some visitor-serving businesses or facilities and may also have office, retail, or housing.

- **The Embarcadero.** The character of this area changes periodically due to lease renewal and reinvestments in the lease sites on the west side of the Embarcadero. Many lease sites will undergo renewal or turn over to new leaseholders over the life of the project, continuing this trend. Additional improvements for lateral and other types of access as well as infrastructure improvements or changes to address expected impacts of sea level rise, are expected in this area over the life of the project. Other changes to the character of this area may result from improvements and redesign of vehicle, bicycle, and pedestrian circulation on the Centennial Parkway and adjacent properties. Embarcadero may also become limited to one-way vehicle traffic between Beach and Marina streets. Additionally, vacant and underutilized parking lots may also be repurposed for new amenities, businesses, and visitor-serving facilities.
- **Downtown.** Under the General Plan and LCP Update, this area would continue to provide places for locals and visitors to shop, with an increase in places to work and live. In the portions of the area that allow mixed-use development, zoning development standards would have heights sufficient to support mixed-uses. Vacant and underutilized sites would undergo development and improvements to provide greater connection between the waterfront and Downtown, eliminating the “dead zone” at the top of Centennial Staircase and encouraging pedestrian traffic between the two areas.
- **Highway 1 Commercial.** This City Park may be expanded to encompass the entire triangular block, if feasible. In addition, under the General Plan and LCP Update, there is potential for the creation of more housing and neighborhood-serving businesses in the blocks surrounding the park to make the area more inviting for park users and to create a gateway to the city along Morro Bay Boulevard. Additionally, under the General Plan and LCP Update, there is potential for mixed use development and increased commercial development along the Quintana Road corridor. The character is envisioned to remain similar to the current character for the remaining portion, and majority, of this area.
- **Agriculture East of Highway 1.** Little to no change in visual character is envisioned in this area over the life of the project.
- **Morro Heights.** No change in visual character is envisioned in this area over the life of the project.
- **State Park and Estuary Area.** No change in visual character is envisioned in this area over the life of the project.

Beyond changes envisioned for the North Embarcadero and parts of Downtown, the General Plan and LCP Update does not anticipate substantial changes to the existing pattern of development in the city. As a result, the General Plan and LCP Update is intended to maintain the city’s small-town, eclectic character and unique aesthetic components of the individual character areas of the city.

The Community Design Element of the General Plan and LCP Update specifically addresses the components of the city’s unique style that would be preserved as the city changes over time. This element focuses primarily on building design, landscaping, scale, and style, with related topics such as density and intensity and use types and locations are addressed in the Land Use Element. While the Community Design Element is not a required component of a general plan, it is intended to preserve the culture and design of the community. In addition to the goals and policies listed under Impact AES-1, the following policies in the General Plan and LCP Update Community Design and Land Use Elements would provide direction for the desired visual character and quality in Morro Bay:

Goal CD-1 The individual identity of each of Morro Bay’s character areas is embraced and represented by new and renovated development.

- Policy CD-1.1 Distinct Character Areas.** Consider and maintain the distinctiveness of each character area in planning and design decision-making.
- Policy CD-1.2 Compatible New Development.** Require new development projects to be compatible with the character vision for the area in which it is located, as described in the Vision for Community Character Areas, above, including ensuring that new development is located within existing developed areas and built in a manner that respects and responds to their unique natural and built environments.
- Policy CD-1.3 Design Guidelines.** Work with residents and business owners to develop and adopt citywide design guidelines (for areas of the City that don’t already have them) that illustrate appropriate form, scale, and massing for buildings while allowing for distinctive design and flexibility.
- Policy CD-1.4: Design Standards.** As part of the Zoning Code, adopt permanent design standards for the city that allow for a wide variety of architectural styles while maintaining the character of each character area and the city as a whole.
- Policy CD-1.6: Protect Agriculture.** Protect the existing agricultural and open space greenbelt surrounding existing developed areas for the its agricultural, open space, habitat, and scenic qualities, including to ensure development remains within existing developed areas with adequate public services. When approving development in areas near agricultural zones in the Planning Area, consider potential long-term agricultural impacts and require mitigation as part of development.
- Policy CD-1.8: Minimize Aesthetic Impacts.** Structures, including fences, shall be subordinate to and blended into the environment, including by using appropriate materials that will achieve that effect. Where necessary, modifications shall be required for siting, structural design, shape, lighting, color, texture, building materials, access, and screening to protect public views and ensure development protects the public viewshed. Public views shall be protected and enhanced as a matter of great public importance, particularly related to public views that include Morro Bay proper, the sandspit, and Morro Rock, and all development shall be sited and designed to be subordinate to such views.
- Policy CD-1.9: Complementary Design.** Require building designs, materials, and landscaping that are complementary to the landscape, climate, and existing development.
- Policy CD-1.10: Signs.** Require commercial signs to be of a size, location, and appearance so they do not detract from the area’s scenic qualities and/or cause visual clutter and blight. New development, and renovation or expansion of existing development, shall be designed to be consistent with the community character, and to protect scenic resources.

Goal LU-1 The community form of Morro Bay reflects its vision and values, promoting a strong economy and high quality of life.

Policy LU-1.1 Land Use Pattern. Maintain the current pattern of Morro Bay's land use to preserve the distinct character areas and community form, while enhancing and transforming areas with greatest potential for change to improve economic activity and align them with the community vision. (See Figure LU-3 Land Use Map.) New development shall be located within, contiguous with, or in close proximity to existing developed areas with adequate public services and where it will not have significant effects, either individually or cumulatively, on coastal resources.

Goal LU-5 Coastal priority uses are viable, protected, and contribute to the economy and character of Morro Bay.

Policy LU-5.4 Vistra Energy Site Master Plan. Master plan the redevelopment of the former Vistra power plant site and surrounding area, which could include reuse of some of the existing buildings. The master plan will be the responsibility of the developer or property owner upon property development. Encourage extensive community participation in the master plan process. Ensure that the land use map identified in Figure LU-4 and development capacity established in Table LU-2 guide land planning for the site. Other objectives for the master plan include creating a better connection between the two sides of the Embarcadero at the Vistra site and creating a pedestrian-friendly atmosphere along the site's Embarcadero street frontage. The master plan shall be incorporated into the LCP via an LCP amendment prior to any CDP processing for associated development.

Goal LU-8 Morro Bay's downtown and waterfront areas are active and welcoming locations for shopping, recreation, public access, visitor-serving needs, and coastal services.

Policy LU-8.9 Design Flexibility. Allow for design flexibility in the downtown and waterfront areas while perpetuating quality development that will complement and enhance the area's eclectic style and small, seaside character. Development along the waterfront shall comply with the Waterfront Master Plan.

Development facilitated by the General Plan and LCP Update would result in visual changes to the community. However, development and redevelopment that may occur during the lifetime of the General Plan and LCP Update would be governed by the above goals and policies as well as the associated updates to the standards contained in the City's Zoning Code. These plans and community standards have been developed with the goal of retaining Morro Bay's visual character, while providing visual enhancements in certain areas of the city. Impacts would be less than significant with implementation of applicable policies and regulations.

Mitigation Measures

No additional policy-oriented mitigation would be required to address this impact. As individual development projects are proposed, focused, project-level environmental review may be required, which could result in the implementation of project-specific mitigation measures.

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

Impact AES-3 NEW DEVELOPMENT FACILITATED BY THE GENERAL PLAN AND LCP UPDATE WOULD BE SUBJECT TO EXISTING REGULATIONS IN THE CITY'S ZONING CODE, AND GENERAL PLAN AND LCP UPDATE POLICIES, TO PROTECT SKYWARD NIGHTTIME VIEWS AND TO LESSEN OR PREVENT GLARE. THEREFORE, THE PROJECT WOULD RESULT IN A LESS THAN SIGNIFICANT IMPACT ASSOCIATED WITH NEW SOURCES OF LIGHT AND GLARE.

The General Plan and LCP Update would facilitate new development that could introduce new sources of light and glare in Morro Bay, resulting in increased ambient nighttime lighting. New sources of light and glare could be introduced by infill development, new development on currently vacant or undeveloped lots, or modification of existing buildings. Specific sources of ambient lighting would include streetlights, parking lot lights, signage on business establishments, exterior building lights, illumination from interior lights, and lighting at outdoor recreational facilities. Reflective building and vehicle surfaces, and the headlights of motor vehicles, could generate additional glare in the planning area.

Implementation of the General Plan and LCP Update Conservation Element policies listed below would prevent new sources of light or glare that would impact views in the planning area.

Policy C-9.5 Lighting Standards. Development shall be sited and designed to avoid illuminating, reduce glare, protect and enhance skyward nighttime public views, and minimize lighting in open spaces and natural areas. New lighting fixtures shall be mounted at low elevations and fully shielded to direct lighting downward. Lighting along walkways should be mounted on low bollards or ground buttons. Lighting shall be focused on targeted use areas and shall be limited to what is necessary for public safety. Floodlighting shall be prohibited. Exterior lighting fixtures should complement the architectural style of structures.

Implementation of these policies would ensure that the updated Zoning Code establishes standards to prevent glare and protect the character of the city from inappropriate levels of lighting. Future development facilitated by the General Plan and LCP Update would be required to submit a lighting plan that complies with updated Zoning Code standards. Additionally, future development facilitated by the General Plan and LCP Update would require an independent environmental review that would determine the project-specific light and glare effects and subsequent mitigation measures, if required to comply with standards for lighting and building materials to prevent glare. As a result, the General Plan and LCP Update would have a less than significant impact related to the introduction of light and glare.

Mitigation Measures

No additional policy-oriented mitigation would be required to address this impact. As individual development projects are proposed, focused, project-level environmental review may be required, which could result in the implementation of project-specific mitigation measures.

d. Cumulative Impacts

The analysis in this section examines impacts of the General Plan and LCP Update on aesthetics throughout the cumulative impact analysis area and is cumulative in nature. Some types of impacts to aesthetic resources are localized and not cumulative in nature. For example, the creation of glare or shadows at one location is not worsened by glare or shadows created at another location. Rather these effects are independent and the determination as to whether they are adverse is specific to the project and location where they are created. Projects that block a view or affect the visual quality of a site also result in localized impacts. The impact occurs specific to a site or area and remains independent from another project elsewhere that may block a view or degrade the visual environment of a specific site.

There are two types of aesthetic impacts that may be additive in nature and thus cumulative: night sky lighting and overall changes in the visual environment as the result of increasing urbanization of large areas. As development in one area, such as a relatively large city adjoining agricultural land like Morro Bay, increases and possibly expands over time and meets or connects with development in an adjoining ex-urban area, the effect of night sky lighting experienced outside of the region may increase in the form of larger and/or more intense nighttime glow in the viewshed. Although growth envisioned in the General Plan and LCP Update is primarily focused on infill areas, development outside of those geographies with long-distance views may result in nighttime lighting becoming more visible, covering a larger area and/or appearing in new areas as a result of projected development under the General Plan and LCP Update.

As planned cumulative development occurs throughout San Luis Obispo County (the cumulative impact analysis area), the overall visual environment will change. However, compliance with City and County policies and standards for the protection of visual resources, compatible design for new development, and maintaining visual character, would ensure that the combination of forecasted development in the planning area and planned development in neighboring communities would not result in a substantially different visual environment than currently exists. The cumulative impacts associated with night sky lighting and changes in the visual environment would not be considered significant, and the General Plan and LCP Update's contribution to these impacts would not be cumulatively considerable.

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4.2 Air Quality

This section analyzes the effects of the General Plan and LCP Update on air contaminant emissions and the associated impacts, as well as odors. The analysis in this section describes current air quality conditions in and around the City of Morro Bay and evaluates the potential air impacts of the General Plan and LCP Update.

4.2.1 Setting

a. Climate and Topography

The General Plan and LCP Update planning area is part of the South Central Coast Air Basin (SCCAB) which includes all of San Luis Obispo, Santa Barbara, and Ventura counties. The climate of the San Luis Obispo County area and all of the SCCAB is strongly influenced by its proximity to the Pacific Ocean and the location of the semi-permanent high-pressure cell in the northeastern Pacific. The Mediterranean climate of the region produces moderate average temperatures, although slightly more extreme temperatures can be reached in the winter and summer. The warmest month of the year is October with an average maximum temperature of 69.2 degrees Fahrenheit, while the coldest month of the year is December with an average minimum temperature of 42.6 degrees Fahrenheit. Rainfall is concentrated in the winter months. Local climate conditions are shown in Table 4.2-1.

Table 4.2-1 Morro Bay Area Climate Conditions

Average annual rainfall	16.74 inches
Average maximum temperature (annual)	65.0 °F
Average minimum temperature (annual)	47.8 °F
Warmest month(s)	October
Coolest month(s)	December, January
Annual mean temperature	56.4 °F

Source: Western Regional Climate Center, 2018.

The region is subject to seasonal winds. Seasonal winds are strong northerly to northeasterly winds that originate from high-pressure areas centered over the desert of the Great Basin. These winds are usually warm, dry, northerly winds which blow offshore at 15 to 20 miles per hour (mph), but can reach speeds in excess of 60 mph. Seasonal winds are particularly strong in mountain passes and at the mouths of canyons. However, seasonal and local topographic conditions may alter the wind directionality experienced in Morro Bay.

Two types of temperature inversions (warmer air on top of cooler air) are created in the area: subsidence and radiational. The subsidence inversion is a regional effect created by the Pacific high in which air is heated as it is compressed when it flows from the high-pressure area to the low-pressure areas inland. This type of inversion generally forms at about 1,000 to 2,000 feet and can occur throughout the year, but it is most evident during the summer months. Radiational, or surface, inversions are formed by the more rapid cooling of air near the ground at night, especially

during winter. This type of inversion is typically lower and is generally accompanied by stable air. Both types of inversions limit the dispersal of air pollutants within the regional airshed, with the more stable the air (low wind speeds, uniform temperatures), the lower the amount of pollutant dispersion.

b. Air Pollutants of Primary Concern

The State and federal Clean Air Acts mandate the control and reduction of certain air pollutants. Under these Acts, the United States Environmental Protection Agency (USEPA) and the California Air Resources Board (ARB) have established ambient air quality standards (AAQS) for certain “criteria” pollutants. Ambient air pollutant concentrations are affected by the rates and distributions of corresponding air pollutant emissions, as well as by the climactic and topographic influences discussed above. The primary determinant of concentrations of non-reactive pollutants (such as carbon monoxide [CO] and fine particulates [PM₁₀]) is proximity to major sources. Ambient CO levels usually closely follow the spatial and temporal distributions of vehicular traffic. A discussion of these primary criteria pollutants follows.

Federal and state standards have been established for ozone, CO, nitrogen dioxide (NO₂), sulfur dioxide (SO₂), lead, and fine particulates (PM₁₀ and PM_{2.5}). Standards have been set at levels intended to be protective of public health. California standards are more restrictive than federal standards for each of these pollutants except lead and the eight-hour average for CO. Table 4.2-2 illustrates the current federal and State AAQS for each of these pollutants.

Table 4.2-2 Current Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	California Standard (CAAQS)	Federal Standard (NAAQS)
Ozone (O ₃)	1-Hour	0.09 ppm	–
	8-Hour	0.070 ppm	0.070 ppm
Carbon Monoxide (CO)	8-Hour	9.0 ppm	9.0 ppm
	1-Hour	20.0 ppm	35.0 ppm
Nitrogen Dioxide (NO ₂)	Annual	0.030 ppm	0.053 ppm
	1-Hour	0.18 ppm	0.100 ppm
Sulfur Dioxide (SO ₂)	Annual	–	–
	24-Hour	0.04 ppm	–
	1-Hour	0.25 ppm	0.075 ppm
PM ₁₀	Annual	20 µg/m ³	–
	24-Hour	50 µg/m ³	150 µg/m ³
PM _{2.5}	Annual	12 µg/m ³	12 µg/m ³
	24-Hour	–	35 µg/m ³
Lead	30-Day Average	1.5 µg/m ³	–
	Rolling 3-Month Average	–	0.15 µg/m ³

ppm = parts per million; µg/m³ = micrograms per cubic meter

Source: ARB 2017a

The San Luis Obispo County Air Pollution Control District (SLOAPCD) monitors criteria pollutant levels to assure that air quality standards are met, and if they are not met, develops strategies to meet the standards. Depending on whether or not the standards are met or exceeded, the air basin is classified as being in “attainment” or as “non-attainment.” As of August 2013 (the last date that SLOAPCD’s attainment status was updated), San Luis Obispo County is in non-attainment for the 1-hour and 8-hour State standards for ozone and the 24-hour State standard for PM₁₀ (SLOAPCD 2017).

Table 4.2-3 summarizes the annual air quality data for the local airshed. ARB maintains over 60 air quality monitoring stations throughout California, including ten stations in San Luis Obispo County. The nearest monitoring station is the Morro Bay Station, 899 Morro Bay Boulevard which is located within the city limits of Morro Bay. The Morro Bay Station collects data on ozone but does not collect data on PM_{2.5} and PM₁₀ concentrations. Therefore, Table 4.2-3 also shows data on PM_{2.5} and PM₁₀ concentrations from the San Luis Obispo-3220 South Higuera Street Station, which is the next closest station to Morro Bay. The data collected at this station is considered to be generally representative of the baseline air quality experienced in the planning area.

Table 4.2-3 Ambient Air Quality Data

Pollutant	2014	2015	2016
Ozone (ppm), Worst 1-Hour ¹	0.070	0.064	0.060
Number of days of State exceedances (>0.09 ppm) ¹	0	0	0
Ozone (ppm), 8-Hour Average ¹	0.066	0.057	0.057
Number of days of State exceedances (>0.07 ppm) ¹	0	0	0
Number of days of federal exceedances (>0.07 ppm) ¹	0	0	0
Carbon Monoxide (ppm), Highest 8-Hour Average	*	*	*
Number of days of above State or federal standard (>9.0 ppm)	*	*	*
Particulate Matter <10 microns, µg/m ³ , Worst 24 Hours ²	43.2	43.1	43.2
Number of days above State standard (>50 µg/m ³) ²	0	0	0
Number of days above federal standard (>150 µg/m ³) ²	0	0	0
Particulate Matter <2.5 microns, µg/m ³ , Worst 24 Hours ²	15.6	16.4	21.0
Number of days above federal standard (>35 µg/m ³) ²	0	0	0

Notes: ppm = parts per million; µg/m³ = micrograms per cubic meter

¹ Data from the Morro Bay Station

² Data from the San Luis Obispo-3220 South Higuera Street Station

* No data was available for the NCCAB to determine the value.

Source: ARB 2017b

The primary pollutants of concern in San Luis Obispo County are ozone (O₃) and particulate matter (PM₁₀). Table 4.2-3 provides the number of days of State or federal exceedance in a given year, that the standard would have been exceeded had sampling occurred every day of the year. The major local sources for PM₁₀ are agricultural operations, vehicle dust, grading, and dust produced by high winds. Ozone is a secondary pollutant that is not produced directly by a source, but rather is formed by a reaction between nitrogen oxides (NO_x) and reactive organic gases (ROG) in the presence of sunlight. Reductions in ozone concentrations are dependent on reducing the amount of these precursors. In San Luis Obispo County, the major sources of ROG are motor vehicles, organic

solvents, the petroleum industry, and pesticides; and the major sources of NO_x are motor vehicles, public utility power generation, and fuel combustion by various industrial sources (SLOAPCD 2001).

c. Sensitive Receptors

Federal and State AAQS have been established to represent the levels of air quality considered sufficient, with an adequate margin of safety, to protect public health and welfare. They are designed to protect that segment of the public most susceptible to respiratory distress, such as children under 14; the elderly over 65; persons engaged in strenuous work or exercise; and people with cardiovascular and chronic respiratory diseases.

The majority of sensitive receptor locations are therefore residences, schools, and hospitals. There are no hospitals located within Morro Bay. Additional sensitive receptors in the planning area include the existing elementary schools, churches, community center, and senior center. School locations in the planning area are identified in Section 4.12, *Public Services*.

d. Naturally Occurring Asbestos

Naturally occurring asbestos (NOA) can be released from serpentine and ultramafic rocks when the rock is broken or crushed. At the point of release, the asbestos fibers may become airborne, causing air quality and human health hazards. The U.S. Environmental Protection Agency and ARB identify asbestos as a toxic air contaminant. ARB has established an Air Toxics Control Measure (ACTM) for NOA, which is found in the California Code of Regulations (17 CCR 93105). This measure requires specified control measures for grading or land disturbance that meets certain conditions and allows for the local APCD to exempt specific projects or areas from regulation upon review of a geological evaluation. As originally mapped by the SLOAPCD, most of central Morro Bay and all of the developed areas north of central Morro Bay are areas of concern with known serpentine rock formation, which are potential sources of NOA (SLOAPCD 2017a).

e. Odors

The SLOAPCD *CEQA Air Quality Handbook* identifies multiple odor-causing sources including but not limited to; wastewater treatment plants, landfills, composting facilities, petroleum refineries, and chemical manufacturing. The main objectionable odor released from wastewater treatment plants is associated with hydrogen sulfide (H₂S), which emits an odor similar to rotten eggs.

f. Regulatory Setting

This analysis has been prepared pursuant to the California Environmental Quality Act (CEQA) of 1970 and associated Guidelines (Public Resources Code 21000 et seq. and California Code of Regulations, Title 14, Chapter 3, Sections 15000-15387) and in accordance with local, state and federal laws, including those administered by USEPA, ARB, and SLOAPCD.

The Federal Clean Air Act (FCAA) governs air quality in the United States. In addition to being subject to federal requirements, air quality in California is also governed by more stringent regulations under the California Clean Air Act (CCAA). At the federal level, the USEPA administers the FCAA. Both CAAs are administered by ARB at the State level and at the regional and local levels by the AQMDs. SLOAPCD regulates air quality at the regional level for San Luis Obispo County.

Federal

The USEPA is responsible for enforcing the FCAA. The USEPA is also responsible for establishing the National AAQS, which are a requirement under the 1977 FCAA and subsequent amendments. The USEPA regulates emission sources that are under the exclusive authority of the federal government, such as aircraft, ships, and certain types of locomotives. The agency has jurisdiction over emission sources outside state waters (e.g. beyond the outer continental shelf) and establishes various emission standards, including those for vehicles sold in states other than California. Automobiles sold in California must meet the stricter emission standards established by ARB.

State

In California, ARB is responsible for meeting the state requirements of the FCAA, administering the CCAA, and establishing the California CAAQS. The CCAA, as amended in 1992, requires all air districts in the state to endeavor to achieve and maintain the CAAQS. The CAAQS are generally more stringent than the corresponding federal standards and incorporate additional standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility reducing particles. ARB regulates mobile air pollution sources, such as motor vehicles. The agency is responsible for setting emission standards for vehicles sold in California and for other emission sources, such as consumer products and certain off-road equipment. ARB established passenger vehicle fuel specifications, which became effective in March 1996. ARB oversees the functions of local air pollution control districts and air quality management districts, which in turn administer air quality activities at the regional and county level.

Tanner Air Toxics Act and Air Toxics Hot Spots Information and Assessment Act

TACs in California are primarily regulated through the Tanner Air Toxics Act (AB 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588) (Hot Spots Act). As discussed above, HAPs/TACs are a broad class of compounds known to cause morbidity or mortality (cancer risk). HAPs/TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuel combustion, and commercial operations (e.g., dry cleaners). Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, state and federal level.

AB 1807 sets forth a formal procedure for ARB to designate substances as TACs. To date, ARB has identified more than 21 TACs and adopted USEPA's list of HAPs as TACs. In 1998, diesel PM was added to ARB's list of TACs. Once a TAC is identified, ARB adopts an Airborne Toxic Control Measure for sources that emit that particular TAC. If a safe threshold exists at which no toxic effect occurs from a substance, the control measure must reduce exposure below that threshold. If no safe threshold exists, the measure must incorporate Best Available Control Technology (BACT) to minimize emissions.

The Hot Spots Act requires for existing facilities that emit toxic substances above a specified level to prepare a toxic emissions inventory and a risk assessment if the emissions are significant, notify the public of significant risk levels, and prepare and implement risk reduction measures.

Diesel Exhaust and Diesel Particulate Matter

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about two-thirds of the cancer risk from TACs (based on the statewide average). Diesel exhaust is a complex mixture of gases, vapors, and fine particles that include particulate matter, benzene and formaldehyde,

which have been previously identified as TACs by ARB, and are listed as carcinogens either under State Proposition 65 or under the Federal Hazardous Air Pollutants program.

ARB has adopted and implemented a number of regulations for stationary and mobile sources to reduce emissions of diesel PM. Several of these regulatory programs affect medium and heavy duty diesel trucks that represent the bulk of diesel PM emissions from California highways. These regulations include the solid waste collection vehicle (SWCV) rule, in-use public and utility fleets, and the heavy-duty diesel truck and bus regulations. In September 2000, ARB adopted the Diesel Reduction Plan, which recommends control measures to reduce risks associated with diesel PM and achieve an 85 percent reduction in diesel PM relative to 2000 levels by 2020 (ARB 2000). In 2011, ARB approved the On-Road Heavy-Duty Diesel Vehicles (In-Use) Regulation that requires existing on-road heavy-duty diesel fueled vehicles to meet specific performance requirements between 2012 and 2023, with all affected diesel vehicles required to have 2010 model-year engines or the equivalent by 2023. These requirements are phased in over the compliance period and depend on the model year of the vehicle. As emissions are reduced, risks associated with exposure to emissions also are expected to be reduced.

ARB Air Quality and Land Use Handbook

In April 2005, ARB released the final version of its *Air Quality and Land Use Handbook: A Community Health Perspective*. This guidance document is intended to encourage local land use agencies to consider the risks from air pollution before they approve the siting of sensitive land uses near sources of air pollution, particularly TACs (e.g., freeway and high traffic roads, commercial distribution centers, rail yards, ports, refineries, dry cleaners, gasoline stations, and industrial facilities). These advisory recommendations include general setbacks or buffers from air pollution sources. However, unlike industrial or stationary sources of air pollution, the siting of new sensitive land uses does not require air quality permits or approval by air districts, and, as noted above, the ARB handbook provides guidance rather than binding regulations.

Regional

SLOAPCD regulates air quality in the portion of the SCCAB that is in San Luis Obispo County, and is responsible for attainment planning related to criteria air pollutants, and for district rule development and enforcement. Under state law, the SLOAPCD is required to prepare an overall plan for air quality improvement for the SCCAB, known as the Clean Air Plan (CAP). The most recent CAP was prepared in 2001. The 2001 CAP is the third update to the original 1991 CAP, adopted in 1992. The 2001 CAP describes the air quality setting for the County in detail, including the local climate and meteorology, current and projected air quality, and the regulatory framework for the management of air quality. The 2001 CAP is intended to bring the County into attainment of the State ozone standard within a three year timeframe through a comprehensive set of control measures designed to reduce ozone precursor emissions from a wide variety of stationary and mobile sources. The 2001 CAP is incorporated by reference and is available for review at the SLOAPCD web site, www.slocleanair.org.

4.2.2 Impact Analysis

a. Methodology

Operational emissions for buildout of the General Plan and LCP Update were modeled based on the potential development capacity in 2040 relative to existing conditions using the California Emissions Estimator Model (CalEEMod), version 2016.3.2 (i.e., the project comprises the net change between existing and 2040 conditions). Information presented in Table 2-5 in Section 2.0, *Project Description*, was used to determine the proposed project's land uses, number of residential units, and non-residential areas, which were entered into CalEEMod. The results of the CalEEMod emissions model, as well as an explanation of the methods and assumptions used to derive these inputs, are provided in Appendix C. The emissions analysis assumed that future development under the General Plan and LCP Update would comply with SLOAPCD rules, such as Rule 504, which restricts residential wood burning, and Rule 433, which sets limits on VOC content in architectural coatings.

Because project-level details are not currently known and it was assumed that full buildout of the land use plan would occur, the operational emissions as modeled provide a worst-case scenario estimate and are included in the appendix of this EIR for informational purposes. The significance of air quality impacts related to the project's operational emissions are determined through qualitative analysis in accordance with SLOAPCD guidance. Construction emissions were not modeled due to the high dependence of emission estimates on project-level construction details, which are not known at this time.

b. Significance Thresholds

Based on Appendix G of the *CEQA Guidelines*, a project may be deemed to have a significant impact on air quality if it would:

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

As stated in the *CEQA Guidelines*, the significance criteria established by the regional air quality pollution control district may be relied upon to make determinations of significance. SLOAPCD's recommended significance criteria are established in its *CEQA Air Quality Handbook* (SLOAPCD 2012) and applicable criteria are described below.

Consistency with the 2001 CAP

Section 3.2 of the *CEQA Air Quality Handbook* states that a consistency analysis with the 2001 CAP is required for program level environmental review and that a project consistent with the land use and transportation control measures and strategies outlined in the 2001 CAP is considered consistent with the CAP. The 2001 CAP guidance for project consistency analysis states that the following questions should be evaluated:

- a. *Are the population projections used in the plan or project equal to or less than those used in the most recent CAP for the same area?*
- b. *Is rate of increase in vehicle trips and miles traveled less than or equal to the rate of population growth for the same area?*
- c. *Have all applicable land use and transportation control measures from the CAP been included in the plan or project to the maximum extent feasible?*

According to the 2001 CAP, if the answer to all of the above questions is yes, then the project is consistent with the CAP. If the answer to any of the above questions is no, the project is inconsistent with the CAP. For the purpose of this analysis, the project’s consistency with the 2001 CAP is determined through a consistency analysis with specific land use and transportation measures and strategies included in the CAP, as well as evaluation of the three questions listed above. However, to evaluate question two, only vehicle miles traveled (VMT) is evaluated because VMT provides a better indicator of mobile source emissions and the number of vehicle trips is redundant with VMT, which is equal to the number of vehicle trips multiplied by the average trip length.

Operational Emissions

As stated in Section 3.5 of the *CEQA Air Quality Handbook*, a program level environmental review, such as for the proposed project, does not require a quantitative air emissions analysis at the project scale; instead, a qualitative analysis should be provided based on criteria such as prevention of urban sprawl and reduced dependence on automobiles and evaluation for consistency with transportation and land use planning strategies outlined in the 2001 CAP. Therefore, the significance of the project’s operational emissions is determined qualitatively.

Although not applicable to the General Plan and LCP Update, the SLOAPCD has established significance thresholds for evaluating project-level operational emissions. Future development projects subject to CEQA within the Morro Bay planning area would be required to compare project operational air pollutant emissions to SLOAPCD thresholds and incorporate mitigation if emissions exceed threshold levels. Table 4.2-4 provides SLOAPCD’s project-level significance thresholds for operational emissions.

Table 4.2-4 SLOAPCD Operational Emissions Significance Thresholds

Pollutant	Threshold	
	Daily (lbs/day)	Annual (tons/year)
ROG + NO _x (combined) ¹	25.00	25
Diesel Particulate Matter (DPM) ¹	1.25	–
Fugitive Particulate Matter (PM ₁₀), Dust	25.00	25
CO	550.00	–

¹ SLOAPCD specifies that CalEEMod winter emission outputs should be compared to operational thresholds for these pollutants (2012).
 Source: SLOAPCD 2012

Construction Emissions

Although not applicable to the General Plan and LCP Update, the SLOAPCD has developed quantitative daily and quarterly significance thresholds for project construction emissions. The daily thresholds apply to projects that would be completed in less than one quarter (90 days). The quarterly construction thresholds apply to projects that would be completed in more than one quarter. Quarterly thresholds are subdivided into Tier 1 and Tier 2, which are tied to different mitigation requirements. Projects exceeding the higher Tier 2 threshold are required to implement more stringent mitigation measures. Table 4.2-5 provides SLOAPCD’s project-level significance thresholds for construction emissions.

Table 4.2-5 SLOAPCD Construction Emissions Significance Thresholds

Pollutant	Threshold		
	Daily (lbs)	Quarterly Tier 1 (tons)	Quarterly Tier 2 (tons)
ROG + NO _x (combined) ¹	137	2.50	6.30
Diesel Particulate Matter (DPM) ¹	7	0.13	0.32
Fugitive Particulate Matter (PM ₁₀), Dust	–	2.50	–

¹ SLOAPCD specifies that CalEEMod winter emission outputs should be compared to operational thresholds for these pollutants (2012).

Source: SLOAPCD 2012

As with the SLOAPCD’s operational thresholds, these thresholds are intended for project-level review rather than program-level environmental review as construction emissions are highly dependent on project-specific details. Thus, the significance of the construction emissions associated with buildout of the General Plan and LCP Update is evaluated qualitatively. However, future development projects within the Morro Bay planning area subject to CEQA would be required to evaluate the significance of project air pollutant emissions using SLOAPCD thresholds and incorporate mitigation if emissions exceed threshold levels in accordance with SLOAPCD guidance.

Toxic Air Contaminants

As stated in the *CEQA Air Quality Handbook*, a project that has the potential to emit toxic or hazardous air pollutants or is located in close proximity to sensitive receptors may have a significant health impact related to toxic air contaminants (TACs). A qualitative analysis is provided to determine whether the General Plan and LCP Update would result in increased exposure of sensitive receptors to diesel particulate matter (DPM) or other toxics by siting receptors along major roadways or in proximity to industrial facilities.

Odor

Table 3-3 of the *CEQA Air Quality Handbook* provides potential screening distances for nuisance sources. Projects locating sensitive receptors, or other uses where people congregate, within the screening distance of nuisance sources require further evaluation to determine whether the project would be exposed to significant odor impact. For a project that will be located near an existing odor source, the project would have a significant odor impact if it sites receptors as close or closer to the source than a location that has experienced: 1) more than one confirmed complaint per year

averaged over a three year period, or 2) three unconfirmed complaints per year averaged over a three year period. A qualitative discussion is provided to determine whether the General Plan and LCP Update would facilitate new development that would result in odor-related conflicts.

c. Project Impacts and Mitigation Measures

Threshold 1: Would the project conflict with or obstruct implementation of the applicable air quality plan?
Threshold 2: Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?

Impact AQ-1 THE GENERAL PLAN AND LCP UPDATE WOULD RESULT IN AN INCREASE IN VMT THAT WOULD EXCEED THE PROJECTED RATE OF POPULATION GROWTH IN MORRO BAY, WHICH WOULD BE INCONSISTENT WITH THE SLOAPCD CLEAN AIR PLAN. THIS WOULD BE A SIGNIFICANT AND UNAVOIDABLE IMPACT.

As described in Section 4.2.3, *Significance Thresholds and Methodology*, SLOAPCD determines consistency with the 2001 CAP based on whether the project would exceed the population projections used in the CAP for the same area, whether the vehicle trips and vehicle miles traveled generated by the project would exceed the rate of population growth for the same area, and whether all applicable land use management strategies and transportation control measures from the 2001 CAP have been included in the project to the maximum extent feasible.

The consistency of the General Plan and LCP Update with each of these criteria is discussed in the following paragraphs.

Population Growth Consistency

Buildout of the General Plan would add an estimated 1,348 residents to Morro Bay by 2040 (see Table 2-4 in Section 2, *Project Description*). When added to the existing population within the City of approximately 10,714 (California Department of Finance 2018), buildout of the General Plan and LCP Update would increase the city's total population to an estimated 12,062 residents, or an increase of 12.6 percent. The 2001 CAP uses growth forecasts provided by the San Luis Obispo Council of Governments (SLOCOG) in the Regional Growth Forecast to project population-related emissions for the SCCAB (SLOAPCD 2001; SLOCOG 2017). In turn, SLOCOG population forecasts are based on the land use assumptions presented in the existing general plans of local governments within the SCCAB. When a general plan is updated, land uses are also updated to accommodate future growth projected based on recent population growth trends. Consequently, an updated general plan prepared for a local jurisdiction experiencing a higher rate of population growth than assumed in the previous general plan would have projected growth exceeding previous general plan projections and also exceeding SLOCOG projections.

Implementation of the General Plan and LCP Update would not cause the population of Morro Bay to exceed the projected 2040 medium-scenario population of 12,092 residents. In addition, future SLOCOG growth projections would incorporate the General Plan and LCP Update land use assumptions and would inform future air quality management in the SCCAB.

Vehicle Miles Traveled Increase

The Community Baseline Assessment for the General Plan and LCP Update (Appendix B) provides estimates of daily VMT within the City's Sphere of Influence (SOI) under existing conditions, buildout conditions, and buildout plus project conditions. Future VMT estimates were developed as part of the Morro Bay Circulation Element Update Final Technical Report (refer to Table 10 in Appendix E). Daily VMT under existing conditions reflects the current roadway network and traffic volumes collected in 2016. Daily VMT under buildout plus project conditions reflects anticipated buildout under the General Plan and LCP Update.

Total daily VMT in the SOI under existing conditions is estimated to be 84,739, which equates to approximately 31 million annual VMT. Total daily VMT in the City's SOI under buildout plus project conditions is estimated to be 297,699, which equates to approximately 102 million annual VMT. Based on these projections, VMT would increase by approximately 230 percent by 2040 with implementation of the General Plan and LCP Update. The projected increase in VMT under project conditions is attributable to the large increase in customer and employee vehicle trips associated with substantial commercial growth anticipated in the General Plan and LCP Update land use plan. Because the percent increase in VMT would exceed the percent growth in population, the project would be inconsistent with the 2001 CAP's assumptions for VMT.

Implementation of Land Use and Transportation Control Measures

Five of the transportation control measures and four of the land use planning strategies contained in the 2001 CAP are applicable to the proposed project. The project's consistency with the 2001 CAP's applicable land use and transportation control measures is evaluated in Table 4.2-6.

Table 4.2-6 Project Consistency with Applicable 2001 CAP Land Use and Transportation Control Measures

2001 CAP Control Measure	Project Consistency
Land Use Planning Strategies	
<p>L-1 Planning Compact Communities. Maintaining compact city and village areas reduces reliance on the automobile by enhancing the viability of public transit and maximizing the potential for walking and bicycling to work, shopping, and other destinations.</p>	<p>Consistent</p> <p>The General Plan and LCP Update would focus new development primarily in Morro Bay’s city limits, as illustrated in the land use plan and as supported by the following policies included in the General Plan and LCP Update:</p> <ul style="list-style-type: none"> ▪ Policy LU-3.6: Infill Development. Promote infill development on vacant or underutilized properties in the city as the preferred strategy for most new development in Morro Bay. ▪ Policy LU-3.7: Limited Outward Expansion. Establish criteria to allow for some limited outward expansion beyond the city’s existing limits to achieve large-scale conservation of parcels and a small amount of rural-scale residential use and visitor-serving amenities to serve conservation lands. Standards applies to the future sphere of influence (SOI) area include keeping development off of ridgelines and preserve views of the City’s backdrop of undeveloped open land. (See also Policies C-9.1 through C-9.5 and Implementation Actions C-30 and C-31.) <p>In addition, the General Plan and LCP Update includes policies to reduce vehicle use and promote use of transit and active transportation, such as the following:</p> <ul style="list-style-type: none"> ▪ Policy CIR-1.1: Balanced Transportation. Work to complete a balanced multimodal transportation system that meets the needs of all users, including pedestrians, cyclists, motorists, children, seniors, and people with disabilities. ▪ Policy CIR-1.3: System Connectivity. Develop a complete and connected network of accessible sidewalks, crossings, paths, and separated bike lanes that are convenient and attractive throughout the city. ▪ Policy CIR-1.4: Future Enhancements. Identify streets in the city that can be made “complete,” and plan for new bikeways, sidewalks, and crosswalks on these streets by reallocating how space within the public right-of-way is used. ▪ Policy CIR-2.2: Street End Pedestrian Connections. Create safer and more distinct lateral access connections across the street ends on the west side of the Embarcadero at Dunes, Harbor, Morro Bay Boulevard, Front, Pacific, Marina, and Driftwood Streets, including by relocating parking from these areas. (See also Policies LU-4.1, LU-4.5, LU-4.6, LU-7.1 through LU-7.6, and OS-1.6 and Implementation Action LU-19.) ▪ Policy CIR-2.3: Pedestrian Safety. Provide for accessible, safe, and convenient paths, sidewalks, and crossings along major streets and beach and coastal areas for all users, including the disabled, youth, and the elderly. (See also Policies LU-8.5 and OS-3.6.)

2001 CAP Control Measure	Project Consistency
<p>L-2 Providing for Mixed Land Use. Communities should allow a mixture of land uses that enables people to walk or bicycle to work or to purchase necessary household items or service, at locations convenient to their neighborhood.</p>	<p>Consistent</p> <p>The General Plan and LCP Update would support mixed-use development primarily through the Mixed-Use designation, as well as the Community, District, Neighborhood, and Visitor-Serving Commercial designations.</p> <p>In addition, the General Plan and LCP Update supports mixed-use development through the following policies:</p> <ul style="list-style-type: none">▪ Policy LU-1.3: Access to Daily Needs. Create sustainable development patterns characterized by mixed uses, walkable neighborhoods, and multimodal connections that allow residents to meet their daily needs for food, goods and services, employment, and other resources.▪ Policy CIR-2.1: Compact Development. Support mixed-use, compact-style, and other land use development patterns that facilitate easy active transportation and transit use. (See also Policies LU-3.1, LU-3.3, LU-3.6, and LU-3.7.)
<p>L-3 Balancing Jobs and Housing. Within cities and unincorporated communities, the gap between the availability of jobs and housing should be narrowed and should not be allowed to expand.</p>	<p>Consistent</p> <p>The General Plan and LCP Update would allow for future development of new residential and employment spaces. In addition, the project would support balancing jobs and housing through the following policy:</p> <ul style="list-style-type: none">▪ Policy LU-3.5: Jobs/Housing Ratio. At buildout of Plan Morro Bay, the jobs/housing ratio should be as close to balanced (1.0) as possible.

2001 CAP Control Measure	Project Consistency
<p>L-4 Circulation Management. The primary goal of the recommended Circulation Management Policies and Programs is to encourage the design and construction of the county’s transportation system in a manner that supports alternative travel modes and decreases reliance on single occupant motor vehicles. Policies include:</p> <p>Promoting accessibility in the transportation system</p> <p>Promoting walking and bicycling</p> <p>Parking management</p> <p>Transportation demand management</p>	<p>Consistent</p> <p>The General Plan and LCP Update includes policies to reduce vehicle use and promote use of transit and active transportation, such as those listed under L-1, T-3 (below), as well as the following policies to support parking management:</p> <ul style="list-style-type: none"> ▪ Policy CIR-4.1: Adequate Parking Required. Eliminate minimum parking requirements when and where appropriate to promote walkable neighborhoods and transit and bicycle use, and establish maximum parking standards. In all cases, a finding shall be made that the proposed development can be served by adequate parking either on-site, off-site in a private parking lot, or offsite in a public parking lot provided the applicant has paid for that number of parking spaces via an in-lieu fee to the City (see also Policy CIR-4.3) In all cases, parking shall be provided in a manner that does not adversely impact the public’s ability to park, unless a determination is made that existing parking in the area is sufficient ▪ Policy CIR-4.2: Paid Parking. The City may seek a Coastal Development Permit to establish paid public parking spaces with reasonable rates in appropriate places. When considering a Coastal Development Permit application for any development that could reduce, degrade, or otherwise limit public parking opportunities (including paid parking) near beach access points, shoreline trails, or parklands, including any changes in parking timing, pricing, and availability, evaluate the potential impact on public coastal access, and ensure existing levels of public access are maintained, including through ensuring that alternative access opportunities, including bike lanes and parking, pedestrian trails, and relocated free vehicular parking spaces, are provided so as to fully mitigate any potential negative impacts and maximize access opportunities. Any revenue from fee-based parking programs within the Coastal Zone shall only be used to fund public access and other transportation improvements within the Coastal Zone. The funds can also be used to manage a City paid parking program. ▪ Policy CIR-4.3: Expand In-Lieu Fee Program. Update parking fee requirements to expand to all commercial areas and to provide options for how in-lieu fees can improve access to downtown businesses and the coast. Ensure the in-lieu fee parking program provides adequate funding for public parking opportunities. All such fees shall be developed based on the actual cost to the City to develop and provide an equivalent number of parking spaces, including costs of land, planning, construction, and maintenance. ▪ Policy CIR-4.4: Shared Parking. Encourage shared parking between adjacent uses where possible. ▪ Policy CIR-4.5: Coastal Access Parking. Monitor coastal access parking demand and adjust parking strategies to ensure an appropriate amount of parking is provided so as to maximize public coastal access opportunities. ▪ Policy CIR-4.6: Excess Right-of-Way Parking. In downtown and the waterfront areas, reconfigure existing parking space alignments to achieve greater parking yield. ▪ Policy CIR-4.7: Alternative Options. Require or establish EV charging stations, bike sharing and park and ride locations throughout Morro Bay and in particular close to transit and amenities.

2001 CAP Control Measure	Project Consistency
Transportation Control Measures	
<p>T-2A Local Transit System Improvements. The focus of this measure is on improving local transit service and infrastructure to increase ridership by enhancing the convenience and overall viability of the system.</p>	<p>Consistent</p> <p>The General Plan and LCP Update would support improvements to local transit service and infrastructure through the following policy:</p> <ul style="list-style-type: none"> ▪ Policy CIR-1.6: Local Transit Improvement. Continue to improve the local Morro Bay Transit Deviated Fixed Route and Call-A-Ride services and ensure connections to regional transit and active transportation facilities.
<p>T-2B Regional Public Transit Improvements. San Luis Obispo Regional Transit Authority (SLORTA) operates the regional fixed route system, Central Coast Area Transit (CCAT). The focus of this measure is to improve regional transit service and infrastructure with the goal of increasing ridership rates in excess of countywide population growth rates.</p>	<p>Consistent</p> <p>The General Plan and LCP Update would support improvements to regional transit service and infrastructure through the following policies:</p> <ul style="list-style-type: none"> ▪ Policy CIR-1.5: Regional Transit. Coordinate with the San Luis Obispo Regional Transit Authority to ensure local transit connects smoothly with regional transit and possible future route and schedule expansions.
<p>T-3 Bicycling and Bikeway Enhancements. To effectively encourage the modal shift to bicycles, a comprehensive program to promote bicycle use was adopted in the 1991 Clean Air Plan.</p>	<p>Consistent</p> <p>The General Plan and LCP Update would support increased bicycle use through policies listed under L-1 above, as well as the following policies:</p> <ul style="list-style-type: none"> ▪ Policy CIR-2.4: Active Transportation Amenities. Provide facilities and amenities for active transportation users at public facilities, including bicycle storage and seating areas. (See also Policies LU-8.4 and OS-1.8.) ▪ Policy CIR-2.5: Prioritizing Improvements. Prioritize infrastructure improvements that benefit bicycle and pedestrian safety and convenience around community facilities and locations in pedestrian-oriented areas. (See also Policy OS-1.8 and Implementation Action OS-1.) ▪ Policy CIR-2.6: Destination Facilities. Require and place access areas and facilities for bicycle, pedestrian, and transit travel in front of major destinations, such as shopping centers, parks, and schools. Facilities may include any or a combination of the following: designated passenger drop-off and pickup zones, benches, lighting, secure bike parking, shelters, and street trees. (See also Policies LU-2.3 and PS-2.1.)
<p>T-4 Park and Ride Lots. To reduce vehicle miles traveled, this measure supports the development of new park and ride lots, including through the use of existing parking lots and developing agreements for park and ride lots when new commercial development occurs.</p>	<p>Consistent</p> <p>The General Plan and LCP Update would support development of park and ride lots through the following policies:</p> <ul style="list-style-type: none"> ▪ Policy C-3.6: Park and Ride. Support the future development of park and ride lots in Morro Bay. Site lots near commuter transit service and provide bicycle storage lockers at the lots to ensure they are designed to facilitate use by transit and active transportation users.

2001 CAP Control Measure	Project Consistency
<p>T-6 Traffic Flow Improvements. This control measure focuses on traffic flow improvements and “traffic-calming” to improve the flow of all transportation modes. Traffic-calming refers to a full range of methods designed to improve the flow of nonmotorized transportation by slowing down the speed of motorized traffic. Traffic-calming is generally used in residential areas on non-arterial local streets and roads.</p>	<p>Consistent</p> <p>The General Plan and LCP Update would support improvements to traffic flow through the following policies:</p> <ul style="list-style-type: none"> ▪ Policy CIR-1.7: System Flexibility. Regularly evaluate and modify the overall transportation system, and remain informed and innovative regarding use of new mobility technologies. ▪ Policy CIR-1.10: Goods Movement. Maintain smooth, consistent, and nonintrusive movement of trucks and goods through the city by way of truck routes, including working with businesses to minimize disruption to traffic flow during loading and unloading, and expanding designated commercial loading zones along the Embarcadero.
<p>T-8 Teleworking, Teleconferencing, and Telelearning. This control measure seeks to reduce emissions by promoting telecommuting for any employee whose job can accommodate working from home.</p>	<p>Consistent</p> <p>The General Plan and LCP Update would promote telecommuting through the following policies:</p> <ul style="list-style-type: none"> ▪ Policy C-3.7: Telecommuting. Encourage employers to adopt teleworking, teleconferencing, and telelearning options for their employees and adopt policies and/or programs to further promote teleworking, teleconferencing, and telelearning among City staff.

Notes: Two transportation control measures, T-1B Campus Trip Reduction Program and T-5 Motor Vehicle Inspection and Control Programs, are not applicable to the project because the planning area does not include a college campus or have a smog check program.

As shown in Table 4.2-6, the General Plan and LCP Update would be consistent with applicable land use and transportation control measures contained in the 2001 CAP. In addition, the General Plan and LCP Update includes goals and policies intended to promote compact and infill development and reduce VMT, which would reduce criteria pollutant emissions associated with new development in the planning area. Implementation of the goals and policies in the General Plan and LCP Update Land Use and Circulation Elements listed below would minimize adverse effects associated with long term criteria pollutant emissions. These include:

Policy LU-1.3 Access to Daily Needs. Create sustainable development patterns characterized by mixed uses, walkable neighborhoods, and multimodal connections that allow residents to meet their daily needs for food, goods and services, employment, and other resources.

Policy LU-3.6 Infill Development. Promote infill development on vacant or underutilized properties in the city as the preferred strategy for most new development in Morro Bay.

Policy LU-3.7 Limited Outward Expansion. Establish criteria to allow for some limited outward expansion beyond the city’s existing limits to achieve large-scale conservation of parcels and a small amount of rural-scale residential use and visitor-serving amenities to serve conservation lands. Standards applies to the future sphere of influence (SOI) area include keeping development off of ridgelines and preserve views of the City’s backdrop of undeveloped open land. (See also Policies C-9.1 through C-9.5 and Implementation Actions C-30 and C-31.)

- Policy CIR-1.1 Balanced Transportation.** Work to complete a balanced multimodal transportation system that meets the needs of all users, including pedestrians, cyclists, motorists, children, seniors, and people with disabilities.
- Policy CIR-1.3 System Connectivity.** Develop a complete and connected network of accessible sidewalks, crossings, paths, and separated bike lanes that are convenient and attractive throughout the city.
- Policy CIR-1.4 Future Enhancements.** Identify streets in the city that can be made “complete,” and plan for new bikeways, sidewalks, and crosswalks on these streets by reallocating how space within the public right-of-way is used.
- Policy CIR-1.5 Regional Transit.** Coordinate with the San Luis Obispo Regional Transit Authority to ensure local transit connects smoothly with regional transit and possible future route and schedule expansions.
- Policy CIR-1.6 Local Transit Improvement.** Continue to improve the local Morro Bay Transit Deviated Fixed Route and Call-A-Ride services and ensure connections to regional transit and active transportation facilities.
- Policy CIR-2.1 Compact Development.** Support mixed-use, compact-style, and other land use development patterns that facilitate easy active transportation and transit use. (See also Policies LU-3.1, LU-3.3, LU-3.6, and LU-3.7.)
- Policy CIR-2.2 Street End Pedestrian Connections.** Create safer and more distinct lateral access connections across the street ends on the west side of the Embarcadero at Dunes, Harbor, Morro Bay Boulevard, Front, Pacific, Marina, and Driftwood Streets, including by relocating parking from these areas. (See also Policies LU-4.1, LU-4.5, LU-4.6, LU-7.1 through LU-7.6, and OS-1.6 and Implementation Action LU-19.)
- Policy CIR-2.3 Pedestrian Safety.** Provide for accessible, safe, and convenient paths, sidewalks, and crossings along major streets and beach and coastal areas for all users, including the disabled, youth, and the elderly. (See also Policies LU-8.5 and OS-3.6.)
- Policy CIR-2.4 Active Transportation Amenities.** Provide facilities and amenities for active transportation users at public facilities, including bicycle storage and seating areas. (See also Policies LU-8.4 and OS-1.8.)
- Policy CIR-2.5 Prioritizing Improvements.** Prioritize infrastructure improvements that benefit bicycle and pedestrian safety and convenience around community facilities and locations in pedestrian-oriented areas. (See also Policy OS-1.8 and Implementation Action OS-1.)
- Policy CIR-2.6 Destination Facilities.** Require and place access areas and facilities for bicycle, pedestrian, and transit travel in front of major destinations, such as shopping centers, parks, and schools. Facilities may include any or a combination of the following: designated passenger drop-off and pickup zones, benches, lighting, secure bike parking, shelters, and street trees. (See also Policies LU-2.3 and PS-2.1.)

2001 Clean Air Plan Consistency Conclusion

As discussed above, the General Plan and LCP Update would not conflict with SLOAPCD's assumptions for population growth, and would be consistent with applicable land use and transportation control measures contained in the 2001 CAP. However, the General Plan and LCP Update would result in an increase in VMT of approximately 230 percent by 2040, which would exceed the projected rate of population growth in Morro Bay. As a result, the General Plan and LCP Update would obstruct implementation of the applicable air quality plan, which is a significant impact.

Mitigation Measures

The General Plan and LCP Update would comply with applicable General Plan and LCP Update goals and policies that would reduce VMT to the extent feasible. In addition, individual development projects in the planning area would require project-level environmental review, including evaluation of future projects for consistency with the applicable air quality plan in accordance with the SLOAPCD CEQA *Air Quality Handbook*, which could result in the implementation of project-specific mitigation measures to reduce VMT. However, no additional policy-oriented mitigation is available that would reduce projected VMT.

Significance After Mitigation

Additional policy-oriented mitigation is not available that would reduce the projected VMT increase such that it would not exceed population growth in the region. Therefore, the General Plan and LCP Update would be inconsistent with the 2001 CAP, and this impact would remain significant and unavoidable.

The following discussion addresses the potential human health impacts associated with significant and unavoidable long term increases in criteria pollutant emissions. This discussion is provided to address concerns raised in the *Sierra Club v. County of Fresno (Friant Ranch; 2018)* decision regarding adequate disclosure of the potential human health effects from significant air quality impacts. The Supreme Court opinion in *Friant Ranch* requires projects with significant air quality impacts to "relate the expected adverse air quality impacts to likely health consequences or explain why it is not feasible at the time of drafting to provide such an analysis, so that the public may make informed decisions regarding the costs and benefits of the project."

In their amicus briefs on the *Friant Ranch* case, South Coast Air Management District (SCAQMD) and San Joaquin Valley Air Pollution Control District (SJVAPCD) staff state that it is not feasible with existing modeling techniques to precisely correlate a project's impacts related to ROG, NO_x, and PM emissions to quantifiable health impacts, unless the emissions are sufficiently high to use a regional modeling program, which is not the case for the proposed project (Brief for South Coast Air Quality Management District 2018; Brief for San Joaquin Valley Unified Air Pollution Control District 2018).

The SCAQMD and SJVAPCD amicus briefs note that ozone formation is not linearly related to emissions. Therefore, ozone impacts vary depending on the location of the emissions, the location of other precursor emissions, meteorology, and seasonal impacts, and because ozone is formed later and downwind from the actual emission. In addition, the SJVAPCD amicus brief states that although emissions of particulate matter can have a localized impact, the tonnage emitted does not always equate to the local PM concentration because local PM concentrations are affected by several factors, including wind transport, meteorology, and complex chemical factors. In addition,

secondary PM is formed via a complex process such that the tonnage of PM-forming precursor emissions in a given area does not necessarily result in an equivalent concentration of secondary PM in that same area. Therefore, a general description of the adverse health impacts resulting from the pollutants at issue is the full extent of information that can be provided at this time.

The increase in ozone and PM₁₀ concentrations in San Luis Obispo County as a result of project operation would contribute to adverse health impacts that are already occurring due to the region's nonattainment status for these pollutants. As discussed in Section 4.2.1(b), *Air Pollutants of Primary Concern*, the health impacts of ozone include respiratory and eye irritation and possible changes in lung functions, and the health impacts of PM₁₀ include increased respiratory symptoms, aggravated asthma, development of chronic bronchitis, nonfatal heart attacks, and premature death in people with heart or lung disease.

Threshold 2: Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?

Threshold 3: Would the project expose sensitive receptors to substantial pollutant concentrations?

Impact AQ-2 BUILDOUT OF THE GENERAL PLAN AND LCP UPDATE WOULD RESULT IN SHORT-TERM EMISSIONS OF CRITERIA POLLUTANTS. CONSTRUCTION EMISSIONS FROM FUTURE PROJECT IN THE PLANNING AREA WOULD BE QUANTIFIED ONCE PROJECT DETAILS ARE KNOWN AND EVALUATED FOR POTENTIAL IMPACTS IN ACCORDANCE WITH SLOAPCD GUIDANCE. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION.

Buildout of the General Plan and LCP Update would result in temporary emissions associated with construction activities, such as construction worker travel to and from project sites, delivery and hauling of construction supplies and debris, fuel combustion by on-site construction equipment, and application of architectural coatings and other products. These construction activities would temporarily create emissions of dust, equipment exhaust, and other air contaminants, particularly during site preparation and grading. The magnitude of ROG and NO_x emissions would depend largely on the quantity and type of equipment used and the hours of usage. The extent of PM_{2.5} and PM₁₀ emissions would depend largely upon the following factors: 1) the amount of disturbed soils; 2) the length of disturbance time; 3) whether existing structures are demolished; 4) whether excavation is involved; and 5) whether transporting excavated materials off-site is necessary. Dust emissions can lead to both nuisance and health impacts.

Because construction emissions from buildout of the General Plan and LCP Update would be potentially significant, mitigation is required. The SLOAPCD provides standard mitigation measures for construction in the *CEQA Air Quality Handbook*, which are included as Mitigation Measure AQ-2. Future development projects in the Morro Bay planning area would also be evaluated for air quality impacts once project-level details are known and would be required to incorporate additional mitigation if project construction emissions exceed the thresholds established by the SLOAPCD.

Because individual projects would be required to evaluate air quality impacts resulting from construction emissions and mitigate emissions as required by SLOAPCD guidance, air quality impacts from construction of the proposed project would be mitigated to a less than significant level.

Mitigation Measures

AQ-2 Standard Mitigation for Construction Equipment

Proponents of individual land use projects, or other projects requiring grading or building permits, shall require construction contractors to incorporate the following standard mitigation measures, as applicable, to reduce ROG, NO_x, and DPM emissions from construction equipment. Mitigation measures shall be listed on project construction plans and the project proponent shall perform periodic site inspections during construction to ensure that mitigation measures are being implemented.

- Maintain all construction equipment in proper condition according to manufacturer's specifications
- Fuel all off-road and portable diesel powered equipment with ARB-certified motor vehicle diesel fuel (non-taxed version suitable for use off-road)
- Use diesel construction equipment meeting ARB's Tier 2 certified engines or cleaner off-road heavy-duty diesel engines, and comply with the State Off-Road Regulation
- Use on-road heavy-duty trucks that meet ARB's 2007 or cleaner certification standard for on-road heavy-duty diesel engines, and comply with the State On-Road Regulation
- Construction or trucking companies with fleets that do not have engines in their fleet that meet the engine standards identified in the above two measures (e.g. captive or NO_x exempt area fleets) may be eligible by proving alternative compliance
- All on and off-road diesel equipment shall not idle for more than 5 minutes. Signs shall be posted in the designated queuing areas and or job sites to remind drivers and operators of the 5 minute idling limit
- Diesel idling within 1,000 feet of sensitive receptors is not permitted
- Staging and queuing areas shall not be located within 1,000 feet of sensitive receptors
- Electrify equipment when feasible
- Substitute gasoline-powered in place of diesel-powered equipment, where feasible
- Use alternatively fueled construction equipment on-site where feasible, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane or biodiesel.

Significance After Mitigation

Mitigation Measure AQ-2 would reduce short-term NO_x, ROG, and DPM emissions generated by construction activities associated with future buildout of the project. This impact would be less than significant with mitigation.

Threshold 3: Would the project expose sensitive receptors to substantial pollutant concentrations?

Impact AQ-3 THE GENERAL PLAN AND LCP UPDATE WOULD ALLOW FOR DEVELOPMENT OF NEW RESIDENCES AND OTHER SENSITIVE RECEPTORS IN PROXIMITY TO INDUSTRIAL USES, WHICH COULD RESULT IN EXPOSURE OF SENSITIVE RECEPTORS TO ELEVATED CONCENTRATIONS OF TACs. THE GENERAL PLAN AND LCP UPDATE WOULD NOT GENERATE LEVELS OF TRAFFIC THAT WOULD EXPOSE SENSITIVE RECEPTORS TO SUBSTANTIAL POLLUTANT CONCENTRATIONS, OR RESULT IN NEW DEVELOPMENT THAT WOULD EXPOSE SENSITIVE RECEPTORS TO HAZARDS ASSOCIATED WITH NATURALLY OCCURRING ASBESTOS. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Toxic Air Contaminants

High levels of TACs, such as diesel particulate matter (DPM), formaldehyde, benzene, acetaldehyde, and polycyclic aromatic hydrocarbons (PAH), can result in health risks for sensitive populations. ARB recommends local jurisdictions adopt land use policies to separate sensitive land uses a minimum of 500 to 1,000 feet from common TAC sources, depending on the source. SLOAPCD permitting requirements would apply to new stationary sources of TACs in Morro Bay. ARB’s recommendations for siting new sensitive land uses for common mobile and stationary sources of air toxics are presented in Table 4.2-7 and published in the *Air Quality and Land Use Handbook: A Community Health Perspective* (ARB 2005). The recommended setbacks are advisory and should not be interpreted as defined “buffer zones.”

Table 4.2-7 Recommendations for Siting New Sensitive Land Uses in California

Source Category	Advisory Recommended Setback Distance
Freeways and High-traffic Roads	500 feet from a freeway or urban road with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day
Distribution Centers that accommodate than 100 trucks per day, more than 40 trucks with operating transport refrigeration units (TRUs) per day, or where TRU unit operations exceed 300 hours per week	1,000 feet. Avoid location of new sensitive land uses near entry and exit points
Rail Yards	1,000 feet. Within 1 mile, consider siting limitation and mitigation approaches
Ports	Immediately downwind. Consult local air district
Refineries	1,000 feet
Chrome Platers	1,000 feet
Dry Cleaners Using Perchloroethylene	300 feet. For operations with two or more machines, provide 500 feet. For operations with 3 or more machines, consult with the local air district Do not site new sensitive land uses in the same building with perc dry cleaning operations
Gasoline Dispensing Facilities	300 feet for a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater) 50 feet for typical gas dispensing facilities

Source: ARB 2005

Potential land use sources of TACs in Morro Bay currently include one dry cleaning facility and multiple gasoline service stations. No other common sources of TACs included in Table 4.2-7 are present in the planning area. However, ARB has identified six¹ TAC sources in the planning area that are not included in Table 4.2-7 or addressed specifically in the *Air Quality and Land Use Handbook* (Morro Bay 2017, also refer to the Community Baseline Assessment for the General Plan and LCP Update [Appendix B]). These sources are shown in Figure 4.2-1, and include:

- Benedict-Retty Crematory at 1401 Quintana Road
- Black Mountain Pet Crematorium at 1401 Quintana Road
- Guerra Quarry at 1835 Atascadero Road
- Hanson Aggregates at 180 Atascadero Road
- Mission Linen and Uniform Service at 399 Errol Street
- Morro Bay/Cayucos Wastewater Treatment Facility at 160 Atascadero Road

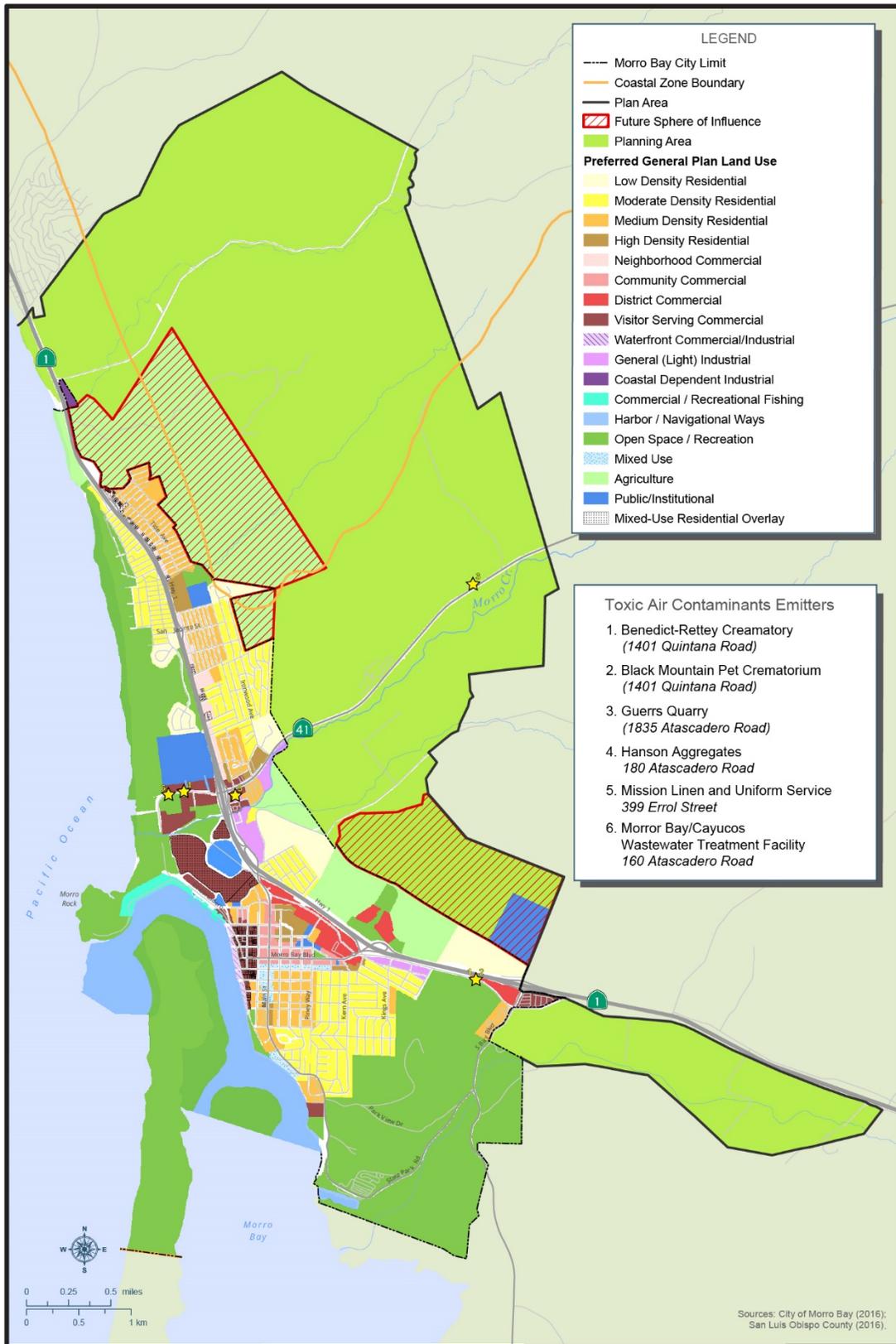
As shown in Figure 4.2-1, sensitive land uses, such as residences, could be located in proximity to identified TAC sources under the General Plan and LCP Update. The General Plan and LCP Update includes policies intended to maintain and improve local air quality through local actions and interagency coordination. Implementation of the policies in the General Plan and LCP Update Conservation Element listed below would minimize adverse effects associated with criteria pollutants and TACs. These include:

- Policy C-3.1: Interagency Cooperation.** Continue to cooperate with the SLOAPCD and other regional, state, and national agencies to implement the County Clean Air Plan, including enforcing air quality standards and improving air quality.
- Policy C-3.2: Pollutant Sites.** Identify opportunities to locate new air pollutant sources away from the general population.
- Policy C-3.4: Vehicle Idling.** Explore and implement strategies to minimize vehicle idling.
- Policy C-3.5: Air Quality in Sensitive Land Uses.** Minimize exposure of sensitive land uses to toxic air contaminants by locating new pollutant sources away from sensitive uses such as schools, hospitals, parks, playgrounds, residential areas, and natural and open space areas.

Compliance with existing applicable regulations, SLOAPCD permitting requirements, and General Plan and LCP Update policies would minimize risks associated with criteria pollutant and TAC emissions. Oversight by the appropriate State and local agencies and compliance by new development with applicable regulations would minimize the risk of the public's potential exposure to TAC emissions. Therefore, health risk impacts from TAC emissions would be less than significant.

¹ Morro Bay Power Plant ceased operation in 2014 and the site would be redeveloped for mixed-use under the project (Wilson 2014). Thus, it is not currently considered a source of TACs and would not be a future source with implementation of the project. The US Army Corps of Engineers was a temporary source of TACs during dredging work in Morro Bay Harbor (DredgingToday.com 2017).

Figure 4.2-1 Toxic Air Contaminants Sources in Morro Bay



Carbon Monoxide Hotspots

The General Plan and LCP Update is anticipated to increase regional VMT (refer to Section 4.13, *Transportation*). Areas with high vehicle density, such as congested intersections, have the potential to create high concentrations of CO (“CO hotspots”) and could potentially expose sensitive receptors to substantial pollutant concentrations. The ARB considers freeways and urban roadways with more than 100,000 vehicles per day and rural roadways with more than 50,000 vehicles per day to pose a health risk to sensitive receptors within 500 feet due to DPM emissions (ARB 2005). In addition, the Bay Area Air Quality Management District (BAAQMD) has established a volume of 44,000 vehicles per hour as the level above which traffic volumes may contribute to a violation of CO standards (BAAQMD 2017). Existing traffic volumes along all of the studied roadway segments in Morro Bay under existing, buildout, or buildout with project conditions do not exceed 50,000 vehicles per day or 44,000 vehicles per hour at any location (Appendix E). Therefore, the General Plan and LCP Update would not result in volumes of traffic that would create, or substantially contribute to, hazardous levels of TACs or the exceedance of State and federal AAQS for CO.

Naturally Occurring Asbestos

NOA has been identified by the State Air Resources Board as a toxic air contaminant. Serpentine and ultramafic rocks are common in San Luis Obispo County and may contain NOA. According to the SLOAPCD NOA Map for San Luis Obispo County, most of central Morro Bay and all of the developed areas north of central Morro Bay are areas of concern with known serpentine rock formation, which are potential sources of NOA (SLOAPCD 2018a). Future development under the General Plan and LCP Update would result in excavation and grading and therefore may encounter NOA. Under ARB’s Air Toxics Control Measure (NOA ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations, prior to any grading activities at a site within the green “buffer” areas on SLOAPCD’s NOA map, the owner or operator would be required to comply with the NOA ATCM. The NOA ATCM requires submittal of a geologic evaluation determining whether serpentine rock is present on a project site, and if so, to what extent (less or more than one acre). Depending on the results of the geologic evaluation, a project would be required to file an exemption request form (if on serpentine is present), a Mini Dust Control Measure Plan (if less than one acre of serpentine is present), or an Asbestos Dust Control Measure Plan (if more than one acre of serpentine is present). Compliance with ARB’s NOA ATCM, would ensure that impacts associated with naturally occurring asbestos would remain less than significant.

Mitigation Measures

No additional policy-oriented mitigation would be required to address this impact. As individual development projects are proposed, focused, project-level environmental review may be required, which could result in the implementation of project-specific mitigation measures.

Threshold 4: Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Impact AQ-4 IMPLEMENTATION OF THE GENERAL PLAN AND LCP UPDATE WOULD NOT CREATE OBJECTIONABLE ODORS THAT WOULD IMPACT A SUBSTANTIAL NUMBER OF PEOPLE, AND FUTURE PROJECTS WOULD BE REQUIRED TO COMPLY WITH SLOAPCD REGULATIONS PROHIBITING NUISANCE EMISSIONS (INCLUDING ODORS). THIS WOULD BE A LESS THAN SIGNIFICANT IMPACT.

As discussed above, Table 3-3 of the SLOAPCD's *CEQA Air Quality Handbook* identifies potential odor sources and screening distances for nuisance sources. Potential odor sources identified by the SLOAPCD included manufacturing plants, coffee roasters, composting facilities, landfills, transfer stations, and wastewater treatment plants. While the city contains potential odor sources, such as coffee roasters, auto body shops, and the Morro Bay-Cayucos Wastewater Treatment Plant (WWTP), the SLOAPCD has confirmed that it has not received odor complaints for sources in Morro Bay for several years (Elliot 2018).

The General Plan and LCP Update would allow for development of new industrial sources that may generate odors. However, SLOAPCD Rule 402 prohibits discharge of air contaminants or other materials, including odors, that cause injury, detriment, nuisance or annoyance to any to any considerable number of persons or to the public, or to a business or property; the rule, however, exempts odors from agricultural operations. While the General Plan and LCP Update would allow for some development of residences and agriculture in proximity to one another (east of State Route [SR] 1), existing agricultural operations have not resulted in odor complaints, and future agricultural operations are expected to be similar in nature, consisting of small-scale crop farming and grazing. Therefore, the General Plan and LCP Update would not result in sensitive receptors being located near sources of substantial odors, and this impact would be less than significant.

Mitigation Measures

No additional policy-oriented mitigation would be required. As individual development projects are proposed, focused, project-level environmental review may be required, which could result in the implementation of project-specific mitigation measures to reduce potential odor conflicts.

d. Cumulative Impacts

Morro Bay is located in San Luis Obispo County, which is a part of the SCCAB, along with Santa Barbara and Ventura Counties. All of the city's neighboring jurisdictions are also located in San Luis Obispo County and within the SCCAB. Air quality in the SCCAB is regulated by SLOAPCD, which has prepared an air quality plan to improve conditions and meet federal and state air quality standards. San Luis Obispo County is in non-attainment for the 1-hour and 8-hour state standards for ozone and the 24-hour state standard for PM₁₀ (SLOACPD 2017). Future development throughout San Luis Obispo County would create ozone and PM₁₀ emissions, which would contribute to continued or exacerbated violation of state emissions standards, resulting in a significant cumulative impact to air quality. As discussed under Impact AQ-1 and Impact AQ-2, buildout of the General Plan and LCP Update would result in an increase of VMT exceeding the rate of population increase, which would be inconsistent with SLOAPCD's 2001 CAP. The 2001 CAP is intended to bring the County into attainment of the State ozone standard. Because the General Plan and LCP Update would be inconsistent with the CAP, the General Plan and LCP Update's contribution to cumulative regional air quality impacts would be significant and unavoidable.

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4.3 Biological Resources

This section addresses the existing environmental conditions in the planning area and provides an assessment of the potential for direct and indirect impacts to sensitive natural communities, special status species, regulated waterways and wetlands, sensitive habitat and mature native trees, and wildlife movement corridors. Background technical documents were prepared in support of the evaluation of impacts for biological resources and have been referenced in this section as applicable.

4.3.1 Setting

The planning area is located along the California coast east and northeast of Estero Bay and Morro Bay. The planning area includes a variety of land use types, including residential, commercial, and agricultural areas, as well as open undeveloped space consisting of native and non-native vegetation communities.

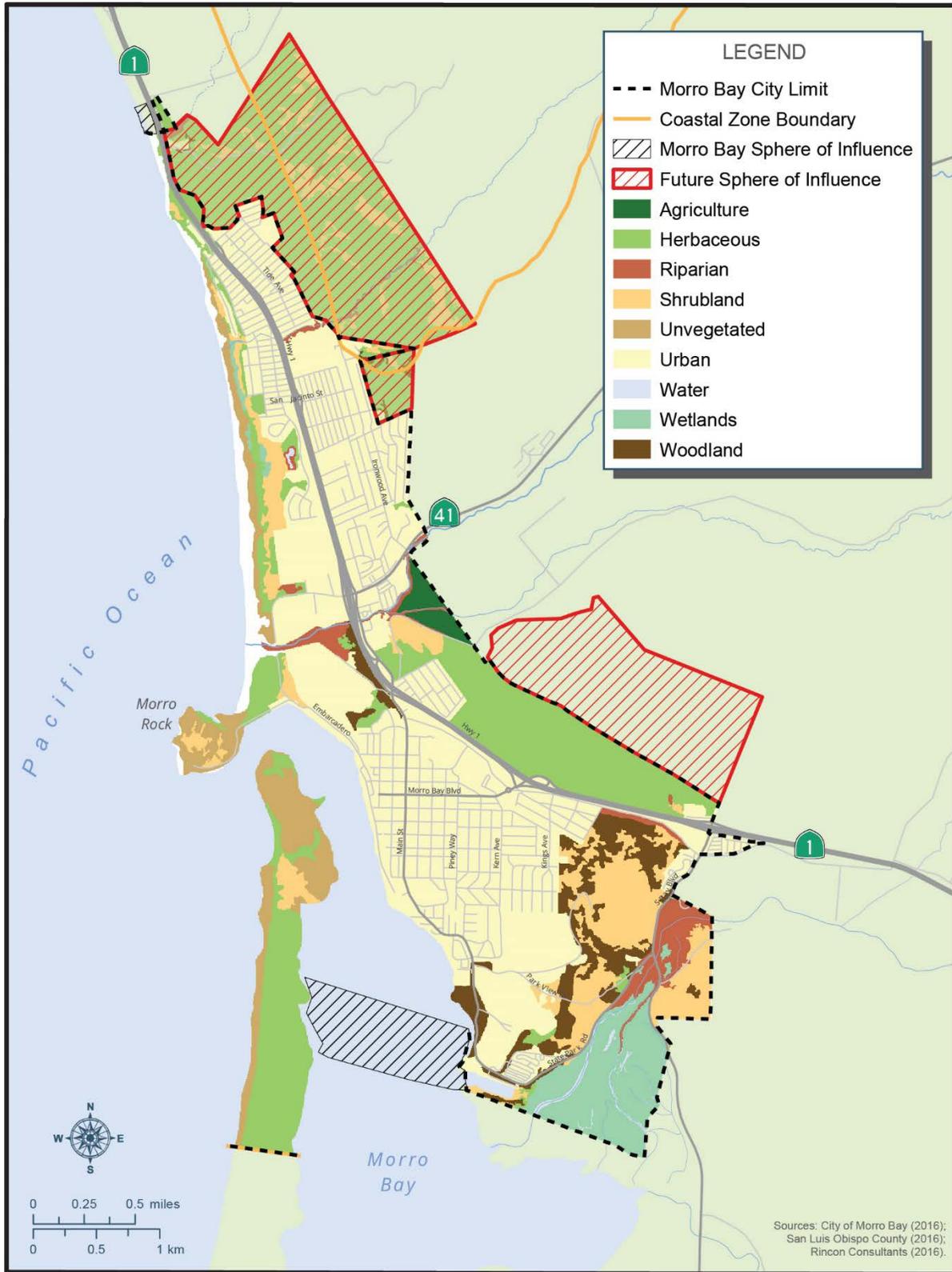
The vegetation communities and wildlife habitats in the planning area are based on the Community Baseline Assessment for the General Plan and LCP Update (refer to Appendix B) and the Environmentally Sensitive Habitat Area (ESHA) Review and Current Conditions Mapping (refer to Appendix D) as well as the County of San Luis Obispo 2007 vegetation map (San Luis Obispo County 2007 and 2009), California Department of Fish and Wildlife (CDFW) California Wildlife Habitat Relationship (CWHR) classification system (CDFW 2014), A Manual of California Vegetation, Second Edition (Sawyer et al. 2009), Atlas of Sensitive Species of the Morro Bay Area (Sims 2010), topographic maps, and recent aerial photographs (Google Earth 2018).

Vegetation types are broadly grouped by form, as shown in Figure 4.3-1. Within each broad category, multiple alliances may be present. For each broad vegetation community described, the corresponding alliances listed in the discussion are defined as vegetation classification units containing one or more associations, and defined by a characteristic range of species composition, habitat conditions, physical characteristics, and diagnostic species, typically at least one of which is found in the uppermost or dominant layer of the vegetation (Jennings et al. 2009). These vegetation communities and wildlife habitats have been adapted to reflect the current conditions within the planning area. Note that not all baseline reports and documents that informed this analysis cover the full planning area or use the same classification systems; a table that explains how the different naming systems related to one another is attached as Appendix D.

a. Terrestrial Vegetation Communities and Other Land Cover Types

Morro Bay has a wide diversity of tree (hardwood and coniferous forests, oak woodlands), shrub (chaparrals, coastal scrubs), and herbaceous (grasslands) terrestrial habitat types. Additionally, some areas have been modified for agricultural uses. Remaining areas include developed and sparsely vegetated/barren land cover types. This section addresses terrestrial habitats and other land cover types not associated with water. Vegetation communities associated with aquatic and semi-aquatic areas, including riparian and wetland vegetation types and unvegetated open waters, are discussed in section 4.3.1(b).

Figure 4.3-1 Terrestrial Vegetation Communities and Other Land Cover Types



Woodlands

Conifer and hardwood forests and woodlands in the planning area are tree-dominated habitats that can support diverse wildlife populations. The following are descriptions of native or naturalized, terrestrial, tree-dominated habitats that occur in the planning area.

Coastal Oak Woodland

Coastal oak woodlands are variable in structure. Slope, soil, precipitation, moisture availability, and air temperature cause the variations in structure of coastal oak woodlands. These factors vary along the latitudinal, longitudinal, and elevational gradients over which coastal oak woodlands are found.

In the Morro Bay General Plan and LCP Update planning area, the coastal oak woodlands are dominated by coast live oak (*Quercus agrifolia*), an evergreen hardwood tree. The overstory consists of primarily coast live oak, sometimes mixed with scattered conifers. In sites with moderate moisture, the trees are dense and form a closed canopy. In drier sites, the trees are widely spaced, forming an open woodland or savannah. The understory is equally variable. In some instances, it is composed of shrubs from adjacent chaparral or coastal scrub, which forms a dense, almost impenetrable understory. More commonly, shrubs are scattered under and between trees. Where trees form a closed canopy, the understory varies from a lush cover of shade-tolerant shrubs, ferns, and herbs to sparse cover with a thick carpet of litter. When trees are scattered and form an open woodland, the understory is grassland, sometimes with scattered shrubs. Common understory species include poison oak (*Toxicodendron diversilobum*), California blackberry (*Rubus ursinus*), and annual grasses. Coastal oak woodlands are not abundant in the planning area and are primarily found outside the current city limits. These woodlands correspond to the Coast Live Oak Woodland Alliance using A Manual of California Vegetation, Second Edition (MCV2) classification system (Sawyer et al. 2009).

Coniferous Woodlands

Coniferous woodland areas in the planning area primarily consist of stands of Monterey pine (*Pinus radiata*) and Monterey cypress (*Hesperocyparis macrocarpa*). While these species are native to California, Morro Bay is outside the native range of these conifers (CDFW 2018a; Jepson Flora Project [eds.] 2018; Kral 1993; Eckenwalder 1993). These species have been widely planted and have naturalized outside their range; their presence in the planning area is primarily due to past plantings of groves and windrows, including large stands at Morro Bay State Park near Black Hill and within the golf course. Other prominent groves and windrows are near the high school, along roadways, and in some neighborhoods. The configuration of trees and composition of the understory varies. Some areas, such as the groves near Black Hill, are intermixed with coastal scrub and chaparral species; other areas have annual grassland understory or landscaping. Although these groves are not naturally occurring woodlands, the structure of these vegetation communities provide valuable wildlife habitat, including roosting and nesting habitat for many species of birds. These woodlands correspond loosely to the Monterey Pine and Monterey cypress Forest Alliances described in the MCV2 system in terms of dominant species in the canopy, but lack the typical understory and age structure, and are not naturally occurring forests (Sawyer et al. 2009; CNPS 2018a).

Eucalyptus Groves

This habitat type typically ranges from single-species thickets with little or no shrubby understory to scattered trees over a well-developed herbaceous and shrubby understory. Trees within this habitat

type are typically planted in rows for use as a wind break, and over time, young trees may recruit into spaces between the planted trees. In most cases, eucalyptus forms a dense stand with a closed canopy. Blue gum eucalyptus (*Eucalyptus globulus*) and red gum eucalyptus (*E. camaldulensis*) are the most common eucalyptus species found in these stands in the planning area. The understory of these areas tends to have extensive patches of leaf litter that limit growth of other vegetation, but understory may include species such as poison oak, and in some areas, the understory includes sparse landscape plantings. In the planning area, eucalyptus groves include linear windbreaks and broad groves. This community corresponds to the Eucalyptus Grove Woodland Semi-natural Alliance described in the MCV2 system (Sawyer et al. 2009).

Shrub-dominated Habitats

Chaparral and coastal scrub communities are prevalent in the planning area. Chaparral vegetation types are typically dominated by evergreen shrubs with stiff branches and sclerophyllous leaves, while coastal scrub vegetation types are typically dominated by semi-deciduous/drought-deciduous, aromatic shrubs with soft, pliable branches. The following are descriptions of native or naturalized terrestrial shrub-dominated habitats that occur in the planning area.

Chamise Chaparral

This habitat type ranges from nearly pure stands of chamise (*Adenostoma fasciculatum*) to mixed stands in which other chaparral species are present, but chamise is clearly dominant. Mature chamise chaparral is single-layered, generally lacking well-developed herbaceous ground cover and overstory trees. Occasionally herbs colonize openings in the chaparral. Shrub canopies frequently overlap, producing a dense canopy of interwoven branches. Fire occurs regularly in chamise-chaparral and influences habitat structure. In Morro Bay, occurrences of chamise chaparral typically correspond to the Chamise Shrubland Alliance described in the MCV2 system (Sawyer et al. 2009).

Mixed Chaparral

Mixed chaparral habitat is dominated by shrubs with thick, stiff evergreen leaves, with a mixture of species forming the shrub canopy. Shrub height and crown cover vary with age since last burn, precipitation, aspect, and soil type. At maturity, mixed chaparral typically is a dense, nearly impenetrable thicket. On sites with serpentine soils or steep slopes, shrub cover may be reduced and shrubs may be shorter. Leaf litter and standing dead material may accumulate in stands that have not burned for several decades. This type is distinguished from chamise chaparral based on the presence and relative abundance of other shrub species in addition to chamise, such as buckbrush (*Ceanothus cuneatus*), lemonade berry (*Rhus integrifolia*), toyon (*Heteromeles arbutifolia*) and bigberry manzanita (*Arctostaphylos glauca*). Mixed chaparral can correspond to multiple alliances depending upon the species composition, including, but not limited to the Buckbrush Shrubland Alliance and the Bigberry Manzanita Shrubland Alliance described in the MCV2 system (Sawyer et al. 2009).

Coastal Scrub

The coastal scrub habitat type is most similar to central coastal scrub, as described by Holland (1986). These coastal scrub communities consist of a dense canopy of aromatic shrubs adapted to drier south-facing slopes and terraces along the coastal zone of California and northern Baja California. Vegetation in the coastal scrub type is composed primarily of soft-leaved deciduous shrubs that may reach three to six feet tall and form a dense canopy over rocky or other nutrient-

poor soils, including coastal bluffs. Evergreen shrubs are often present within this habitat type. In Central California, from Monterey to Point Conception, coastal scrub occurs primarily below 2,000 feet on the ocean side of the coastal ranges.

In the planning area, dominant species include California sagebrush (*Artemisia californica*), coyote brush (*Baccharis pilularis*), and black sage (*Salvia mellifera*). Sticky monkeyflower (*Mimulus aurantiacus*) and poison oak are common associates. Grasses and herbs are interspersed, including foothill needlegrass (*Stipa lepida*) and everlasting (*Pseudognaphalium* spp.). Goldenbush (*Isocoma menziesii*) is also a common component on bluffs. In the planning area, coastal sage scrub habitats include areas consistent with the California Sagebrush Scrub Shrubland Alliance, the Black Sage Scrub Shrubland Alliance, and the Coyote Brush Scrub Shrubland Alliance described in the MCV2 system (Sawyer et al. 2009).

Coastal Dune Scrub

Coastal dune scrub communities are mature dune communities occupying the stable and more fertile soils of the interdune and backdune, compared with the unstable and low-nutrient foredune environment. Coastal dune scrub occurs on soils with higher organic matter content, higher water holding capacity, and lower salt content. These communities also have reduced reflectivity and temperature fluctuation of the soil compared to other dune communities, due to more abundant shade and vegetation litter (Holland and Keil 1995). These characteristics result in higher species diversity in these communities when compared to other dune communities.

Coastal dune scrub communities within the planning area make up the dominant habitat type of the Morro Dunes Complex, which runs north to south from Cayucos to Montana de Oro State Park. Coastal dune scrub communities are largely dominated by shrubby vegetation. Common subshrub and shrub species of coastal dune scrub in Morro Bay area include California sagebrush, coyote brush, mock heather (*Ericameria ericoides*), coastal buckwheat (*Eriogonum parvifolium*), coastal golden yarrow (*Eriophyllum staechadifolium*), golden bush, deerweed (*Acmispon glaber*), coastal silver lupine (*Lupinus chamissonis*), Blochman's groundsel (*Senecio blochmaniae*) and black sage. In addition to these shrubs and subshrubs, many native herbaceous species are present in this habitat type and include, but are not limited to, California aster (*Corethrogyne filaginifolia*), Blochman's leafy daisy (*Erigeron blochmaniae*), wallflower (*Erysimum suffrutescens*), California poppy (*Eschscholzia californica*), and horkelia (*Horkelia cuneata*) (Sims 2010; City of Morro Bay 2018). This community most closely resembles the *Lupinus chamissonis* - *Ericameria ericoides* Shrubland Alliance, as described in the MCV2 (Sawyer et al. 2009).

Coastal dunes in the planning area contains regions of the federally threatened western snowy plover (*Charadrius alexandrinus nivosus*) and federally endangered Morro shoulderband snail (*Helminthoglypta walkeriana*) critical habitats, and provides abundant nesting and foraging habitat for other avian and special status wildlife species. This community also provides suitable habitat for many special status plant species including dune larkspur (*Delphinium parryi* ssp. *blochmaniae*), Blochman's groundsel, and Blochman's leafy daisy (City of Morro Bay 2018).

Herbaceous Habitats

Terrestrial herbaceous vegetation communities in the planning area include foredunes and grasslands. These habitats are generally composed of areas dominated by grasses or herbaceous (nonwoody) species. The following are descriptions of native or naturalized herb-dominated habitats that occur in the planning area.

Foredune

The foredune natural community occurs at the edge of the coastal strand, where sand begins to accumulate and stabilize, with increased plant cover and diversity. This community occurs between the coastal strand and the backdune/dune scrub community. The predominant vegetation is dune mat, a sensitive natural community dominated by red sand verbena (*Abronia maritima*), beach sand verbena (*Abronia umbellata*) and beach bur (*Ambrosia chamissonis*). Other common species include yarrow (*Achillea millefolium*), coastal sagewort (*Artemisia pycnocephala*), spearscales (*Atriplex* spp.), sea rocket (*Cakile maritima*), beach primrose (*Camissonia cheiranthifolia*), seaside daisy (*Erigeron glaucus*), and seaside golden yarrow. Foredune communities in Morro Bay are most closely associated with the Beach Bursage – Sand Verbena – Sea Rocket Association of the Dune Mat Herbaceous Alliance, as described in the MCV2 (Sawyer et al. 2009).

Most of this community overlaps with the western snowy plover critical habitat and provides essential habitat for other special status species, such as legless lizard (*Anniella pulchra*). The foredune also contains suitable habitat for special status plant species such as beach spectaclepod (*Dithyrea maritima*), red sand verbena, and coast woolly-heads (*Nemacaulis denudata* var. *denudata*). This community also provides abundant foraging habitat for many special status wildlife species in the coastal zone.

Annual Grasslands

This habitat type consists primarily of non-native annual grasses and a mixture of native and non-native herbs, and typically lacks shrub or tree cover. The physical characteristics and species composition of annual grasslands are variable. Common grass species in Morro Bay include wild oats (*Avena* spp.), soft chess brome (*Bromus hordeaceus*), ripgut brome (*B. diandrus*), and red brome (*B. madritensis*). Common herb species can include non-native filarees (*Erodium* spp.), and bur clover (*Medicago polymorpha*) as well occasional patches of wildflowers, including California poppy and succulent lupine (*Lupinus succulentus*). Annual grasslands can correspond to multiple alliances depending upon the species composition, and in the planning area, may include, but are not limited, to Wild Oat Semi-Natural Stands and Brome (ripgut, red) – Purple False Brome Semi-Natural Stands as described in the MCV2 (Sawyer et al. 2009). Some grasslands in the planning area within and around the city are utilized for livestock grazing, and are differentiated from pasture vegetation types based on management and species composition. Annual grasslands are not abundant within the current city limits but are more common in the portions of the planning area surrounding the city.

Perennial Grassland

Perennial grassland habitats contain native perennial grasses as a consistent component of a grass-dominated herbaceous vegetation community. Many of these habitats have been invaded by non-native annual grasses and herbs statewide, and annual grasses are frequently a common component of these communities. In the planning area, perennial grassland habitats have the characteristic presence of perennial grass species such as California oatgrass (*Danthonia californica*), purple needlegrass (*Stipa pulchra*), and meadow barley (*Hordeum brachyantherum*). Annual grasses are typically also present at moderate to high cover. Native annual and perennial wildflowers are also a typical component. Perennial grassland habitat typically occurs in deeper soils than scrub communities. Perennial grassland can correspond to multiple alliances depending upon the species composition. These alliances can include, but are not limited to, the California Oatgrass Herbaceous Alliance and Purple Needlegrass Herbaceous Alliance as described in the MCV2 (Sawyer et al. 2009).

Perennial grasslands are not abundant within current city limits, but are more common in the portions of the planning area surrounding the city.

Agricultural Land Cover Types

Agricultural Fields

Vegetation in this habitat includes a variety of sizes, shapes, and growing patterns. Most irrigated row and field crops are grown in rows. Some crops may form 100 percent canopy at some times of year while others may have significant bare areas between rows. Many crops are annuals, such as lettuces, peas, and cole crops, while others, such as asparagus and berries, as well as tree crops, such as oranges and avocados, are perennial. Annuals are usually planted in winter or spring and harvested one or two seasons later. However, they may be planted in rotation with other irrigated crops year-round. Winter wheat or barley may sometimes be planted after the harvest of a previous crop in the fall, dry farmed (during the wet winter and early spring months), and then harvested in the late spring. Cultivated agricultural lands in the planning area are primarily used to grow peas, peppers, beans, avocados, and dry farmed crops.

Pasture

Managed pasture vegetation is typically a mix of perennial grasses and legumes that completely cover the soil. Structurally, this habitat type resembles annual grassland habitats, and in this document this type is differentiated from annual grassland based on evident active management of the vegetation through practices such as irrigation, seeding, and high stocking rates, as well as differences in species composition. Vegetation height varies, according to season and livestock stocking levels. The mix of grasses and legumes varies according to management practices such as seed mixture, fertilization, soil type, irrigation, weed control, and the type of livestock on the pasture.

Sparsely/Non-vegetated Habitats and Developed Areas

Developed areas are abundant in the city, and uncommon in the surrounding planning area. Species that occur in these developed areas are typically adapted to human caused disturbance and/or composed of ornamental species. Additionally, some barren or sparsely vegetated areas are present. These include both natural features, such as beach and rock outcrop, and areas that are bare due to past disturbance. The following are descriptions of developed and sparsely/non-vegetated habitats that occur within the planning area.

Coastal Strand

The coastal strand community is present in the regions of unstable sand on beaches immediately adjacent to the ocean. Due to the harsh environmental conditions such as salt spray, tidal inundation, and high winds, these communities typically have little to no vascular vegetation (Sims 2010). An accumulation of uprooted algae, driftwood and other debris is common in this community, which extends between the approximate low tide line of the open ocean and the relatively more stabilized foredune. The coastal strand also provides essential foraging habitat and prey base for many coastal avian wildlife, including the threatened western snowy plover, and other wildlife species in the area. It is also an important passive recreational area. This land cover type is not classified in the MCV2 system due to lack of vegetation.

Morro Rock

Morro Rock is located at the mouth of the bay and is the northernmost visible volcanic plug in a chain of plugs extending from Islay Hill in San Luis Obispo. The ecological preserve on Morro Rock serves as a nesting site for peregrine falcons. The rock is sparsely vegetated; where vegetation is present, cover is sparse.

Other Barren Areas

This land cover type is defined by the absence of vegetation. Any habitat with less than 2 percent total vegetation cover and less than 10 percent cover by tree or shrub species is defined as barren. Structure and composition of barren habitats are largely determined by the region of the State as well as surrounding environment. Examples of barren habitats include areas of exposed parent rock (rock outcrops) and rocky slopes. Due to the inadequacies in nutrient and water content throughout thin layers of soil and the presence of solid or densely packed rock that forms an impenetrable layer for plant roots to grow, rock outcrops often lack much vegetation. In Morro Bay, rock outcrops often coincide with serpentine soils, which further limit certain plant species growth (Sims 2010).

Urban

This land cover type is a predominately man-made habitat comprising residential, commercial, and industrial developed areas, with large developed areas lacking vegetation. Plant species within urban habitats are typically ornamental and other nonnative invasive plant species.

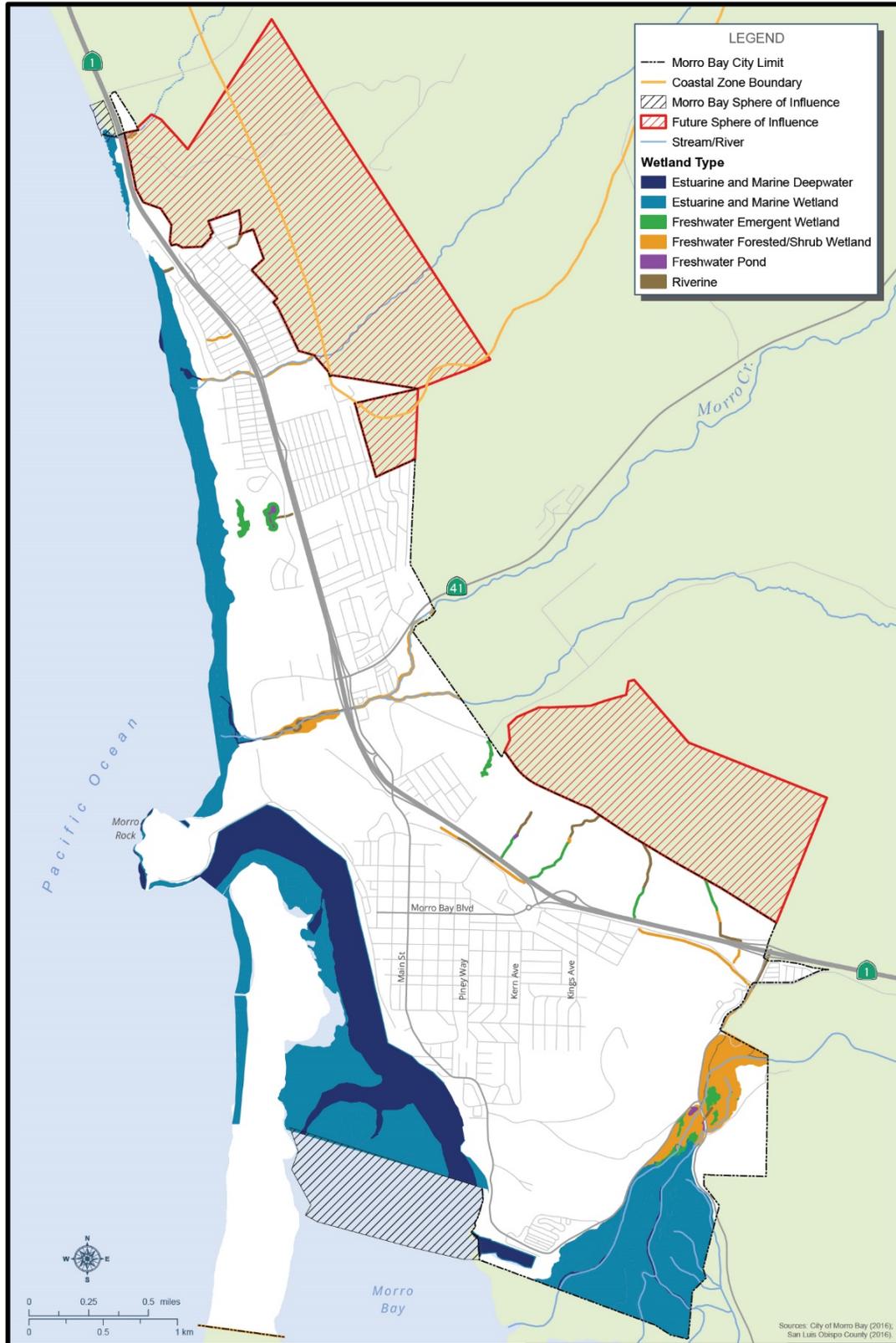
b. Aquatic and Semi-Aquatic Habitats

The planning area contains a wide diversity of aquatic and semi-aquatic vegetation communities and land cover types. The following sections describe vegetation communities and land cover types within or closely associated with aquatic and semi-aquatic areas. Descriptions are summarized from previous baseline reports and published datasets, including the vegetation datasets discussed in Section 4.3.1(a) such as the CWHR (CDFW 2014), the Community Baseline Assessment for the General Plan and LCP Update (Appendix B), and the ESHA Report (Appendix D), as well as datasets focused specifically on drainages, wetlands and riparian areas, including the National Wetlands Inventory (NWI; USFWS 2018a) and the National Hydrography Dataset (USGS 2018). The NWI and National Hydrography Dataset information for the planning area are depicted in Figure 4.3-2. Drainages, wetlands, riparian communities and open waters in the planning area are also depicted in broad terms in Figure 4.3-1.

Watershed

The planning area is within two watersheds, the Morro Bay Watershed in the southern portion of the planning area, and the Cayucos Creek-Whale Rock Watershed in the northern portion of the planning area (Resource Conservation Districts of San Luis Obispo County [RCDs] 2014). The Morro Bay Watershed covers 46,598 acres, and the mouth of the watershed falls within the planning area. Most of the watershed is used for open space, agriculture, and recreation. Approximately 10 percent of the watershed is urban. Waters in this watershed drain into the Chorro and Los Osos creeks, which drain into the Morro Bay Estuary, Morro Bay, and then into Estero Bay in the Pacific Ocean. The Chorro Creek subwatershed accounts for about 60 percent of the total land area in this watershed and drains into the estuary (RCDs 2014).

Figure 4.3-2 National Wetlands Inventory & National Hydrography Dataset for the Planning Area



The Cayucos Creek-Whale Rock Watershed covers 54,974 acres, a portion of which drains into Morro Creek, which discharges into the Pacific Ocean (RCDs 2014). Several additional subwatersheds also drain to the Pacific Ocean. Most of the watershed is used for open space and agriculture. Approximately 6 percent of the watershed is urban.

Drainages, Riparian Areas, Wetlands, and Other Waters

Several creeks and their tributaries flow through the city and terminate into the Morro Bay Estuary or directly into the Pacific Ocean within the City's Coastal Zone. Willow riparian woodland and willow scrub often occurs along both perennial and intermittent streams. Some of these areas overlap portions of federally designated critical habitat for California red-legged frog (*Rana draytonii*), steelhead (*Oncorhynchus mykiss*) south-central California Coast distinct population segment (DPS), and tidewater goby (*Eucyclogobius newberryi*). The multi-layered riparian vegetation, available water supply, and vegetative cover make these areas essential habitat for several special status species. Smaller streams may lack riparian canopy. Wetlands are regarded as important biological resources both because of their rarity and because they serve a variety of functional values. Several types of wetlands exist in the city and planning area, including but not limited to freshwater marsh, springs and seeps, portions of lakes, ponds, rivers and streams, coastal salt marsh, and backdune wetlands.

Note that the NWI uses a different classification system for aquatic and semi-aquatic habitats compared with vegetation classification systems. The descriptions below and tables in Appendix D describe the different classifications that may apply to each aquatic and semi-aquatic habitat type presented below.

Rivers and Streams

Rivers and streams in the planning area include ephemeral and intermittent streams and dry washes, which are common in the Coast Range. Morro Bay supports numerous creeks and drainages. Drainages that contain water year-round or experience periodic filling and draining provide foraging habitat, breeding habitat, and movement habitat for a variety of aquatic animals and a number of special-status species. The NWI classification system treats rivers and streams as Riverine systems. Where wetland and riparian vegetation are present, the NWI classification system differentiates these areas as Palustrine and Lacustrine types, which are discussed in more detail in subsequent sections below. Drainages do not correspond to a specific vegetation alliance in the MCV2 system (Sawyer et al. 2009).

Chorro Creek, Morro Creek, Alva Paul Creek, and Toro Creek, as well as numerous intermittent and ephemeral streams, are located within the planning area. Morro Creek, the largest creek in the City's Coastal Zone, terminates into the ocean, and includes designated critical habitat for the federally threatened steelhead. Morro Creek and Toro Creek form seasonal sand bars at the mouth of the streams that block direct flow to the sea during summer months, creating a lagoon between the stream mouth and the Pacific Ocean. Waterfowl and shorebirds use temporary lagoons as a migratory stop-over and may also use these habitats during breeding season. The lagoons also provide potential habitat for a number of fish species, including the federally endangered tidewater goby. These and other creeks and waterways provide suitable habitat for fish, bird and plant species. Small streams may flow for only a few days following storms, but provide groundwater recharge, seasonally wet habitat, and also convey water, nutrients, and potential pollutants to the bay and the ocean, thus influencing quality of downstream receiving waters.

Note that some segments of stream features adjacent to SR 1 in the planning area were realigned and/or channelized in the past. Additionally, a number of stormwater channels convey runoff from roads and developed areas during storms. These features are not natural watercourses but some features do convey water into natural wetlands and waterways. These modified waterways, which periodically or permanently contain water and support hydrophytic vegetation or hydric soils, may also be considered wetlands based on the California Coastal Commission definition of a wetland (14 California Code of Regulations [CCR] Section 13577[b]).

Riparian Thickets and Woodlands

Riparian thickets and woodlands generally grow immediately adjacent to freshwater bodies, forming a vegetated corridor along the stream. Riparian areas often occur along both perennial and intermittent streams, freshwater wetlands, and other waterways within the planning area. Multi-layered riparian vegetation, available water supply, and vegetative cover make these areas essential habitat for wildlife. Some of these areas overlap portions of California red-legged frog, steelhead, and tidewater goby critical habitat. Riparian habitats are present along drainages and form wider bands in areas with lower velocity flows, floodplains, and gentle topography.

Riparian thickets and woodlands take multiple forms in the planning area. Within the existing city limits, riparian thickets and woodlands are primarily willow woodland and willow scrub communities, dominated by shrubs, particularly arroyo willow (*Salix lasiolepis*) and mulefat (*Baccharis salicifolia*). Other common species found in riparian thickets include coyote brush, poison oak, and dock (*Rumex* spp.). In other parts of the planning area, larger trees form an upper canopy, typically dominated by cottonwoods (*Populus* spp.) and sycamore (*Platanus racemosa*), with an understory shrub layer typically consisting of willows (*Salix* spp.), mulefat, poison oak, and herbaceous species. Note that willow stands are also found occasionally as components of back dune wetland complexes where they are not directly associated with streams. Riparian thickets and woodlands can correspond to multiple alliances depending upon the species composition. These alliances can include, but are not limited to, the Arroyo Willow Thickets Shrubland Alliance, the California Sycamore Woodlands Alliance, and the Black Cottonwood Forest Alliance as described in the MCV2 (Sawyer et al. 2009). The NWI categorizes such riparian areas as Palustrine Scrub-Shrub and Palustrine Forested types.

Wetlands

Wetlands are regarded as important biological resources both because of their rarity and because of the ecosystem and water quality services they provide. Some of these areas contain sensitive natural communities or provide habitat for sensitive species including the federally and state endangered salt marsh bird's-beak (*Chloropyron maritimum* ssp. *maritimum*). Wetland areas occur in regions that are periodically or permanently covered by shallow water, are dominated by hydrophytic vegetation, or have soils that are predominantly hydric.

Several types of naturally occurring wetlands exist in the city and planning area, including freshwater marshes, springs and seeps, and vegetated portions of ponds, rivers and streams, as well coastal salt marsh and estuary. As noted above, wetland areas can also occur within storm-water outfalls and urban run-off channels if those areas support periodic or permanent shallow or flowing water that can support hydrophytic vegetation or hydric soils. Three wetland types occur within the city and planning area and are discussed in more detail below.

ESTUARINE WETLANDS/COASTAL SALT MARSH AND PICKLEWEED MAT

Estuarine systems are composed of tidal habitats and adjacent tidal wetlands that are influenced by water runoff from, and often semi-enclosed by, land. They are located along low-energy coastlines and have variable salinity. Portions of estuarine systems are typically vegetated with emergent coastal salt marsh species. Coastal salt marshes occur in bays and other areas protected from open ocean where there is a mixing of freshwater from streams and springs with salt water from the ocean. They intergrade with the unvegetated portion of the estuarine system, and are subject to periodic inundation (Holland and Keil 1995). Coastal salt marshes occur in the Morro Bay Estuary and along the margins of Morro Bay. Species diversity within the coastal salt marsh tends to be relatively lower than other wetland communities because fewer species can tolerate the high salinity and fluctuations of water height. Plants of the coast salt marsh are mostly herbaceous perennials that are adapted to growing in saline environments, and generally short-statured with reduced leaves. Many species of this community also have tissues with many air cavities, which allow them to respire in environments with low oxygen, and salt glands that allow excess salts to be excreted. Other species have cells that contain high concentrations of dissolved solutes, allowing them to absorb water without osmotic imbalances (Holland and Keil 1995).

The delta at the mouths of Chorro and Los Osos Creeks is primarily vegetated with pickleweed (*Salicornia pacifica*; also called *Sarcocornia pacifica* in some references) mat wetland. These wetlands are tidally influenced, and soils are saline due to the tidal waters. Pickleweed mat marsh is the dominant natural community where Chorro Creek terminates into Morro Bay Estuary. The marsh is influenced by seasonal variations of fresh, brackish, and saline water and the level of the water table that occurs close to or at the surface for at least part of the growing season.

Other brackish and salt marsh habitats are present, including areas that provide suitable habitat for the endangered California seablite (*Suaeda californica*), a vascular plant that colonizes the upper portion of the intertidal zone and areas near the high tide line. Additionally, coastal brackish marsh includes areas at mouths of streams where salt marsh bulrush and other salt-tolerant emergent hydrophytes are dominant, as well as potentially suitable habitat for another listed plant, salt marsh bird's beak. Other common species in the coastal salt marshes in the planning area include California saltbrush (*Atriplex californica*), spearscale (*A. triangularis*), slough sedge (*Carex obnupta*), saltgrass (*Distichlis spicata*), giant rush (*Juncus acutus*), creeping rush (*J. lesueurii*), sea lavender (*Limonium californicum*), coastal silverleaf (*Potentilla anserina*), American three-square (*Schoenoplectus americanus*), common three-square (*S. pungens*), and arrowgrass (*Triglochin concinna*) (Sims 2010).

Coastal marshes provide essential habitat for many species, including important foraging and breeding habitat for avian and aquatic species, as well as suitable habitat for special status plant species, as mentioned above, including the federally and State endangered salt marsh bird's-beak (*Chloropyron maritimum* ssp. *maritimum*) and federally endangered California seablite.

These wetlands can correspond to multiple alliances depending upon the species composition. These alliances can include, but are not limited to, the Pickleweed Mats Herbaceous Alliance and American bulrush marsh, as defined by Sawyer et al. (2009). The NWI classifies these types as estuarine and marine wetlands. The CWHR groups these wetlands as saline emergent wetlands (CDFW 2014).

FRESHWATER EMERGENT WETLANDS

Multiple freshwater emergent wetlands are located within the planning area. These areas are dominated by wetland vegetation such as dock (*Rumex* spp.), brownheaded rush (*Juncus phaeocephalus*), and tule (*Schoenoplectus acutus*), growing in areas fed by fresh, nonsaline water. Freshwater emergent wetlands are found both at springs and seasonal drainages and provide habitat for avian and special status plant species. Some of these wetlands also include areas of California red-legged frog critical habitat. Wetlands that occur in a mosaic of cattails (*Typha* spp.), California bulrush (*Schoenoplectus californicus*), and willows interspersed with open water patches around and within ponds is also included in this type.

These wetlands can correspond to multiple alliances depending upon the species composition. These alliances can include, but are not limited to, the Iris-leaf Rush Seeps Provisional Herbaceous Alliance (California Native Plant Society [CNPS] 2018a), Hardstem Bulrush Marsh, California bulrush marsh, and Cattail Marsh Herbaceous Alliances as defined by Sawyer et al. (2009). The NWI classifies these types as palustrine emergent wetlands. The CWHR groups these wetlands as freshwater emergent wetlands.

DUNE WETLANDS

Dune wetlands occur under two general scenarios – they often occur where fresh water from rivers or streams accumulates behind a sandbar at the mouth of a coastal stream, and they can also occur where perched groundwater accumulates in low-lying backdune areas, often due to lenses within the dune that restrict water movement, not directly tied to the mouth of a river or stream. The soils in these areas have slow drainage and form mesic environments with nutrient rich soils and high potential to support wetland vegetation. These communities are found where Alva Paul Creek enters the coastal natural communities within the City's Coastal Zone, and in low lying areas in the backdune of the dune complex along the coast. Dune wetlands are dominated by sand dune sedge (*Carex pansa*), spiny rush (*Juncus acutus*), and brownheaded rush, with inclusion of arroyo willow and understory of dock, and coastal silverweed. These dune wetlands contain suitable habitat for special status plant species and provide nesting, foraging, and refuge for wildlife species.

These wetlands can correspond to multiple alliances depending upon the species composition. These alliances can include, but are not limited to, the Iris-leaf Rush Seeps Provisional Herbaceous Alliance (CNPS 2018a) and Sand Dune Sedge Swaths Herbaceous Alliance as defined by Sawyer et al. (2009). The NWI classifies these types as palustrine emergent wetlands. The CWHR groups these wetlands as freshwater emergent wetlands.

Open Waters

Some aquatic habitats are not vegetated or are only very sparsely vegetated. These include the open water portions of freshwater ponds, as well as tidal channels, bays and mudflats.

FRESHWATER PONDS

Freshwater ponds typically include open water in the center of the pond, and vegetative cover is commonly present along the edges and may include trees, shrubs, emergent herbaceous plants, mosses, and/or lichens. Freshwater ponds can be man-made or natural and typically consist of an area of standing water with variable amounts of shoreline. Ponds are present within the city and the surrounding pond areas. Freshwater ponds provide important breeding habitat for special-status

species such as California red-legged frog and western pond turtle (*Emys marmorata*). The NWI classifies these types as palustrine or lacustrine habitats, depending on size.

ESTUARINE/MUDFLATS, TIDAL CHANNELS, AND SHALLOW BAY, AND MARINE OPEN WATERS

Estuarine areas that are vegetated with emergent estuarine/coastal salt marsh species were previously discussed. Unvegetated tidal channels and mudflats are also part of the estuarine system, as are shallow bay areas suitable for eelgrass. The shallows of Morro Bay and the associated estuary consist of a varying degree of brackish water. These waters are a mixture of tidal waters of the Pacific Ocean and freshwaters from surrounding watersheds. Brackish waters also contain areas of steelhead designated critical habitats near mouths of certain creeks. Salinity increases with proximity to the open ocean and distance from the freshwater inputs. These waters provide nesting and foraging habitat for many bird species in the area, as well as abundant fish habitat. Open water areas and shallows provide suitable habitat for marine mammals such as otters and seals.

At the mouth of the major streams, larger tidal channels are evident and interspersed with coastal salt marsh. The majority of these channels have non-vegetated beds and are largely exposed at low tide, allowing foraging habitat for coastal bird species and other wildlife. Mudflat habitats along coastlines occur where the shore is protected from waves and vegetation is not abundant. In Morro Bay, mudflats are present in some parts of the estuary. The gentle movement of salt water inland and fresh water outward into the estuary carries fine sediments, which settle out as mud. At low tide the intertidal mud is exposed as a mudflat leaving water only in permanent channels. At high tide the mudflat is covered with water. The back bay at Morro Bay is a large area of mudflat and coastal salt marsh habitat. If mud has built up to near or above the high tide line, it may support sparse salt marsh habitat. Therefore, herbaceous species common to the coastal salt marsh habitat in Morro Bay are also likely to occur in the mudflat habitats at very low cover. The shallow waters of Morro Bay support declining populations of eelgrass, and provide abundant foraging habitat for coastal bird species. The eelgrass beds are essential nurseries and foraging habitat for fish and crustaceans, but extent of eelgrass in Morro Bay has declined substantially in the last decade.

Marine habitats are also present in the deep channel and along the margin of the coastal strand. These areas are generally associated with open ocean and have salinities exceeding 30 parts per thousand with little or no dilution except at the immediate mouths of estuaries and freshwater streams. The NWI categorizes these types as estuarine and marine systems.

c. Sensitive Natural Communities, ESHA, and Critical Habitats

Definitions

Sensitive natural communities are vegetation types, associations, or sub-associations that support concentrations of special status plant and/or wildlife species, are of relatively limited distribution, and/or are of particular value to wildlife. According to the CDFW Vegetation Program, Alliances with State ranks of S1-S3 and certain other specified associations are considered imperiled, and thus, potentially of special concern. Natural communities with these ranks are generally addressed during CEQA environmental review with compensatory mitigation prescribed for impacts as applicable. Riparian areas are also considered sensitive natural communities by CDFW.

Similarly, the California Coastal Act Section 30107.5 of the CCR, discusses sensitive natural communities as Environmentally Sensitive Areas, which include any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem, and which could be easily disturbed or degraded by human activities and

developments. The California Coastal Act criteria for determining whether a vegetation community qualifies as an Environmentally Sensitive Habitat Area (ESHA) are based upon the habitat's ecological importance, including the rarity or function of the habitat. Many of the vegetation communities that meet CDFW's definition as sensitive are also ESHAs.

Critical habitat is a term used in the federal Endangered Species Act (ESA) and defined as a specific geographic area (or areas) that contain features essential for the conservation of a threatened or endangered species and that may require special management and protection. Critical habitat may include an area that is not currently occupied by the species but that will be needed for its recovery. These areas provide notice to the public and land managers of the importance of these areas to the conservation of a listed species. Special protections and/or restrictions are possible in these areas when Federal funding, permits, licenses, authorizations, or actions occur or are required.

Sensitive Habitats within the Planning Area

In coastal areas, sensitive natural communities and riparian areas as defined by CDFW are also typically considered to be ESHAs. Within the existing city limits, a recent data review and mapping effort updated the current extent and approximate locations of ESHA resources within the coastal zone (refer to Appendix D). This review identified ESHAs based on presence and habitat needs of special status plants or animals, the presence of a sensitive habitat considered to be imperiled, and/or presence of streams, wetlands, and riparian areas consistent with coastal definitions of wetlands. Many ESHAs are vegetation communities that are included in the CDFW sensitive natural community list; however, ESHA also includes areas with breeding, roosting, or other essential habitat for protected species even when the vegetation itself is not sensitive. The ESHA resources determined to occur within the existing city limits within the planning area are broadly categorized into three groups, with finer distinctions made within each group

- Aquatic resources and wetland habitats
 - Rivers and Streams
 - Creeks and Tributaries
 - Willow Woodland and Willow Scrub
 - Shallow Bay, Mudflat and Eelgrass Habitat
 - Tidal Channels
 - Estuarine Wetlands, Coastal Salt Marsh, and Pickleweed Mat
 - Dune wetlands
 - Freshwater Emergent Wetlands
- Other Sensitive Natural Communities
 - Foredune
 - Backdune and Stabilized Dune with Dune Scrub
 - Coastal Bluff Scrub
 - Black Hill Natural Area
- Other Breeding and Overwintering Sites
 - Morro Rock
 - Other roosting and overwintering sites

Figure 4.3-3 depicts locations of ESHA resources. For more complete descriptions of the ESHA resources, see the pertinent vegetation community descriptions in Sections 4.3.1(a) and 4.3.1(b) above and the ESHA report contained in Appendix D.

Some of the planning area outside the existing city limits falls within the coastal zone, and similar ESHA communities to those inside city limits are present. Additional sensitive natural communities that are not abundant within city limits may also be present in the planning areas outside city limits, including perennial grasslands and other types of riparian communities and wetlands.

For portions of the planning area outside the coastal zone, ESHA designations would not apply. Sensitive natural communities in these areas include drainages, riparian and wetland communities, and could also include unique chaparral alliances and perennial grasslands consistent with CDFW's definitions of a sensitive natural community.

The USFWS Critical Habitat Mapper (2018c) and NMFS West Coast Critical Habitat website (2018) depict designated critical habitats in the planning area. Final designated critical habitats for the following species occur within the planning area: steelhead, California red-legged frog, Morro shoulderband snail, tidewater goby, Pacific leatherback sea turtle (*Dermochelys coriacea*), and western snowy plover (refer to Figure 4.3-4). Records for steelhead, California red-legged frog, Morro shoulderband snail, tidewater goby, and western snowy plover are reported from the Morro Bay coastal zone. Steelhead and California red-legged frog are also expected in upstream portions of the planning area outside the coastal zone. No federally designated critical habitats for plant species occur in the planning area.

Note that critical habitat for Pacific leatherback sea turtle along the Pacific coast, including the vicinity of Morro Bay, was designated on the basis of prey base. Pacific leatherback are specialists that consume jellyfish, including brown sea nettle (*Chrysaora fuscescens*) and other scyphomedusae of the order Semaestomeae, such as moon jellies (*Aurelia labiata*) (NMFS 2012a, 2012b). Pacific leatherbacks are not known or expected to breed on beaches in Morro Bay. Additionally, Pacific leatherbacks do not typically pursue prey farther than the mean lower low water and thus are not expected from shallow water habitats of the immediate shore of the Morro Bay coastal zone, including the intertidal zone. Pacific leatherback could occur in the marine environment offshore, as they have been reported foraging in the deeper coastal waters of Estero Bay marine environment, based on telemetry data, fishery interaction data, and aerial surveys (NMFS 2012b).

d. Special Status Species

Federal, State, and local authorities under a variety of legislative acts share regulatory authority over biological resources. For the purpose of this EIR, special status species are those plants and animals listed, proposed for listing, or candidates for listing as threatened or endangered by the U.S. Fish and Wildlife Service (USFWS) under the ESA; those listed or proposed for listing as rare, threatened, or endangered by the CDFW under the California Endangered Species Act (CESA); and animals designated as "Species of Special Concern" or "Fully Protected" by the CDFW, and those locally designated as having special status, including monarch butterfly (*Danaus plexippus*).

Species of Special Concern (SSC) is a category used by the CDFW for those species that are considered indicators of regional habitat changes or are considered to be potential future protected species. Species of Special Concern do not have any special legal status except that which may be afforded by the California Fish and Game Code. The SSC category is intended by the CDFW for use as a management tool to include these species into special consideration when decisions are made

Figure 4.3-3 ESHAs within Current City Limits

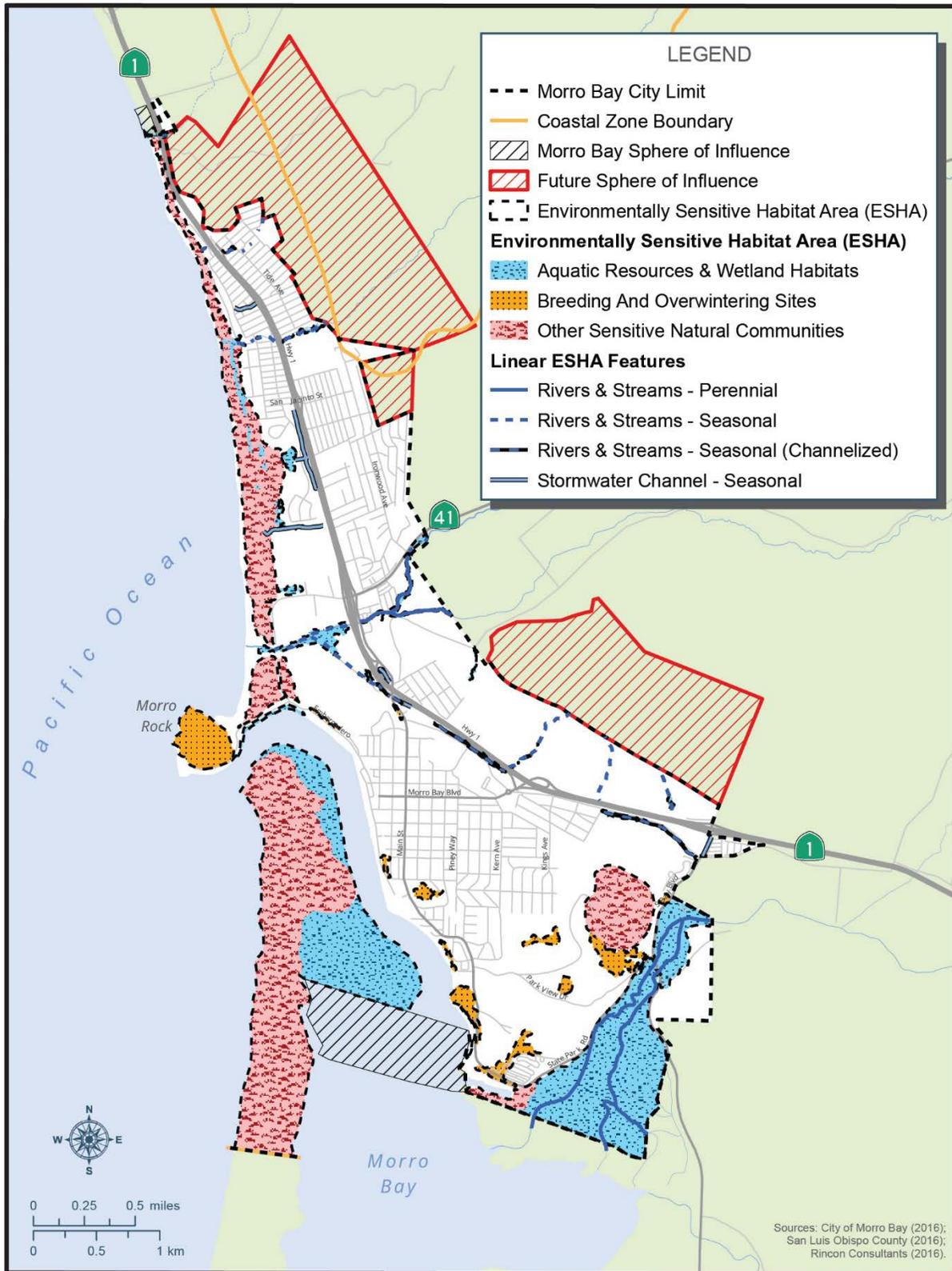
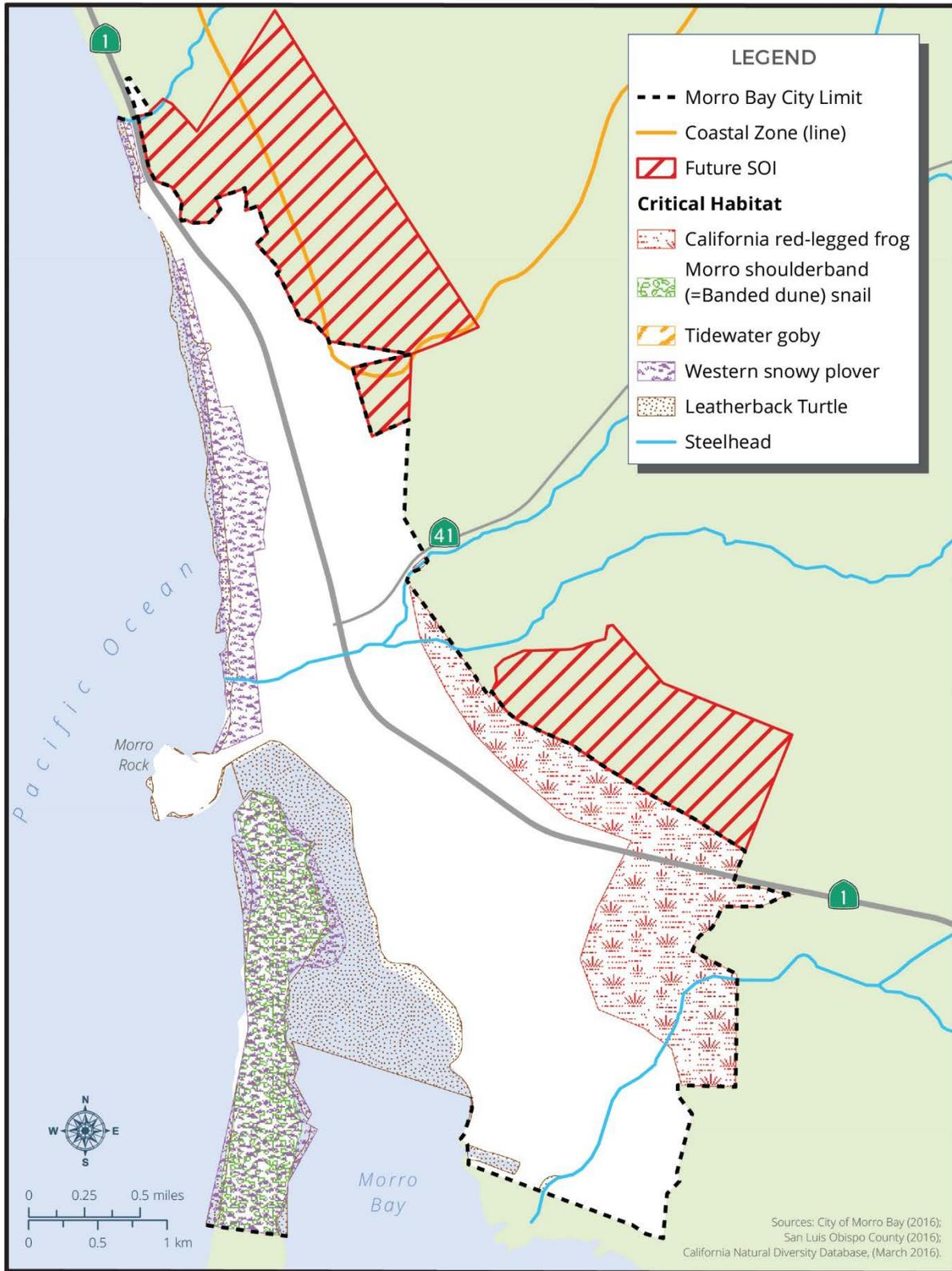


Figure 4.3-4 Critical Habitats in the Planning Area



concerning the development of natural lands, and these species are considered sensitive under the CEQA Appendix G questions.

Additionally, special status plants with California Rare Plant Rank (CRPR) of 1 and 2 are special status species. CDFW standards state that plants with a CRPR 1A, 1B, 2A, and 2B may meet definitions of rare or endangered under *CEQA Guidelines* Sections 15380 (b) and (d) (CDFW 2018b). By CNPS standards, the plants of CRPR Ranks 1A, 1B, 2A and 2B may meet the definitions of Sections 2062 and 2067 (CESA) of the California Fish and Game Code, and are eligible for State listing, thus should be considered under *CEQA Guidelines* Section 15380. In some circumstances, plants with CRPR 3 or 4 may also warrant consideration under *CEQA Guidelines* Section 15380, if cumulative impacts to such plants are significant enough to affect their overall rarity (CDFW 2018b).

Morro Bay is home to several species protected by federal and State agencies, and the planning area surrounding the city also supports suitable habitat for many special status species. The CNDDDB (CDFW 2018c), CNPS Online Inventory of Rare and Endangered Plants (2018b), and USFWS Information for Planning and Consultation tool (IPaC; USFWS 2018b) together list 88 special status species known or with potential to occur within the planning area. Of these, 52 are plant species and 36 are wildlife species.

Special Status Plants

Based on the database and literature review, 52 special status plant species are known to occur, or have potential to occur, within the planning area. Many of these species are associated with ESHAs, or with sensitive natural communities in areas outside the coastal zone. Table 4.3-1 lists these special status plant species, their listing status, and their CRPR.

Table 4.3-1 Special Status Plant Species Documented in or with the Potential to Occur in Morro Bay

Scientific Name	Common Name	FESA/CESA Status	CRPR
<i>Agrostis hooveri</i>	Hoover's bent grass	-/-	1B.2
<i>Arctostaphylos cruzensis</i>	Arroyo de la Cruz manzanita	-/-	1B.2
<i>Arctostaphylos luciana</i>	Santa Lucia manzanita	-/-	1B.2
<i>Arctostaphylos morroensis</i>	Morro manzanita	FT/-	1B.1
<i>Arctostaphylos osoensis</i>	Oso manzanita	-/-	1B.2
<i>Arctostaphylos pechoensis</i>	Pecho manzanita	-/-	1B.2
<i>Arctostaphylos pilosula</i>	Santa Margarita manzanita	-/-	1B.2
<i>Arctostaphylos tomentosa</i> ssp. <i>daciticola</i>	dacite manzanita	-/-	1B.1
<i>Arenaria paludicola</i>	marsh sandwort	FE/SE	1B.1
<i>Astragalus didymocarpus</i> var. <i>milesianus</i>	Miles' milk-vetch	-/-	1B.2
<i>Bryoria spiralifera</i>	twisted horsehair lichen	-/-	1B.1
<i>Calochortus obispoensis</i>	San Luis mariposa lily	-/-	1B.2
<i>Carex obispoensis</i>	San Luis Obispo sedge	-/-	1B.2
<i>Castilleja densiflora</i> var. <i>obispoensis</i>	San Luis Obispo owl's-clover	-/-	1B.2
<i>Centromadia parryi</i> ssp. <i>congdonii</i>	Congdon's tarplant	-/-	1B.1
<i>Chenopodium littoreum</i>	coastal goosefoot	-/-	1B.2
<i>Chlorogalum pomeridianum</i> var. <i>minus</i>	dwarf soaproot	-/-	1B.2

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Scientific Name	Common Name	FESA/CESA Status	CRPR
<i>Chloropyron maritimum</i> ssp. <i>maritimum</i> (= <i>Cordylanthus maritimus</i> ssp. <i>maritimus</i>)	salt marsh bird's-beak	FE/SE	1B.2
<i>Chorizanthe breweri</i>	Brewer's spineflower	-/-	1B.3
<i>Cirsium occidentale</i> var. <i>compactum</i>	compact cobwebby thistle	-/-	1B.2
<i>Cirsium fontinale</i> var. <i>obispoense</i>	San Luis Obispo fountain thistle	FE/SE	1B.2
<i>Cirsium rathophilum</i>	Surf thistle	-/ST	1B.2
<i>Cladonia firma</i>	popcorn lichen	-/-	2B.1
<i>Delphinium parryi</i> ssp. <i>blochmaniae</i>	Dune larkspur	-/-	1B.2
<i>Delphinium parryi</i> ssp. <i>eastwoodiae</i>	Eastwood's larkspur	-/-	1B.2
<i>Delphinium umbraculorum</i>	umbrella larkspur	-/-	1B.3
<i>Dithyrea maritima</i>	beach spectaclepod	-/ST	1B.1
<i>Dudleya abramsii</i> ssp. <i>bettinae</i>	Betty's dudleya	-/-	1B.2
<i>Dudleya abramsii</i> ssp. <i>murina</i>	mouse-gray dudleya	-/-	1B.3
<i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i>	Blochman's dudleya	-/-	1B.1
<i>Erigeron blochmaniae</i>	Blochman's leafy daisy	-/-	1B.2
<i>Eriodictyon altissimum</i>	Indian Knob mountainbalm	FE/SE	1B.1
<i>Eryngium aristulatum</i> var. <i>hooveri</i>	Hoover's button-celery	-/-	1B.1
<i>Extriplex joaquinana</i>	San Joaquin spearscale	-/-	1B.2
<i>Fritillaria ojaiensis</i>	Ojai fritillary	-/-	1B.2
<i>Fritillaria viridea</i>	San Benito fritillary	-/-	1B.2
<i>Horkelia cuneata</i> var. <i>puberula</i>	mesa horkelia	-/-	1B.1
<i>Horkelia cuneata</i> var. <i>sericea</i>	Kellogg's horkelia	-/-	1B.1
<i>Lasthenia californica</i> ssp. <i>macrantha</i>	perennial goldfields	-/-	1B.2
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	Coulter's goldfields	-/-	1B.1
<i>Layia jonesii</i>	Jones' layia	-/-	1B.2
<i>Malacothamnus palmeri</i> var. <i>palmeri</i>	Santa Lucia bush-mallow	-/-	1B.2
<i>Monardella palmeri</i>	Palmer's monardella	-/-	1B.2
<i>Monardella sinuata</i> ssp. <i>sinuata</i>	southern curly-leaved monardella	-/-	1B.2
<i>Monardella undulata</i> ssp. <i>undulata</i>	San Luis Obispo monardella	-/-	1B.2
<i>Nemacaulis denudata</i> var. <i>denudata</i>	coast woolly-heads	-/-	1B.2
<i>Poa diaboli</i>	Diablo Canyon blue grass	-/-	1B.2
<i>Sanicula maritima</i>	adobe sanicle	-/SR	1B.1
<i>Streptanthus albidus</i> ssp. <i>peramoenus</i>	most beautiful jewelflower	-/-	1B.2
<i>Suaeda californica</i>	California seablite	FE/-	1B.1
<i>Sulcaria isidiifera</i>	splitting yarn lichen	-/-	1B.1
<i>Trifolium hydrophilum</i>	saline clover	-/-	1B.2

FT: Federally threatened FE: Federally endangered SE: State endangered
 ST: State threatened SR: State rare
 CRPR: California Rare Plant Rank

Special status plants that are known or have potential to occur in the planning area can occupy a broad range of habitat types. Some are associated with foredune and backdune systems, such as beach spectacle pod, dune larkspur, Blochman’s leafy daisy, mesa Horkelia, and coast woolly heads. Others are associated with chaparral communities, such as several of the manzanita species. Some species occur in serpentine-influenced soils, including Jones’ layia and the fritillaries. Others are associated with coastal salt marsh and estuary habitats, including California seablite. Additionally, some of the species listed are not currently known from within the city limits but are regionally occurring species that could occur in the surrounding planning area.

Special Status Wildlife

Based on the database and literature review, 36 special status wildlife species are known, or have potential to occur within the planning area. Many of these species are associated with ESHAs or with sensitive natural communities outside the coastal zone. Table 4.3-2 lists these special status wildlife species, their listing status, and other status designations.

Table 4.3-2 Special Status Wildlife Species Documented in or with the Potential to Occur in the Planning Area

Scientific Name	Common Name	FESA/CESA Status	Other CDFW & Local Status
Invertebrates			
<i>Branchinecta lynchi</i>	Vernal pool fairy shrimp	FT/–	–
<i>Danaus plexippus</i>	monarch butterfly	–/–	Locally Important
<i>Helminthoglypta walkeriana</i>	Morro shoulderband (=banded dune) snail	FE/–	–
Fish			
<i>Eucyclogobius newberryi</i>	tidewater goby	FE/–	SSC
<i>Oncorhynchus mykiss irideus</i>	steelhead - south-central California coast DPS	FT/–	–
Amphibians			
<i>Batrachoseps minor</i>	lesser slender salamander	–/–	SSC
<i>Rana draytonii</i>	California red-legged frog	FT/–	SSC
<i>Taricha torosa</i>	Coast Range newt	–/–	SSC
Reptiles			
<i>Anniella pulchra</i>	silvery legless lizard	–/–	SSC
<i>Emys marmorata [Actinemys pallida]</i>	western pond turtle	–/–	SSC
<i>Phrynosoma blainvillii</i>	Blainville’s coast horned lizard	–/–	SSC
<i>Thamnophis hammondi</i>	two-striped garter snake	–/–	SSC
Birds			
<i>Agelaius tricolor</i>	tricolored blackbird	–/ST	SSC
<i>Aquila chrysaetos</i>	golden eagle	–/–	FP
<i>Athene cunicularia</i>	burrowing owl	–/–	SSC
<i>Brachyramphus marmoratus</i>	Marbled murrelet	FT/SE	–
<i>Charadrius alexandrinus nivosus</i>	western snowy plover	FT/–	SSC
<i>Circus cyaneus</i>	northern harrier	–/–	SSC

Scientific Name	Common Name	FESA/CESA Status	Other CDFW & Local Status
<i>Coccyzus americanus occidentalis</i>	western yellow-billed cuckoo	FT/SE	–
<i>Elanus leucurus</i>	white-tailed kite	–/–	FP
<i>Empidonax traillii extimus</i>	Southwestern willow flycatcher	FE/SE	–
<i>Falco peregrinus anatum</i>	American peregrine falcon	DL/DL	FP
<i>Lanius ludovicianus</i>	Loggerhead shrike	–/–	SSC
<i>Laterallus jamaicensis coturniculus</i>	California black rail	–/ST	FP
<i>Gymnogyps californianus</i>	California condor	FE/–	FP
<i>Rallus obsoletus obsoletus</i> [=R. <i>longirostris obsoletus</i>]	Ridgway’s rail [=California clapper rail]	FE/SE	FP
<i>Sterna antillarum browni</i>	California least tern	FE/–	FP
<i>Vireo bellii pusillus</i>	Least Bell’s vireo	FE/–	
Mammals			
<i>Antrozous pallidus</i>	pallid bat	–/–	SSC
<i>Corynorhinus townsendii</i>	Townsend’s big-eared bat	–/–	SSC
<i>Dipodomys heermanni morroensis</i>	Morro Bay kangaroo rat	FE/SE	FP
<i>Eumops perotis californicus</i>	western mastiff bat	–/–	SSC
<i>Enhydra lutris nereis</i>	Southern sea otter	FT/–	FP
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat	–/–	SSC
<i>Nyctinomops macrotis</i>	big free-tailed bat	–/–	SSC
<i>Taxidea taxus</i>	American badger	–/–	SSC
FT: Federally threatened	FE: Federally endangered	SE: State endangered	
ST: State threatened	SR: State rare	DL: Delisted	
FP: Fully Protected	SSC: Species of Special Concern		

Generally, special status species are most likely to occur in undeveloped areas and open space areas. However, riparian areas that intersect urban development may also provide habitat and movement corridors for special status species.

The planning area provides important habitat for avian wildlife, including several listed species and other special status species. Some of these species, such as marbled murrelet, are not known to nest in the area, but can overwinter. California condor may forage and has been documented roosting on peaks in the near vicinity. Additionally, rookeries of herons, egrets, and cormorants are known to occur in the planning area. Western snowy plover nests in dune habitats within the city. Species such as golden eagle and tricolored blackbird are not reported to nest within the city but could nest in more rural portions of the planning area surrounding the city.

Ponds, wetlands, streams, and riparian areas provide habitat for aquatic and semi-aquatic amphibians and reptiles, including California red-legged frog, western pond turtle, and two-striped garter snake. Rural portions of the planning area include large areas of designated critical habitat for California red-legged frog. Streams in the planning area provide potentially suitable habitat and passage for steelhead, and lower reaches of certain streams with brackish conditions may be suitable for tidewater goby.

Two species included in Table 4.3-2 were historically documented from the planning area but are not currently known to have extant populations in the planning area. Ridgway’s rail [= California

clapper rail] was previously known from the coastal marsh habitat associated with the estuary but has not been observed in the area in decades and is currently believed to be extirpated. Similarly, the Morro Bay kangaroo rat was known from dune habitat along the sand spit but has not been observed during recent surveys of suitable habitat in the Baywood dune sheet south of Morro Bay, where the last known occurrences were thought to persist.

e. Wildlife Movement Corridors

Wildlife movement corridors, or habitat linkages, are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Such linkages may serve a local purpose, such as providing a linkage between foraging and denning areas, or they may be regional in nature. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return. Others may be important as dispersal corridors for young animals. A group of habitat linkages in an area can form a wildlife corridor network.

The habitats within the link do not necessarily need to be the same as the habitats that are being linked. Rather, the link merely needs to contain sufficient cover and forage to allow temporary inhabitation by ground-dwelling species. Typically, habitat linkages are contiguous strips of natural areas, though dense plantings of landscape vegetation can be used by certain disturbance-tolerant species. Depending upon the species using a corridor, specific physical resources (such as rock outcroppings, vernal pools, or oak trees) may need to be located within the habitat link at certain intervals to allow slower-moving species to traverse the link. For highly mobile or aerial species, habitat linkages may be discontinuous patches of suitable resources spaced sufficiently close together to permit travel along a route in a short period of time.

Wildlife movement corridors can be both large and small scale. Regionally, the City of Morro Bay is located at the edge of an identified essential connectivity area (ECA), as mapped in the report, California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California (2010). This ECA that connects Natural Landscape Blocks such as the Los Padres National Forest and other relatively intact natural areas. This essential habitat connectivity is mapped as somewhat permeable along the eastern edges of the planning area and less permeable in developed areas. Outside the city, the planning area extends much further into this ECA and the relatively natural, undeveloped character of this area allows for terrestrial wildlife to move relatively unhindered. This area is linked through a mosaic of rural lands, many of which retain native vegetation, to public lands such as the Los Padres National Forest, providing movement opportunities for terrestrial wildlife.

Small scale habitat corridors are also present in the Morro Bay coastal zone and include drainages and other topographic features that facilitate movement, and contiguous areas of natural vegetation, including the coastal dunes and Black Hill Natural Area. Perennial streams, wetlands, shallow bays and estuaries, including Morro Creek and Morro Bay Estuary, provide potential fish and other aquatic wildlife movement habitat. Morro Creek is critical habitat for steelhead and provides essential habitat connectivity between the Pacific Ocean and spawning habitat upstream.

Finally, as previously noted, Morro Estuary and Bay provide important wintering habitat for large numbers of avian wildlife, which fly long distances annually to winter in the area. These habitat features provide important stopover and wintering habitat for migratory birds.

f. Regulatory Setting

Federal, State, and local authorities under a variety of statutes and guidelines share regulatory authority over biological resources. The primary authority for general biological resources lies within the land use control and planning authority of local jurisdictions, which in this instance includes the City of Morro Bay and for areas outside city limits, the County of San Luis Obispo. The CDFW is a trustee agency for biological resources throughout the State as defined in CEQA and also has direct jurisdiction under the California Fish and Game Code, which includes, but is not limited to, resources protected by the State of California under the CESA. In addition, the local Regional Water Quality Control Board (RWQCB) is a responsible agency for waters of the State. The California Coastal Commission also has the authority to approve the LCP and has the right to appeal development projects within the Coastal Zone Appeals Jurisdiction. Below are summaries of the federal, State, and local regulations or guiding documents that could apply.

Federal

Endangered Species Act

Under the ESA, authorization is required to “take” a listed species. Take is defined under Section 3 of the ESA as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” Under federal regulation (50 Code of Federal Regulations [CFR] Sections 17.3, 222.102); “harm” is further defined to include habitat modification or degradation where it would be expected to result in death or injury to listed wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Critical habitat is a specific geographic area(s) that is essential for the conservation of a threatened or endangered species and that may require special management and protection. Critical habitat may include an area that is not currently occupied by the species but that will be needed for its recovery. Section 7 of the federal Endangered Species Act outlines procedures for federal interagency cooperation to conserve federally listed species and designated critical habitat.

Section 7(a)(2) of the ESA and its implementing regulations require federal agencies to consult with USFWS or NMFS to ensure that they are not undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species, or result in the destruction or adverse modification of critical habitat. For projects where federal action is not involved and take of a listed species may occur, the project proponent may seek to obtain an incidental take permit under Section 10(a) of the ESA. Section 10(a) allows USFWS to permit the incidental take of listed species if such take is accompanied by a Habitat Conservation Plan (HCP) that includes components to minimize and mitigate impacts associated with the take.

The USFWS and NMFS share responsibility and regulatory authority for implementing the ESA (7 United States Code [USC] Section 136, 16 USC Section 1531 et seq.).

Migratory Bird Treaty Act and Bald and Golden Eagle Protection Act

The Migratory Bird Treaty Act authorizes the Secretary of the Interior to regulate the taking of migratory birds. The act provides that it is unlawful, except as permitted by regulations, “to pursue, hunt, take, capture, kill, attempt to take, capture, or kill, possess, [...] any migratory bird, or any part, nest, or egg of any such bird” (16 USC Section 703(a)). The Bald and Golden Eagle Protection Act is the primary law protecting eagles, including individuals and their nests and eggs. The USFWS implements the Migratory Bird Treaty Act (16 USC Section 703-711) and the Bald and Golden Eagle Protection Act (16 USC Section 668). Under the Bald and Golden Eagle Protection Act’s Eagle Permit

Rule (50 CFR 22.26), USFWS may issue permits to authorize limited, non-purposeful take of bald eagles and golden eagles.

Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) regulates marine fisheries in U.S. federal waters. The Magnuson-Stevens Act was first passed in 1976 and was revised in 1996 and 2007. The purpose of the Magnuson-Stevens Act is to provide long-term biological and economic sustainability of U.S. marine fisheries.

The NMFS has regulatory authority for implementing the Magnuson-Stevens Act. The NMFS requires regional fishery management councils to develop Fisheries Management Plans (FMPs) specific to their regions, fisheries and fish stocks. For waters off the U.S. West Coast, the Pacific Fishery Management Council has developed four FMPs, which are implemented through fisheries regulations for coastal pelagic species, groundfish species, highly migratory species and salmon species. These FMPs also identify Essential Fish Habitat, which is broadly defined as those waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity.

Section 10 of the River and Harbors Act

Section 10 of the Rivers and Harbors Act of 1899 requires authorization from the Secretary of the Army, acting through the U. S. Army Corps of Engineers (USACE), for the construction of any structure in or over any navigable water of the United States. Regulated activities include dredging or disposal of dredged materials, excavation, filling, rechannelization and construction of any structure or any other modification of a navigable water of the United States.

Clean Water Act

Under Section 404 of the Clean Water Act, the USACE, with U.S. Environmental Protection Agency (EPA) oversight, has authority to regulate activities that result in discharge of dredged or fill material into wetlands or other “waters of the United States.” Perennial and intermittent creeks are considered waters of the United States if they are hydrologically connected to other jurisdictional waters. In achieving the goals of the Clean Water Act, the USACE seeks to avoid adverse impacts and offset unavoidable adverse impacts on existing aquatic resources. Any discharge of dredged or fill material into jurisdictional wetlands or other jurisdictional “waters of the United States” would require a Section 404 permit from the USACE prior to the start of work. Typically, when a project involves impacts to waters of the United States, the goal of no net loss of wetlands is met by compensatory mitigation; in general, the type and location options for compensatory mitigation should comply with the hierarchy established by the USACE/EPA 2008 Mitigation Rule (in descending order): (1) mitigation banks; (2) in-lieu fee programs; and (3) permittee-responsible compensatory mitigation. Also, in accordance with Section 401 of the Clean Water Act, applicants for a Section 404 permit must obtain water quality certification from the State Water Resources Control Board (SWRCB) or appropriate RWQCB.

State

California Endangered Species Act

CESA (Fish and Game Code Section 2050 et seq.) prohibits take of State-listed threatened and endangered species without a CDFW incidental take permit. Take under CESA is restricted to direct harm of a listed species and does not prohibit indirect harm by way of habitat modification.

Protection of fully protected species is described in California Fish and Game Code Sections 3511, 4700, 5050 and 5515. These statutes prohibit take or possession of fully protected species. Incidental take of fully protected species may be authorized under an approved Natural Communities Conservation Plan.

Natural Community Conservation Planning Act

The Natural Communities Conservation Planning Act was established by the California Legislature, is directed by the CDFW, and is implemented by the State, as well as public and private partnerships as a means to protect habitat in California. The Natural Communities Conservation Planning Act takes a regional approach to preserving habitat. A Natural Communities Conservation Plan identifies and provides for the regional protection of plants, animals and their habitats, while allowing compatible and appropriate economic activity. Once a Natural Communities Conservation Plan has been approved, CDFW may provide take authorization for all covered species, including fully protected species, Section 2835 of the California Fish and Game Code.

California Fish and Game Code Sections 3503, 3503.5 and 3511

California Fish and Game Code Sections 3503, 3503.5 and 3511 describe unlawful take, possession, or destruction of birds, nests and eggs. Fully protected birds (California Fish and Game Code Section 3511) may not be taken or possessed except under specific permit. Section 3503.5 protects all birds-of-prey and their eggs and nests against take, possession, or destruction of nests or eggs.

Native Plant Protection Act

The CDFW also has authority to administer the Native Plant Protection Act (NPPA) (California Fish and Game Code Section 1900 et seq.). The NPPA requires the CDFW to establish criteria for determining if a species, subspecies, or variety of native plant is endangered or rare. Under Section 1913(c) of the NPPA, the owner of land where a rare or endangered native plant is growing is required to notify the CDFW at least 10 days in advance of changing the land use to allow for salvage of the plant(s).

Section 1600 et seq. of the California Fish and Game Code

Section 1600 et seq. of the California Fish and Game Code prohibits, without prior notification to CDFW, the substantial diversion or obstruction of the natural flow of, or substantial change or use any material from 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. In order for these activities to occur, the CDFW must receive written notification regarding the activity in the manner prescribed by the CDFW, and may require a lake or streambed alteration agreement. Lakes, ponds, perennial and intermittent streams and associated riparian vegetation, when present, are subject to this regulation.

Porter-Cologne Water Quality Control Act

Pursuant to Section 401 of the CWA, projects that apply for a USACE permit for discharge of dredge or fill material must also obtain water quality certification under Section 401 from the RWQCB. Additionally, the SWRCB and each of nine local RWQCBs have jurisdiction over “waters of the State” pursuant to the Porter-Cologne Water Quality Control Act, which are defined as any surface water or groundwater, including saline waters, within the boundaries of the State. The SWRCB has issued general Waste Discharge Requirements (WDRs) regarding discharges to “isolated” waters of the

State (Water Quality Order No. 2004-0004-DWQ, Statewide General Waste Discharge Requirements for Dredged or Fill Discharges to Waters Deemed by the U.S. Army Corps of Engineers to be Outside of Federal Jurisdiction). The local RWQCB implements this general order for isolated waters not subject to federal jurisdiction.

The CWA and associated federal regulations (Title 40 of the CFR 123.25(a)(9), 122.26(a), 122.26(b)(14)(x) and 122.26(b)(15)) require nearly all construction site operators engaged in clearing, grading, and excavating activities that disturb one acre or more, including smaller sites in a larger common plan of development or sale, to obtain coverage under a National Pollutant Discharge Elimination System (NPDES) permit for their stormwater discharges, and develop a Storm Water Pollution Prevention Plan (SWPPP). The NPDES Program is a federal program which has been delegated to the State of California for implementation through the SWRCB and RWQCBs.

California Coastal Act

The California Coastal Act (Coastal Act) outlines standards for development within the coastal zone and includes specific policies (see Division 20 of the Public Resources Code) that address issues such as terrestrial and marine habitat protection, commercial fisheries, and water quality. The coastal zone encompasses 1.5 million acres of land, and stretches from three miles at sea to an inland boundary that varies from several blocks in urban areas to as much as five miles in less developed areas. The majority of the City of Morro Bay is located within the coastal zone. The coastal zone extends into federal waters under the federal Coastal Zone Management Act.

Chapter 3 of the Coastal Act contains the standards used by the California Coastal Commission in the review of coastal development permits and local coastal plans. The seven articles within Chapter 3 govern all development along the coast, and mandate protection of public access, recreational opportunities, and marine and land resources. Chapter 3, Article 4 addresses protection of the marine environment including water quality issues, wetlands protections, and coastal armoring. Chapter 3, Article 5 includes protections for environmentally sensitive habitat.

Local

Morro Bay Municipal Code

The City of Morro Bay Municipal Code Title 12, Chapter 12.08, City tree regulations, outlines a comprehensive plan for the planting and maintenance of trees in, on, or within the public right-of-way, provides rules and regulations for the planting, care and maintenance of such trees, and defines landmark and specimen trees. Municipal Code Title 17, Chapter 12.199 includes removal or harvesting of major vegetation in the City's definition of "Development." In July 2007 the City Council amended the Major Vegetation Removal, Replacement and Protection Guidelines. The Guidelines establish when a permit and replacement of vegetation is required, but do not otherwise amend the LCP or Municipal Code.

The City of Morro Bay Municipal Code Title 16 Subdivisions, Chapter 16.44, Conservation Subdivisions establishes requirements for cluster development proposals intended to protect environmentally significant attributes and preserve open space. A conservation subdivision must meet requirements for open space protected in perpetuity, including an instrument to protect the open space from future development in perpetuity.

The City of Morro Bay Municipal Code Title 17 Zoning implements the general plan and local coastal plan. The Morro Bay City Zoning Ordinance Chapter 17.40.040, Environmental Sensitive Habitat

(ESH) overlay zone, identifies ESH areas to be protected and preserved, including buffers, outlines allowed uses, and restricts new uses and expansions of existing uses in these areas. Reduction of buffers requires consultation with CDFW, mitigation, and consistency with existing policies in the coastal land use plan. This chapter also outlines performance standards for new developments with regard to protecting ESH.

4.3.2 Impact Analysis

a. Methodology

Environmental impacts to biological resources may be assessed using impact significance criteria from federal, State, and local regulations. *CEQA Guidelines*, Chapter 1, Section 21001 (c) states that it is the policy of the State of California to “prevent the elimination of fish and wildlife species due to man’s activities, ensure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities.” Environmental impacts relative to biological resources may be assessed using impact significance criteria encompassing *CEQA Guidelines* and federal, State and local plans, regulations, and ordinances.

The impact analysis is based on available literature regarding the existing biological resources within the General Plan and LCP Update planning area. Data used for this analysis are summarized in the Section 4.3.1.

b. Significance Thresholds

The following thresholds are based on Appendix G of the *CEQA Guidelines*. Impacts would be significant if the adoption and implementation of the General Plan and LCP Update would result in any of the following:

- 1 Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS;
- 2 Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS;
- 3 Have a substantial adverse effect on state or 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, or hydrological interruption, or other means;
- 4 Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- 5 Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and
- 6 Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

The following section presents an analysis of the potential for impacts to sensitive biological resources from the adoption and implementation of the General Plan and LCP Update.

c. Project Impacts and Mitigation Measures

The following section presents an analysis of the potential for impacts to sensitive biological resources from the adoption and implementation of the General Plan and LCP Update.

Threshold 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 CDFW or USFWS?

Impact BIO-1 NEW DEVELOPMENT FACILITATED BY THE GENERAL PLAN AND LCP UPDATE COULD IMPACT LISTED AND OTHER INDIVIDUAL SPECIAL STATUS SPECIES AND FORAGING AND BREEDING HABITAT FOR SPECIAL STATUS WILDLIFE AND HABITAT FOR SPECIAL STATUS PLANTS. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT WITH INCORPORATION OF MITIGATION.

State and/or federally listed animal species with the potential to occur as year-round residents in the planning area include western snowy plover, Morro shoulderband snail, California red-legged frog, steelhead (south-central California coast DPS), vernal pool fairy shrimp, tidewater goby, southern sea otter, and black rail. Several additional listed species of birds, including California condor, least Bell's vireo, yellow-billed cuckoo, tri-colored blackbird, marbled murrelet and least tern are not known to have local breeding populations within the planning area but have been reported wintering or migrating through the planning area. Non-listed fully protected species, including golden eagle, peregrine falcon, and white tailed kite, are known and therefore expected to occur within the planning area. Other native birds are also known to nest in the planning area, including species protected by the Migratory Bird Treaty Act as well as native birds whose nests are protected by California Fish and Game Code. Several non-listed species of special concern are also known or have potential to occur in the planning area, including legless lizard, coast horned lizard, western pond turtle, pallid bat, and American badger. Suitable habitat for special status wildlife is primarily associated with areas identified as ESHA within current city limits, and with native vegetation communities in the surrounding planning area.

State and/or federally listed plant species known or with the potential to occur within in the planning area within the existing city limits include Morro manzanita, marsh sandwort, salt marsh bird's-beak, beach spectacle pod, and California seablite. Potentially suitable habitat in the surrounding planning area is also present for adobe sanicle, Indian knob mountainbalm, San Luis Obispo fountain thistle, and surf thistle, as well as numerous additional non-listed special status plants. Suitable habitat for special status plants is primarily associated with ESHA within the existing city limits, and within native vegetation communities in the surrounding planning area.

The goals, policies, and implementation actions of the General Plan and LCP Update allow for growth and redevelopment within the planning area in the existing city limits and allow limited development activities within the current SOI. More specifically, the General Plan and LCP Update would facilitate development of up to 800 new residential units and 8 million square feet of non-residential development in the planning area. Depending on the location, orientation, and design of new development and redeveloped properties, new development could impact foraging and breeding habitat for special status wildlife and habitat for special status plants, introduce or spread invasive species that compete with native species, and directly injure or kill individuals during construction and occupancy of new facilities. Although growth envisioned in the General Plan and LCP Update would generally preserve the existing pattern of uses and would be focused on

redevelopment and infill rather than outward expansion, some parcels may support special status wildlife and plant species, and development could further fragment movement corridors for wildlife. Additionally, the future SOI may include limited development at a future date, with the potential to result in similar impacts to listed and other special status species as development currently envisioned in the General Plan and LCP Update.

Major strategies of the General Plan and LCP Update are intended to balance the role of land use and circulation planning with supporting resource conservation and sustainability and identify the role of resource conservation and sustainability in supporting Morro Bay's economy. The General Plan and LCP Update includes Open Space/Recreation and Agriculture land use designations focused on parks, open spaces and natural resource areas, and land for cultivation and grazing agricultural uses intended to retain existing resources and the rural character of the area surrounding the city. The Land Use element also includes an ESHA overlay to identify areas within the coastal zone that serve as habitat for rare or especially valuable plant or animal life, including foredune and dune scrub/back dune systems, and wetland and riparian areas, including the estuary. Although the General Plan and LCP Update include policies to conserve and minimize impacts to ESHAs, full avoidance of ESHAs is not feasible. Projects such as transportation improvements and linear utility projects facilitated by the General Plan and LCP Update may cross through ESHAs, and some parcels zoned for development are not adequately sized or shaped to allow for full avoidance of ESHA during development. Impacts to ESHAs that support special status species would also affect the individuals relying on these habitats.

Implementation of goals and policies in the Land Use, Community Design, Conservation, and Open Space Elements of the General Plan and LCP Update would encourage the conservation and protection of open space and natural resources within the General Plan and LCP Update planning area and minimize adverse effects on listed and other special status species. Currently, nearly half of the land within Morro Bay is part of the Morro Bay State Park or another beach area, and parks and open space form another 18 percent. The General Plan and LCP Update does not contemplate a major shift from this existing pattern, retaining habitat for listed and other special status wildlife and plant species. Limited outward expansion, redevelopment, and flexible use would minimize encroachment into habitats suitable for special status species. Although some agricultural areas are not suitable resident habitat for special status wildlife and plants, retention of existing agricultural areas for agricultural uses would retain existing movement corridors and minimize effects to movement of special status wildlife. The following policies from the Land Use Element, Community Design Element, and Open Space Element of the General Plan and LCP Update promote a land use pattern that focuses on retaining existing patterns of land use, and redevelopment and infill rather than outward expansion into rural areas.

Policy LU-1.1 Land Use Pattern. Maintain the current pattern of Morro Bay's land use to preserve the distinct character areas and community form, while enhancing and transforming areas with greatest potential for change to improve economic activity and align them with the community vision. (See Figure LU-4 Land Use Map.) New development shall be located within, contiguous with, or in close proximity to existing developed areas with adequate public services and where it will not have significant effects, either individually or cumulatively, on coastal resources.

Policy LU-3.1 Growth Limits. Continue to limit the amount of development, including future population growth accommodated by *Plan Morro Bay*, to a level supported by

adequate and long-term sustainable available land, water supply, and other infrastructure and service capacity.

Policy LU-3.6 Infill Development. Promote infill development on vacant or underutilized properties in the city as the preferred strategy for most new development in Morro Bay.

Policy LU-3.7 Limited Outward Expansion. Allow for some limited outward expansion beyond the city's existing limits to achieve large-scale conservation of parcels and a small amount of rural-scale residential use and visitor-serving amenities to serve conservation lands. Standards applied to the future sphere of influence (SOI) area include keeping development off of ridgelines and preserve views of the city's backdrop of undeveloped open land. (See also Policies C-9.1 through C-9.5 and Implementation Actions C-30 and C-31.)

Policy LU-5.2 Agricultural Uses. Maintain prime agricultural land and other lands suitable for agricultural use in the planning area in long-term agricultural production.

Policy CD-2.2 Flexible Use. Identify potential buildings for future adaptive reuse, and encourage incorporating flexibility in building designs to maximize the future use of buildings.

Policy OS-7.2 Place Value on Agriculture. Continue to protect high quality agricultural areas within the City's planning area but outside the city limits for future agricultural use.

The following General Plan and LCP Update Conservation Element goals and policies would maximize retention of sensitive natural habitats, including ESHAs, wetlands, and other habitats for special status species by requiring setbacks from ESHAs, minimize encroachment into habitats suitable for special status species, encouraging restoration of degraded areas, and fostering partnerships with agencies and other local stakeholders to protect natural resources.

Goal C-1 Sensitive habitats are protected from potential negative impacts of land use and development.

Policy C-1.1 Environmentally Sensitive Habitat Areas. Protect Environmentally Sensitive Habitat Areas, or "ESHAs," defined as any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem, and which could be easily disturbed or degraded by human activities and developments. In the Morro Bay coastal zone, these areas include, but are not limited to:

- a. Aquatic Resources and Wetland Habitats, which include all year-round and seasonal rivers and streams, wetlands (including fresh and salt water marshes), and riparian vegetation.
- b. Other Sensitive Natural Communities, which include foredune, backdune/dune scrub, coastal bluff faces, and coastal strand environments.
- c. Breeding and Overwintering Sites, which include all roosts, nests, and rookeries for such species as herons, egrets, cormorants, and peregrine falcons, and all documented monarch butterfly overwintering roosts.

Policy C-1.2 Development in ESHA. Development in ESHA (as defined in Policy C-1.1 and Coastal Act Section 30107.5) shall be limited to uses dependent on the resource (e.g., habitat restoration, scientific research, and low-intensity public access and recreation), as well as the uses specified in Coastal Act Sections 30233 and 30236 for wetlands and streams, respectively. All allowable development in ESHA shall be sited and designed to protect against significant disruption of habitat values, including to rare and endangered species. Development in areas adjacent to ESHA shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitats

Policy C-1.3 Biological Site Assessments. A biological assessment shall be required for any development proposed on sites that include or are within 100 feet of mapped ESHA in Figure C-2, and all other sites with natural vegetation regardless of whether ESHA has been mapped in Figure C-2, and for all other projects for which evidence indicates that ESHA may be present either on or adjacent to the site. The best available information about the location of ESHA in the City shall be used. Such assessment shall be prepared at the owner's expense by a qualified biologist approved by the City and shall, at minimum:

- a. Identify and confirm the extent of the ESHA,
- b. Document any site constraints and the presence of sensitive plant or animal species,
- c. Recommend buffers and development setbacks and standards to protect the ESHA,
- d. Recommend mitigation measures to address any allowable impacts, and
- e. Include any other information and analyses necessary to understand potential ESHA impacts as well as measures necessary to protect the resource as required by the Local Coastal Program.

If the site contains the potential for monarch overwintering or rookeries due to the presence of appropriately sized trees and groves, a seasonally timed survey appropriate for detecting the target species must also be included in the study.

Policy C-1.4 Dune ESHA. For all new development within dune ESHA that could impact dune ESHA, and in addition to the biological assessment described above, a qualified, City-approved biologist shall prepare a dune stabilization and/or restoration plan. The dune stabilization/restoration plan shall include, at minimum:

- a. The removal of all nonnative and invasive plants species,
- b. Revegetation with native plant species, including rare and/or endangered species,
- c. Maintenance and monitoring requirements,
- d. Methods for directing public access, and
- e. A schedule for plant establishment including targets for plant variation and density, contingency measures, and reporting.

The dune stabilization/restoration plan shall prohibit the use of any nonnative plant species and shall require that all nonnative species be removed and not

allowed to persist. Initiation of restoration activities shall be required prior to occupancy/use of any allowable new development.

Policy C-1.5 ESHA Buffers. Development shall be set back from ESHA through buffers of a sufficient width and design to protect ESHA sensitive resources from the impacts of adjacent uses, including impacts from construction and post-construction activities, and such buffers shall be maintained in a natural condition, with the only allowed uses being the ones allowed in the ESHA itself.

For aquatic resources and wetlands, the buffer shall be the following, whichever is wider, on both sides of the stream:

- a. For rivers, streams and riparian areas, the required buffer shall extend at least 50 feet from the outer edge of the riparian vegetation on both sides of the river, stream, and/or riparian area or 50 feet itself [measured perpendicularly from the top of the river, stream, or measure from riparian area bank for areas without riparian direction of the vegetation]] or
- b. For wetlands, the required buffer shall extend at least 100 feet from the edge of the wetland (measured perpendicularly from the direction of the wetland itself).
- c. For dunes, the required buffer shall extend at least 50 feet from the edge of the wetland.

For all other ESHA, the buffer shall be a minimum of 50 feet. These widths may be adjusted by the City as appropriate to protect the ESHA habitat value of the resource, but shall not be less than 25 feet. Such reduction shall only be allowed if the reduced buffer provides the same or greater protection to the ESHA than the required buffer. Such adjustment shall be made on the basis of a biological site assessment supported by substantial evidence that includes but is not limited to:

- a. Sensitivity of the ESHA, including any sensitive species, to disturbance.
- b. Habitat requirements of the ESHA, including the migratory patterns of affected species and tendency to return each season to the same nest site or breeding colony.
- c. Topography of the site.
- d. Movement of stormwater.
- e. Permeability of the soils and depth to water table.
- f. Vegetation present.
- g. Unique site conditions.
- h. Whether vegetative, natural topographic, or built features (e.g., roads, structures) provide a physical barrier between the proposed development and the ESHA.
- i. The likelihood of increased human activity and disturbance resulting from the project relative to existing development.

- Policy C-1.6 Structures in ESHA Buffers.** No permanent structures shall be permitted within the setback area except for the minimum amount of fencing required for security and habitat protection purposes or structures of a minor nature such as fences or at-grade improvements for pedestrian or equestrian trails.
- Policy C-1.7 Endangered Species Habitats.** Ensure that all recreational use (such as hiking and birdwatching) is compatible with the protection, of rare or endangered species habitats.
- Policy C-1.8 Takings.** If development in ESHA and/or required ESHA buffers must be allowed to avoid an unconstitutional taking of private property without just compensation, the amount and type of development allowed shall be the least necessary to avoid a taking, and shall be as consistent with LCP policies as possible. Unavoidable impacts must be minimized; temporary impact areas within ESHA and required ESHA buffers must be restored upon completion; and all adverse impacts to ESHA must be fully mitigated in kind (e.g., the mitigation must replace lost habitat functions and values at a minimum 2:1 ratio).
- Policy C-1.9 Partnerships.** Foster and develop public/private partnerships to protect natural resources.
- Policy C-1.10 Updates to ESHA Resources.** Ensure that all information on ESHA is updated regularly, including but not limited to GIS and database resources.
- Policy C-1.11 Habitat Restoration.** Create, improve, and acquire areas that enhance habitat resources and identify, prioritize, and restore them as habitat key areas that link fragmented open space wildlife habitat, as funding and land are available.
- Policy C-1.12 Interagency Collaboration.** Work with local and state jurisdictions to preserve and extend the habitats located in and surrounding the planning area of Morro Bay.
- Policy C-1.13 Improvements to Open Space Areas.** Improve remaining open space areas in wetlands and along the coast to the greatest extent possible to improve existing natural habitats and prevent the deterioration of local wildlife.
- Policy C-1.14 Natural Resource Protection.** Natural resources that are not ESHA shall also be protected as much as feasible.
- Policy C-1.15 Eelgrass Protection.** Continue to address and mitigate eelgrass impacts on a project-by-project basis using implementation guidelines from the California Eelgrass Mitigation Policy (CEMP) to promote eelgrass growth in the bay. In addition, investigate establishing an eelgrass mitigation bank.
- Policy C-1.16 Tree Planting and Removal.** Certain trees are “major vegetation,” where the removal of which constitutes development and requires a Coastal Development Permit. A Coastal Development Permit is required for removal of all native trees and all trees that measure 6 inches in diameter at 54 inches above grade. Replanting of a tree as replacement of an existing tree is required. Dead trees (snags) on City property in the coastal zone should be retained, where possible, to provide habitat, including for cavity-nesting birds. No permit is required for removal of dead, dying, and diseased trees or trees that pose a health, life, and safety issue. These trees must be inspected and verified by an International

Society of Arboriculture (ISA) certified arborist or Registered Professional Forester (RFP).

- Policy C-7.23 Preservation of Morro Bay Estuary.** Take an ecosystem approach to the preservation of the Morro Bay Estuary by consulting with scientists, environmental historians, the US Army Corps of Engineers, and regional and state agencies to regularly evaluate the health of the complete estuary ecosystem. Adjust local and regional requirements and prohibitions on development, building design, water craft usage, pollution control, and other important issues to maintain the quality of the estuary system.

The following General Plan and LCP Update Open Space Element policies would address potential conflicts between resource conservation and recreational uses of open spaces and promote persistence of special status species in open spaces. These policies would minimize impacts from active recreation areas in passive open spaces through vegetative screening, retention of portions of parks as natural habitats, and retaining natural barriers in shoreline open spaces to reduce sea level rise effects.

Goal OS-4 Coastal and marine habitat wildlife and resources are protected while maintaining the cultural identity of the habitat.

- Policy OS-4.2 Marine Habitat and Recreation Balance.** Continue to preserve portions of parks as natural habitat for a variety of species.
- Policy OS-4.3 Beach Maintenance.** Consider species and habitat impacts and potential improvements when performing beach maintenance and monitoring recreational resources.
- Policy OS-4.4 Beach Habitat.** Ensure beaches and coastal areas can function as a quality habitat for permanent and migratory species.
- Policy OS-4.5 Minimal Activity Impacts to Habitat.** Consult with locally knowledgeable scientists to design parks and trails in a way that protects coastal, wetland, and marine habitats from maintenance, construction, recreation, and industrial activity impacts while promoting sustainable recreational and open space uses.
- Policy OS-4.6 Marine Resources.** Marine resources shall be maintained, enhanced, and, where feasible, restored. Special protection shall be given to species and areas of special biological significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and maintain healthy populations of all species of marine organisms, adequate for long-term commercial, recreational, scientific, and educational purposes.

Goal OS-5 Natural resources are preserved to balance the use of open space for outdoor recreation opportunities.

- Policy OS-5.1 Passive Open Spaces.** Maintain vegetative corridors as passive open spaces to provide a balance between natural landscapes and active outdoor use spaces in parks.

Policy OS-5.2 Separation of Uses. Locate active recreational uses away from sensitive habitats or passive recreation areas to create a distinct separation of uses for efficient use of open space.

Policy OS-5.3 Open Space Assets. Maintain, protect, and enhance parks by prioritizing the preservation of the natural beauty, restoration and enhancement of land-based natural resources, and safe use of the land.

Goal OS-6 Open spaces are preserved through adaptation strategies to mitigate the effects of sea level rise and promote community resiliency.

Policy OS-6.2 Barrier Conservation. Prohibit the destruction of natural barriers in open spaces along the shoreline.

The General Plan and LCP Update Open Space Element includes the following policy to address infrastructure and services provided to areas outside the city limits within the future SOI areas.

Policy OS-7.1 Account for External Impacts. If any portion of the area outside the city limits is included in the City's sphere of influence in the future, prepare and adopt a plan for the affected parcels that includes infrastructure and services provided by the City of Morro Bay.

These goals and policies and the associated implementation to limit habitat loss, maintain habitat integrity and connectivity, and protect special status species would minimize, and often avoid, impacts from potential direct and indirect effects to special status species and sensitive habitats. Additionally, all development under the General Plan and LCP Update would be subject to the provisions of the various federal and State natural resources regulations (discussed in subsection 4.3.1(f), *Regulatory Setting*) and their respective permitting processes. Although compliance with applicable regulations and implementation of General Plan and LCP Update goals and policies would minimize or avoid impacts to special status species and sensitive habitats, the General Plan and LCP Update does not include policy language that would address avoidance, minimization, and mitigation of effects to special status species individuals or policy language that would address effects to special status species in future SOI areas. Therefore, impacts to special status species would be potentially significant and additional policy-based mitigation would be required to avoid and/or minimize impacts to special status species and nesting birds.

Mitigation Measures

The following measures are required to address potential impacts to special status species.

BIO-1(a) Avoidance and Minimization during Development

Policy C-1.3 shall be updated to read:

Policy C-1.3 Biological Site Assessments. A biological assessment shall be required for any development proposed on sites that include or are within 100 feet of mapped ESHA in Figure C-2, and all other sites with natural vegetation regardless of whether ESHA has been mapped in Figure C-2, and for all other projects for which evidence indicates that ESHA may be present either on or adjacent to the site. The best available information about the location of ESHA in the City shall be used. Such assessment shall be prepared at the owner's expense by a qualified biologist approved by the City and shall, at minimum:

- a. Identify and confirm the extent of the ESHA,
- b. Document any site constraints and the presence of sensitive plant or animal species,
- c. Recommend buffers and development setbacks and standards to protect the ESHA,
- d. ~~Recommend mitigation measures to address any allowable impacts~~ If listed species, or other special status species, or nesting birds are present or have the potential to occur, specify avoidance and minimization measures, including compensatory mitigation, to be implemented to avoid or minimize take of individuals and loss of occupied habitat, and specify the necessary consultation pathway(s) with USFWS, NMFS, and/or CDFW to obtain incidental take coverage, where necessary, and
- e. Include any other information and analyses necessary to understand potential ESHA impacts as well as measures necessary to protect the resource as required by the Local Coastal Program.

If the site contains the potential for monarch overwintering or rookeries due to the presence of appropriately sized trees and groves, a seasonally timed survey appropriate for detecting the target species must also be included in the study.

BIO-1(b) External Impacts

Policy OS-7.1 shall be updated to read:

Policy OS-7.1 Account for External Impacts. If any portion of the area outside the city limits is included in the City's sphere of influence in the future, prepare and adopt a plan for the affected parcels that includes infrastructure and services provided by the City of Morro Bay. The plan shall also identify policies for the protection of natural resources in the affected areas.

Significance After Mitigation

Impacts to special status species would be less than significant with implementation of Measures BIO-1(a) and BIO-1(b), which would update policies in the General Plan and LCP Update to protect listed species and provide direction on resource protection in any future SOI.

- Threshold 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 U.S. Fish and Wildlife Service?
- Threshold 3:** Would the project have a substantial adverse effect on state or 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?

Impact BIO-2 THE GENERAL PLAN AND LCP UPDATE WOULD NOT FACILITATE DEVELOPMENT THAT WOULD DIRECTLY IMPACT RIPARIAN AND WETLAND HABITS AND OTHER SENSITIVE NATURAL COMMUNITIES. HOWEVER, FUTURE DEVELOPMENT MAY HAVE ADVERSE INDIRECT IMPACTS ON WETLANDS AND AREAS UNDER THE JURISDICTION OF THE CDFW, RWQCB AND/OR USACE, AS WELL AS FOR BOTH WITHIN AND OUTSIDE THE CITY'S COASTAL ZONE. COMPLIANCE WITH EXISTING REGULATIONS AND IMPLEMENTATION OF APPLICABLE GENERAL PLAN AND LCP UPDATE POLICIES WOULD AVOID OR MINIMIZE, POTENTIAL IMPACTS TO RIPARIAN AND WETLAND HABITS AND OTHER SENSITIVE NATURAL COMMUNITIES. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Sensitive natural communities in the planning area include foredunes, backdunes, dune wetlands, and bluff scrub, as well as wetlands and riparian areas. Wetlands in the planning area include estuarine and marine wetlands, estuarine and marine deepwater, freshwater emergent wetlands, freshwater forested/shrub wetlands, riverine, lake, and freshwater ponds. Morro Creek, Chorro Creek, and Toro Creek are major streams in the planning area, and the Morro Bay and estuary are important coastal aquatic habitats. The Pacific Ocean occurs along the west edge of the planning area. Known wetlands, riparian areas, salt marsh, estuary, shallow bay and other aquatic resources within current city limits are designated as ESHA, and policies in the General Plan and LCP Update outline conservation and setbacks from aquatic resource ESHAs and prescribe mitigation for situations in which impacts are unavoidable. Although the General Plan and LCP Update includes policies to conserve and minimize impacts to wetlands, and riparian areas, certain project types, such as transportation improvements and linear utilities cross through these habitats such that full avoidance is not feasible. Additional wetlands may be discovered during site specific surveys. Detailed wetland delineations would be needed to determine the extent of any jurisdictional wetlands and other waters at specific locations and each agency is responsible for making a final determination on the extent of jurisdictional waters for a particular site.

Wetlands and waterways may be subject to USACE, RWQCB and/or CDFW jurisdiction(s), as well as subject to the CCA. Compliance with the requirements of the CWA, Porter-Cologne, California Fish and Game Code, and CCA would be required for any project proposed under the General Plan and LCP Update. Additionally, several policies discussed in Impact BIO-1 promote a land use pattern that focuses on retaining existing patterns of land use, and redevelopment and infill rather than outward expansion into rural areas limit the areal extent of potential encroachments into aquatic resource types. Policies listed under Impact BIO-1, including Policy C-1.1 Sensitive Habitats, Policy C-1.2 Habitat Protection, Policy C-1.3 ESHA Protection, Policy C-1.4 Biological Site Assessments, Policy C-1.5 ESHA Buffers, Policy C-1.6 Structures in ESHA Buffers, and Policy C-1.15 Wetlands, would require protection of sensitive habitats, including wetlands and riparian areas, would require a site assessment to complete a detailed inventory of sensitive habitats prior to new development and specify buffers from ESHA, and would require mitigation for situations in which full avoidance is determined by the City to be infeasible to avoid a takings. Policies C-1.8 Partnerships, C-1.10 Habitat Restoration, and C-1.12 Improvements to Open Space Areas, listed under Impact BIO-1, would

facilitate conservation and restoration of sensitive habitats, including wetlands and riparian areas. In addition, the following General Plan and LCP Update Conservation Element policy would reduce impacts to eelgrass habitats.

Policy C-1.15 Eelgrass Protection. Continue to address and mitigate eelgrass impacts on a project-by-project basis using implementation guidelines from the California Eelgrass Mitigation Policy (CEMP) to promote eelgrass growth in the bay. In addition, investigate establishing an eelgrass mitigation bank.

Additionally, the following General Plan and LCP Update Community Design Element and Conservation Element goals and policies would reduce potential for indirect effects on wetlands, riparian areas, and streams as a result of development effects on water quality and as a result of future extreme weather events.

Goal CD-2 The community is designed to be resilient to future climate conditions, weather events, and economic and social change.

Policy CD-2.1 Local Food Production. Encourage the installation of vegetative roofs, rainwater bioswales, home composting and small-scale gardening and animal keeping in areas that can support such uses.

Policy C-7.13 Drainage Technologies. Require that new development projects employ innovative and efficient drainage technologies that comply with federal and state water quality requirements and reduce runoff and water quality impacts to downstream environments.

Policy C-7.14 Pollutant Runoff. Reduce pollutants in runoff from agriculture and new development by requiring the use of the most effective best management practices currently available. All runoff shall be filtered and treated to remove expected pollutants prior to being directed to infiltration areas and/or stormwater systems. Where runoff cannot be adequately accommodated on-site through on-site systems, any excess runoff shall be conveyed inland in a non-erosive manner. Also encourage green infrastructure on designated "Green Streets" where stormwater and runoff would be managed, captured, and cleansed in public rights-of-ways. Main Street should be studied for potential as a Green Street.

New development or redevelopment facilitated by the General Plan and LCP Update would also be subject to the standards in the Municipal Code relating to sensitive natural communities, ESHA, wetlands, and riparian areas in the city. Compliance with City's updated Municipal Code requirements and the goals and policies proposed in the General Plan and LCP Update would protect wetlands, riparian areas, streams and other sensitive natural communities from potential impacts associated with development and redevelopment facilitated by the project. Therefore, the General Plan and LCP Update would not result in significant adverse effects on riparian areas and other sensitive natural communities, drainages, wetlands and other aquatic habitats and impacts would be less than significant.

Mitigation Measures

No additional policy-oriented mitigation would be required to address this impact. As individual development projects are proposed, focused, project-level environmental review may be required, which could result in the implementation of project-specific measures.

Threshold 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 BIO-3 NEW DEVELOPMENT FACILITATED BY THE GENERAL PLAN AND LCP UPDATE MAY REMOVE TREES, ENCROACH ON ROOKERIES AND BREEDING SITES, IMPEDE MOVEMENT OF TERRESTRIAL AND AQUATIC WILDLIFE, AND OTHERWISE INTERFERE WITH THE MOVEMENT OF WILDLIFE. IMPACTS TO WILDLIFE CORRIDORS, ROOKERIES, AND NEST SITES WOULD BE LESS THAN SIGNIFICANT WITH INCORPORATION OF MITIGATION.

The planning area is located west of the Los Padres National Forest, and natural habitats in the Coast Range along the east side of the planning area provide a nearly continuous band of habitat suitable for movement connecting the eastern planning area to the National Forest. An essential connectivity area is mapped in the eastern portion of the planning area, with core areas east of the existing city limits. Within the city limits, large portions of the planning area are urbanized and lack broad connections from natural habitats along the immediate coast to the rural connectivity area in the east. However, riparian areas and other open spaces form local wildlife corridors within the existing city limits. Outside of the city limits, critical habitat for steelhead is present within the planning area, and includes Morro Creek, Little Morro Creek, and Chorro Creek, both within the existing city limits and further upstream. Adequate passage for fish to move up these streams is an essential component of these critical habitat designations.

Several rookeries and breeding sites are known to be present within the planning area. These include a peregrine falcon nesting site at Morro Rock, as well as heron, egret, and cormorant rookeries in groves of prominent trees. These nesting sites are used for many years. Finally, the planning area includes several groves that provide overwintering habitat for monarch butterflies, an important geographic component of this species' migratory patterns. Although many of the rookeries and the monarch overwintering sites are associated with non-native vegetation, these areas have been identified as ESHAs due to the comparative rarity of these habitats in the planning area and vicinity and the importance of these habitats in the life cycles of the affected species.

Development facilitated by the General Plan and LCP Update would allow for construction of new residential units and non-residential development in the planning area. Depending on the location, orientation, and design of new development and redeveloped properties, development could encroach on rookeries and breeding sites, reducing their suitability for use by breeding birds. Development could also result in removal of trees that provide the microclimates necessary for overwintering monarchs. Although growth envisioned in the General Plan and LCP Update is primarily focused on infill areas, infill development could reduce local movement opportunities for small and medium sized terrestrial wildlife by reducing the number and altering distribution of vacant lots. Additionally, transportation improvements and the establishment of linear utilities facilitated by the General Plan and LCP Update may cross streams and riparian areas. New or extended structures that cross streams can create impediments to movement of fish and can also impede movement of terrestrial wildlife.

As described under Impact BIO-1 and Impact BIO-2, the General Plan and LCP Update includes policies that specify protections for ESHAs, including breeding and overwintering sites, as well as the riparian corridors and stream channels that serve as local wildlife movement corridors for many species. Additionally, implementation actions C-1, C-4, C-5, and C-6, included in the Implementation section of the General Plan and LCP Update, provide specific direction regarding breeding and overwintering sites, including flexibility to adjust to the potential for these sites to move and change over time.

As discussed under Impact BIO-1, policies regarding future land use and preservation of the rural character of lands in the planning area outside city limits promote retention of larger scale wildlife movement. However, the General Plan and LCP Update does not include policies specific to protecting fish passage in steelhead streams or maintaining local wildlife movement corridors when completing transportation and circulation improvements. Although the General Plan and LCP Update policies would preserve open space and protect sensitive habitats resulting in the protection of wildlife movement corridors, wildlife movement corridor protection is not specifically stated. Therefore, this impact to wildlife movement corridors would be potentially significant, and mitigation is required.

Mitigation Measures

The following measure is required to limit impacts to wildlife movement corridors, particularly fish passage.

BIO-3 Wildlife Movement Corridors Protection

The following policy shall be added to the Conservation Element.

Policy C-1.17 Project Design for Wildlife Connectivity. Design new stream crossing structures and extensions or modifications of existing structures to accommodate wildlife movement. At a minimum, structures within steelhead streams must be designed in consultation with a fisheries biologist and shall not impede movement. New projects with long segments of fencing and lighting shall be designed to minimize impacts to wildlife. Fencing or other project components shall not block wildlife movement through riparian or other natural habitat. Where fencing or other project components that may disrupt wildlife movement is required for public safety concerns, they shall be designed to permit wildlife movement.

Significance After Mitigation

Impacts to wildlife movement corridors would be less than significant with implementation of Measure BIO-3 to add a General Plan and LCP Update policy to preserve wildlife movement corridors.

<p>Threshold 5: Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?</p> <p>Threshold 6: 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?</p>
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Impact BIO-4 DEVELOPMENT FACILITATED BY THE GENERAL PLAN AND LCP UPDATE WOULD NOT CONFLICT WITH APPLICABLE LOCAL POLICIES PROTECTING BIOLOGICAL RESOURCES OR AN APPROVED LOCAL, REGIONAL, OR STATE HABITAT CONSERVATION PLAN. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

The planning area is not within the boundaries of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other local, regional or state conservation plan, nor is it immediately adjacent to such a plan. Therefore, development facilitated by the General Plan and LCP Update would not be subject to the provisions of such plan. However, future development under the General Plan and LCP Update would be subject to all applicable local policies and regulations, including applicable requirements of the Morro Bay Municipal Code, related to the protection of important biological resources. The General Plan and LCP Update does not contemplate modifications to Municipal Code Chapter 12.08, City Tree Regulations, which provides standards for the removal, protection, and preservation of street trees and trees within the public right of way. Therefore, the General Plan and LCP Update would not conflict with these regulations. Additionally, the goals and policies listed under Impacts BIO-1 and BIO-2 would ensure that buildout in the planning area under the General Plan and LCP Update occurs in a manner that supports Municipal Code Chapter 16.44, Conservation Subdivisions, which is intended to protect environmentally significant attributes and preserve open space. Therefore, the General Plan and LCP Update would not conflict with applicable local policies and regulations, and this impact would be less than significant.

Mitigation Measures

No policy-oriented measures would be required to address this impact. As individual development projects are proposed, focused, project-level environmental review may be required, including evaluation of individual development projects for consistency with applicable local policies protecting biological resources, which could result in the implementation of project-specific mitigation measures.

d. Cumulative Impacts

Biological resources impacts as described above are related to the potential for direct and indirect impacts to sensitive natural communities, special status species, regulated waterways and wetlands, sensitive habitat and mature native trees, and wildlife movement corridors. Implementation of the land use development patterns under the General Plan and LCP Update could result in impacts on special-status species, riparian, wetland, or other sensitive natural communities, as well as wildlife movement in the planning area, and contribute to cumulative impacts to these resources within the greater cumulative impact area (adjacent communities, including San Luis Obispo county). As a result, cumulative impacts to sensitive biological resources would be potentially significant. Mitigation measures BIO-1(a), BIO-1(b), and BIO-3 would require additional policy language in the General Plan and LCP Update to protect biological resources that have potential to be impacted by development facilitated by the General Plan and LCP Update. These mitigation measures would

reduce the General Plan and LCP Update's potential contribution to cumulative impacts to special status species and wildlife movement corridors to a less than significant level. Therefore, the contribution of the proposed General Plan and LCP Update to cumulative impacts would not be cumulatively considerable with implementation of applicable General Plan and LCP Update goals and policies and required mitigation.

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4.4 Cultural Resources

The analysis in this section has been prepared in accordance with *CEQA Guidelines* Section 15064.5 and considers potential impacts to archaeological, and historic resources. This section includes a brief summary of cultural resources background information and a review of known archaeological and built environment resources as well as potential impacts to these resources as a result of the General Plan and LCP Update. Potential impacts to tribal cultural resources are addressed in Section 4.15, *Tribal Cultural Resources*. Potential impacts to paleontological resources are addressed in Section 4.5, *Geology/Soils*.

4.4.1 Setting

a. Regional and Local Geology

The City of Morro Bay lies at the southern end of the Coast Ranges geomorphic province and contains geologic units ranging in age from Jurassic to recent (CGS 2002). The surface geologic units in the city are listed and described in Table 4.5-1 and mapped in Figure 4.5-1 in Section 4.5, *Geology and Soils*.

b. Prehistoric Background

Morro Bay is located in the Central Coast archaeological region. The Central Coast is defined as extending from south of San Francisco Bay to the northern edge of the Southern California Bight. The prehistoric cultural chronology for the Central Coast can be generally divided into six periods: Paleo-Indian (ca. 10,000–8,000 B.C.), Millingstone/Early Archaic (8,000- 3,500 B.C.), Early (3,500-600 B.C.), Middle (600 B.C.-A.D. 1000), Middle-Late Transition (A.D. 1000-A.D. 1250), and Late (A.D. 1250-contact [ca. A.D. 1769]; Appendix B). These periods are described below.

Paleo-Indian Period (ca. 10,000–8,000 B.C.)

Recent data from Paleo-Indian sites in Southern California indicate that the economy was a diverse mixture of hunting and gathering, with a major emphasis on aquatic resources in many coastal areas and on Pleistocene lake shores in eastern California. Although few Clovis-like or Folsom-like fluted point arrowheads have been found in Southern California, it is generally considered that the emphasis on hunting may have been greater during the Paleo-Indian period than in later periods (Appendix B).

Millingstone/Early Archaic Period (8,000- 3,500 B.C.)

The Millingstone period is characterized by an ecological adaptation to collecting suggested by the appearance and abundance of well-made milling implements. Millingstones occur in large numbers for the first time in the region's archaeological record and are even more numerous near the end of this period. Aside from millingstones, typical artifacts during this period include crude core and cobblecore tools, flake tools, large side-notched projectile points, and pitted stones (Appendix B).

Early Period (3,500-600 B.C.)

An extensive series of shoreline midden deposits are within the Central Coast region dating to the Early period, signifying an increase in occupation of the open coast. Sites dating to this period are marked by large lithic artifact assemblages, which include Central Coast Stemmed Series and side-

notched projectile points. The material culture recovered from Early period sites within the Central Coast region provides evidence for continued exploitation of inland plant and coastal marine resources. Artifacts include milling slabs and handstones, as well as mortars and pestles, which were used for processing a variety of plant resources. Bipointed bone gorges were used for fishing. Shell beads and obsidian are hallmarks of the trade and exchange networks of the Central and Southern California coasts. The archaeological record indicates a substantial increase in the abundance of obsidian at Early period sites in the Monterey Bay and San Luis Obispo areas (Appendix B).

Middle Period (600 B.C.-A.D. 1000)

A pronounced trend toward greater adaptation to regional or local resources occurred during the Middle period. For example, the remains of fish, land mammals, and sea mammals are increasingly abundant and diverse in archaeological deposits along the coast. Related chipped stone tools suitable for hunting were more abundant and diversified, and shell fishhooks became part of the toolkit during this period. Larger knives, a variety of flake scrapers, and drill-like implements are common during this period. Projectile points include large side-notched, stemmed, and lanceolate or leafshaped forms. Bone tools, including awls, are more numerous than in the preceding period, and the use of asphaltum adhesive became common. Sites from this period show a retention of stemmed points and the disappearance of the larger side-notched points (Appendix B).

Middle-Late Transition Period (A.D. 1000-A.D. 1250)

The Middle-Late Transition period is marked by relative instability and change, with major changes in diet, settlement patterns, and interregional exchange. The relatively ubiquitous Middle period shell midden sites found along the Central Coast were abandoned by the end of the Middle-Late Transition period, so most Transition period and Late period sites were first occupied during those periods. One site (Site SLO-239) has been tentatively dated to the Middle-Late Transition period and contains the only residential feature, a circular house floor, dating to this time period (Appendix B).

Late Period (A.D. 1250-contact [ca. A.D. 1769])

Late period sites are marked by small, finely worked projectile points, such as desert side-notched and cottonwood points, as well as temporally diagnostic shell beads. The small projectile points are associated with bow and arrow technology and indicate influence from the Takic migration from the deserts into Southern California. Common artifacts identified at Late period sites include bifacial bead drills, bedrock mortars, hopper mortars, lipped and cupped *Olivella* shell beads, and steatite disk beads. The presence of beads and bead drills suggest that low-level bead production was widespread throughout the Central Coast region (Appendix B).

c. Ethnographic Background

The project site is within the Salinan and Chumash ethnographic territories. The boundaries for these two territories are currently still being debated. The historic boundary created by Kroeber (1925) placed Salinan territory from the Pacific coast shoreline inland 80 km to the Santa Lucia and Diablo ranges, as well as the Salinas River, and extending into Monterey, San Luis Obispo, Fresno, and Kern counties. The ethnographic territory of the Chumash was placed by Kroeber a few miles north of what is now San Luis Obispo and extending south to Malibu Canyon. The Chumash spoke six languages, Obispeño being associated with the Northern Chumash represented in the project area. Linguistic data supports the division of the Salinan into two groups, the Antoniaños and the

Migueleños (Hester 1978). The boundary of the Salinan-Northern Chumash traditional territory has been contested and, as a result, numerous territorial boundaries have been suggested (Milliken and Johnson 2005). Recent work by Milliken and Johnson based on mission records and summarizing previous work proposed the Salinan-Chumash interface to be a few miles south of the Mission San Miguel, between the mission and San Marcos Creek. Relative to the Chumash, Salinan prehistory is not well understood. The ethnographic backgrounds of the Chumash and Salinan are discussed here.

Northern Chumash

Groups neighboring the Chumash included the Salinan to the north, the Southern Valley Yokuts and Tataviam to the east, and the Gabrielino (Tongva) to the south. Chumash place names in the project vicinity include Pismu (Pismo Beach), Tematatimi (along Los Berros Creek), and Tilhini (near San Luis Obispo) (Greenwood 1978). Only a general outline of the lifeways of the Obispeño Chumash is known based on the little ethnographic information available (Greenwood 1978).

Although their language was closer to Southern Chumash groups, the material culture and lifeways of the Northern Chumash appear to have been more similar to their northern neighbors, the Salinan. Accordingly, their populations in this area are thought to have been substantially lower than in the Santa Barbara Channel area, their villages smaller, and their livelihood less based on intensive use of marine fisheries (Glassow, Wilcoxon, and Erlandson 1988; Greenwood 1978).

Permanent Chumash villages included hemispherical dwellings arranged in close groups, with the chief having the largest for social obligations (Brown 2001). Each Chumash village had a formal cemetery marked by tall painted poles and often with a defined entrance area (Gamble, Walker, and Russell 2001). Archaeological studies have identified separate sections for elite versus commoner families within the cemetery grounds (King 1969).

The acorn was a dietary staple for the mainland Chumash, though its dominance varied by coastal or inland location. Chumash diet also included cattail roots, fruits and pads from cactus, and bulbs and tubers of plants such as amole (Miller 1988). On the coast, the wooden plank canoe (tomol) was employed in the pursuit of marine mammals and fish. The tomol not only facilitated marine resource procurement but also facilitated an active trade network maintained by frequent crossings between the mainland and the Channel Islands.

Chumash populations were decimated by the effects of European colonization and missionization (Johnson 1987). Traditional lifeways largely gave way to laborer jobs on ranches and farms in the Mexican and early American periods. Today, the Santa Ynez Band of Chumash Indians is the only federally recognized Chumash tribe, though many people of Chumash descent continue to live throughout their traditional territory.

Salinan

Little substantial data exists regarding the settlement patterns of the Salinan (Hester 1978). The Salinan are often separated into two groups, the northern Antoniaños, and the southern Migueleños. Twenty-one possible villages have been associated with Salinan tradition including the major Migueleños village, tšolám or Cholami. Although no permanent sites have been identified in the coastal ranges, logistical foraging and hunting camps in these areas are likely. Houses were dome-shaped and use of communal structures and subterranean sweathouses has been recorded (Hester 1978).

Very little has survived of Salinan material culture. However, some baskets of varying shapes and sizes have been collected and represent Salinan basketry. Bone and stone tools were manufactured and have been recovered in limited amounts. The Salinan tool kit is similar to many groups in this region and includes projectile points, scrapers, stone bowl mortars, arrowshaft straighteners, and bone awls. Additionally, C-shaped fishhooks have been found at coastal sites (Hester 1978).

In July of 1771 San Antonio de Padua became the first mission established within the Salinan territory and the population at that time is estimated at around 3,000. Mission San Miguel Arcangel was later founded in 1797 and expanded rapidly, with over 1,076 Migueleños, and some neighboring groups also incorporated into the mission. By 1831, Salinan population dwindled to fewer than 700 individuals and by 1928, only 36 Salinan remained in California. Throughout this period most Salinan continued to live in the vicinity of the two missions (Hester 1978).

d. Historical Background

Post-European contact history for the state of California is generally divided into three periods: the Spanish period (1769–1822), the Mexican period (1822–1848), and the American period (1848–present). The Juan Rodrigues Cabrillo expedition reached the San Luis Obispo region in 1542, possibly landed in Morro Bay, and sailed as far north as San Francisco Bay. For more than 200 years, other Spanish, Portuguese, British, and Russian explorers sailed the Alta (upper) California coast and made limited inland expeditions, but they did not establish permanent settlements (Appendix B).

Spanish Period (1769–1822)

The earliest detailed descriptions of the area come from members of Gaspar de Portolá’s land expedition, which passed through the region in 1769. Early travelers in the Central Coast region reported seeing no large Native American villages like those noted in the Santa Barbara Channel area. Gaspar de Portolá and Franciscan Father Junípero Serra established the first Spanish settlement in Alta California at Mission San Diego de Alcalá in 1769. This was the first of 21 missions erected by the Spanish between 1769 and 1823. Portolá continued north, passing through the project vicinity and reaching San Francisco Bay in 1769. Mission San Luis Obispo de Tolosa was founded in 1772, the fifth of 21 missions established by the Spanish in Alta California (Appendix B).

Mexican Period (1822–1848)

The Mexican period commenced when news of the success of the Mexican Revolution (1810-1821) against the Spanish crown reached California in 1822. This period was an era of extensive interior land grant development and exploration by American fur trappers west of the Sierra Nevada Mountains. The California missions declined in power and were ultimately secularized in 1834. Governor Pío Pico and his predecessors made more than 600 rancho grants between 1833 and 1846, putting most of the state’s lands into private ownership for the first time. The secularization of the missions during the Mexican period resulted in approximately 500,000 acres of former mission lands being granted to Mexican citizens in San Luis Obispo County. The City of Morro Bay contains portions of what were once the San Bernardo and the Moro y Cayucos land grants. Rancho San Bernardo was granted in 1840 to Vincent Canet, and Rancho Moro y Cayucos was granted in 1842 to Martin Olivera and Vicente Feliz (Appendix B).

American Period (1848–present)

The American period began with the signing of the Treaty of Guadalupe Hidalgo in 1848, in which the United States agreed to pay Mexico \$15 million for the conquered territory, including California,

Nevada, Utah, and parts of Colorado, Arizona, New Mexico, and Wyoming. Settlement of Southern California continued to increase during the early American period. Many ranchos in the county were sold or otherwise acquired by Americans, and most were subdivided into agricultural parcels or towns. Rancho San Bernardo was patented to Vincent Canet in 1865, and a patent was issued for Rancho Moro y Cayucos to James McKinley in 1878. The County of San Luis Obispo was founded in 1850. Roads were constructed throughout the county in the 1870s, primarily by Chinese laborers, leading to increased mobility throughout the county. In 1872, Captain John Harford began construction on the Pacific Coast Railway. In 1864, Franklin Riley visited Morro Bay while traveling the coast. Riley knew that there was a pocket of public land between Don Canet's Rancho San Bernardo and the coast, so he decided to homestead this land, and in 1870 founded it as the City of Morro Bay. Few roads led to Morro Bay, so transportation relied on steamers. Riley built the Embarcadero and planned the town next to the bay to accommodate sea trade and travel. Throughout the 1870s, the town grew rapidly because of trade along the Embarcadero. Land development became very important in Morro Bay in the early 1900s, with several real estate developers promoting the city. During the 1920s, numerous housing developments were carved out of ranches and farms. In the early twentieth century Port Harford was renamed Port San Luis and oil from the Santa Maria and Taft-Coalinga fields was shipped beginning in 1907 and 1913, respectively. The California Polytechnic School was established in 1901 as a high school and eventually became California Polytechnic State University (Cal Poly). The county's agriculture and ranching production supplied US troops during World War I and helped its residents weather the Great Depression of the 1930s. At the start of World War II, the US War Department transferred nearly 100,000 military personnel to bases at Morro Bay, Camp San Luis, Camp Roberts, and Cambria (Appendix B). The Morro Bay Power Plant was constructed in the 1950s, providing jobs and tax revenue. Morro Bay was incorporated as a general law city in 1964 and elected its first City Council.

e. Previously Identified Cultural Resources

The city does not contain any resources listed by the State Office of Historic Preservation (SHPO) as California Points of Interest, and no resources in the city are listed in the National Register of Historic Places (NRHP) or the California Register of Historical Resources (CRHR) (refer to Appendix B). Morro Rock is listed as a State Historical Landmark. Currently, the City of Morro Bay does not have a cultural resources inventory of built-environment and archaeological resources present in the city. However, the city likely contains built-environment resources over 50 years of age because development in the city dates back to the 1800s.

f. Regulatory Setting

Cultural resources, including built environment and archaeological resources, may be designated as historic by National, State, or local authorities. In order for a resource to qualify for listing in the NRHP, the CRHR, or as a locally significant resource, it must meet one or more identified criteria of significance. The resource must also retain sufficient historic integrity, defined in *National Register Bulletin 15* as the "ability of a property to convey its significance" (National Park Service [NPS] 1990). Explanations of these criteria are included in the regulatory setting discussions that follow.

State

California Environmental Quality Act

CEQA requires a lead agency to analyze whether historic and/or archaeological resources may be adversely impacted by a proposed project. Under CEQA, a "project that may cause a substantial

adverse change in the significance of a historic resource is a project that may have a significant effect on the environment” (California Public Resources Code [PRC] Section 21084.1). Evaluating significance is a two-part process: first, the determination must be made as to whether or not the project area contains cultural resources; second, if cultural resources are present, the proposed project must be analyzed for a potential “substantial adverse change in the significance” of the resource.

California Register of Historical Resources

The CRHR is a guide to cultural resources that must be considered when a government agency undertakes a discretionary action subject to CEQA. The CRHR helps government agencies identify, evaluate, and protect California’s historical resources, and indicates which properties are to be protected from substantial adverse change (PRC Section 5024.1[a]). The CRHR is administered through SHPO that is part of the California State Parks system.

A cultural resource is evaluated under four CRHR criteria to determine its historical significance. A resource must be significant at the local, state, or national level in accordance with one or more of the following criteria set forth in the *CEQA Guidelines* Section 15064.5(a)(3):

1. It is associated with events that have made a significant contribution to the broad pattern of California’s history and cultural heritage;
2. It is associated with the lives of persons important in our past;
3. It 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. It has yielded, or may be likely to yield, information important in prehistory or history.

In addition to meeting one or more of the above criteria, the CRHR requires that sufficient time must have passed to allow a “scholarly perspective on the events or individuals associated with the resource.” Fifty years is used as a general estimate of the time needed to understand the historical importance of a resource according to SHPO publications. The CRHR also requires a resource to possess integrity, which is defined as “the authenticity of a historical resource’s physical identity evidenced by the survival of characteristics that existed during the resource’s period of significance. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association.” Archaeological resources can sometimes qualify as “historical resources” (*CEQA Guidelines* Section 15064.5[c][1]).

According to CEQA, all buildings constructed over 50 years ago and that possess architectural or historical significance may be considered potential historical resources. Most resources must meet the 50-year threshold for historic significance. However, resources less than 50 years in age may be eligible for listing on the CRHR if it can be demonstrated that sufficient time has passed to understand their historical importance.

In addition, if a project can be demonstrated to cause damage to a unique archaeological resource, the lead agency may require reasonable efforts 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 (PRC Section 21083.2[a], [b], and [c]).

PRC Section 21083.2(g) defines a unique archaeological resource as an artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

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

Two other programs are administered by the state: California Historical Landmarks and California "Points of Historical Interest." California Historical Landmarks are buildings, sites, features, or events that are of statewide significance and have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other historical value. California Points of Historical Interest are buildings, sites, features, or events that are of local (city or county) significance and have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other historical value.

Impacts to significant cultural resources that affect the characteristics of any resource that qualify it for the NRHP or adversely alter the significance of a resource listed in or eligible for listing in the CRHR are considered a significant effect on the environment. These impacts could result from 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 (*CEQA Guidelines* Section 15064.5 (b)(1), 2000). Material impairment is defined as demolition or alteration in an adverse manner [of] those characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in, the CRHR. (*CEQA Guidelines* Section 15064.5[b][2][A]).

Codes Governing Human Remains

CEQA Guidelines Section 15064.5 also assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. The disposition of human remains is governed by Health and Safety Code Section 7050.5 and PRC Sections 5097.94 and 5097.98 and falls within the jurisdiction of the Native American Heritage Commission (NAHC). If human remains are discovered, the County Coroner must be notified within 48 hours and there should be no further disturbance to the site where the remains were found. If the remains are determined by the coroner to be Native American, the coroner is responsible for contacting the NAHC within 24 hours. The NAHC, pursuant to PRC Section 5097.98, will immediately notify those persons it believes to be most likely descended from the deceased Native Americans so they can inspect the burial site and make recommendations for treatment or disposal.

Senate Bill 18 and Assembly Bill 52

California Senate Bill 18 (SB 18) (California Government Code Sections 65352.3 and 65352.4) was enacted on March 1, 2005 and requires cities and counties to notify and consult with California Native American tribal groups and individuals regarding proposed local land use planning decisions for the purpose of protecting traditional tribal cultural places (sacred sites), prior to adopting or amending a General Plan or designating land as open space. California Assembly Bill 52 of 2014 (AB 52) was enacted on July 1, 2015 and expands CEQA by defining "tribal cultural resources" as a new resource category. AB 52 establishes that "A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (PRC Section 21084.2). It further states that the lead agency

shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3). AB 52 also establishes a formal consultation process for California tribes regarding those resources. A more detailed discussion of the requirements of SB 18 and AB 52 is included in Section 4.15, *Tribal Cultural Resources*.

Local

Morro Bay Municipal Code

The Morro Bay Municipal Code adopts by reference the 2016 California Historical Building Code. Morro Bay Municipal Code Section 12.05.150 provides seven criteria, three of which must be met for the designation of landmark trees in the city and include native trees or groves of historical significance to local indigenous cultures. Morro Bay Municipal Code Section 14.72.060(C)(2) allows for the issuance of variances for the repair or rehabilitation of “historic structures” provided that the proposed action and variance preserve the historic nature of the structure.

Zoning Code Section 17.48.310 established regulations for the protection of archaeological and historic resources on both public and private lands in the city.

4.4.2 Impact Analysis

a. Methodology and Significance Thresholds

Under CEQA, any project that may cause a substantial adverse change in the significance of a historical resource would also have a significant effect on the environment. According to Appendix G of the *CEQA Guidelines*, impacts related to cultural resources from the proposed project would be significant if the project would:

1. Cause a substantial adverse change in the significance of an historical resource as defined in Section 15064.5;
2. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5;
3. Disturb any human remains, including those interred outside of dedicated cemeteries

The significance of a cultural resource and, subsequently, the significance of any impact are determined by consideration of whether that resource can increase our knowledge of the past. The determining factors are site content and degree of preservation. A finding of archaeological significance follows the criteria established in the *CEQA Guidelines*.

CEQA Guidelines Section 15064.5 (Determining the Significance of Impacts to Archaeological Resources) states:

(3) [...] Generally, a resource shall be considered by the lead agency to be “historically significant” if the resource meets the criteria for listing on the CRHR (PRC Section 5024.1, Title 14 CCR Section 4852).

(4) The fact that a resource is not listed in, or determined to be eligible for listing in the CRHR, not included in a local register of historical resources (pursuant to PRC Section 5020.1[k]), or identified in an historical resources survey (meeting the criteria in PRC Section 5024.1[g]) does not preclude a lead agency from determining that the resource may be an historical resource as defined in PRC Sections 5020.1(j) and 5024.1.

(b) A project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.

Historical resources are “significantly” affected if there is demolition, destruction, relocation, or alteration of the resource or its surroundings. Generally, impacts to historical resources can be mitigated to below a level of significance by following the Secretary of the Interior’s Guidelines for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior’s Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (Guidelines Section 15064.6[b]). In some circumstances, documentation of a historical resource by way of historic narrative photographs or architectural drawings will not mitigate the impact of demolition below the level of significance (Guidelines Section 15126.4[b][2]). Preservation in place is the preferred form of mitigation for archaeological resources as it retains the relationship between artifact and context and may avoid conflicts with groups associated with the site (Guidelines Section 15126.4 [b][3][A]). If an archaeological resource does not meet either the historic resource or the more specific “unique archaeological resource” definition, impacts do not need to be mitigated (Guidelines Section 15064.5[e]). Where the significance of a site is unknown, it is presumed to be significant for the purpose of the EIR investigation.

b. Project Impacts and Mitigation Measures

Threshold 1: Would the project cause a substantial adverse change in the significance of a historical resource as defined in *CEQA Guidelines* Section 15064.5?

Threshold 2: Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to *CEQA Guidelines* Section 15064.5?

Impact CR-1 DEVELOPMENT FACILITATED BY THE GENERAL PLAN AND LCP UPDATE HAS THE POTENTIAL TO IMPACT HISTORICAL AND UNIQUE ARCHAEOLOGICAL RESOURCES. IMPLEMENTATION OF APPLICABLE GENERAL PLAN AND LCP UPDATE GOALS AND POLICIES WOULD MINIMIZE OR AVOID POTENTIAL ADVERSE IMPACTS TO HISTORICAL AND ARCHAEOLOGICAL RESOURCES. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT WITH INCORPORATION OF MITIGATION.

Based on *CEQA Guidelines* Section 15064.5, the General Plan and LCP Update, including future development activities facilitated by the General Plan and LCP Update, would have a significant impact on historical resources if it would cause a substantial adverse change in the significance of a historical resource. Historical resources include properties eligible for listing on the National Register of Historic Places, the CRHR, or the local register of historical resources. In addition, as explained in Section 15064.5, “[s]ubstantial adverse change in the significance of an historical resource means 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.” Although there are no specific development projects associated with the General Plan and LCP Update, implementation of the proposed General Plan and LCP Update would guide development in the planning area through the year 2040. Development facilitated by the General Plan and LCP Update could result in adverse effects to known or unknown historic resources.

Effects on archaeological resources can only be determined once a specific project has been proposed because the effects are dependent on both the individual project site conditions and the characteristics of the proposed ground-disturbing activity. Ground-disturbing activities associated with development facilitated by the General Plan and LCP Update have the potential to damage or

destroy previously unknown historic or prehistoric archaeological resources that may be present on or below the ground surface. Potential impacts to historic or prehistoric archaeological resources are most likely to occur in areas that have not previously been developed with urban uses, have not been studied through a cultural resource investigation, or when excavation extends to new depths. Consequently, damage to or destruction of previously-unknown sub-surface cultural resources could occur as a result of development under the proposed General Plan and LCP Update.

The General Plan and LCP Update Conservation Element includes Goal C-10, which is aimed at protecting cultural and historic resources, including policies requiring the identification of cultural and historic resources, the protection of cultural resources during construction, and the development of a cultural resources overlay. Applicable General Plan and LCP Update goals and policies are listed below.

Goal C-2 Cultural and historic resources are identified for protection and showcased as a vital part of Morro Bay

- Policy C-2.1 Historic and Cultural Resources Strategy.** Develop a plan to address historic and cultural resource issues in Morro Bay, which may include conducting and updating inventories, exploring certification options, and developing context statements.
- Policy C-2.2 Interagency Cooperation.** Work with the Historical Society of Morro Bay and other local groups on historic preservation objectives.
- Policy C-2.3 Protection of Cultural Resources.** Ensure the protection of cultural and archaeological resources during development, construction, and other similar activities. Development shall avoid, to the maximum extent feasible, adversely impacting cultural and/or archaeological resources, and shall include adequate BMPs to address any such resources that may be identified during construction, including mitigation measures sufficient to allow documentation, preservation, and other forms of mitigation.
- Policy C-2.4 Cultural Resources Overlay.** Develop a cultural resources overlay to protect cultural, archaeological and paleontological resources in Morro Bay.

The General Plan and LCP Update also includes the following implementation actions for Goal C-2:

- C-11** Become a Certified Local Government (CLG) by developing a historic preservation ordinance, establishing a historic preservation committee, and maintaining a system to regularly update cultural resources.
- C-12** Conduct inventories of historic and cultural resources in Morro Bay. Update these inventories as needed to ensure up-to-date information.
- C-13** Establish a local register that mimics requirements of the California Register of Historic Resources and the National Register of Historic Places, but focuses on locally important historic themes, such as Morro Bay’s legacy as a fishing village.
- C-14** Identify historical themes and develop a historic context statement that is used to identify significant historical themes within a community that are often represented in the built environment, such as houses and infrastructure.

These goals, policies, and implementation actions are intended to provide a plan for developing project-level mitigation necessary to address site-specific historic and cultural resources. Additionally, future development under the General Plan and LCP Update would be subject to the provisions of applicable federal and State cultural and historic resource regulations (discussed in subsection 4.4.1(f), *Regulatory Setting*). Although compliance with applicable regulations and implementation of General Plan and LCP Update goals and policies would minimize impacts to archaeological and historic resources, the General Plan and LCP Update does not include policy language or implementation actions to address potential impacts to archaeological and historic resources on a project-by-project basis within the planning area. Therefore, impacts to archaeological and historic resources would be potentially significant and additional policy-based mitigation would be required to avoid and/or minimize these potential impacts.

Mitigation Measures

The following measures are required to address potential impacts to cultural and historic resources.

CR-1(a) Avoidance or Minimization of Historic, Cultural, and Archaeological Resources Impacts

Policy C-2.3 of the General Plan and LCP Update shall be revised to read:

Policy C-2.3 Protection of Cultural Resources. Ensure the protection of historic, cultural, and archeological resources during development, construction, and other similar activities. Development shall avoid, to the maximum extent feasible, adversely impacting historic, cultural, and/or archaeological resources, and shall include adequate BMPs to address any such resources that may be identified during construction, including avoidance, minimization, and mitigation measures sufficient to allow documentation, preservation, and other forms of mitigation. If the resource(s) in question are of Native American origin, develop avoidance or minimization measures in consultation with appropriate Native American tribe(s).

CR-1(b) Cultural Resources Study Implementation Action

The following implementation action for Goal C-2 shall be added to the General Plan and LCP Update:

Require all discretionary proposals within the cultural resources overlay to consider the potential to disturb cultural resources. If preliminary reconnaissance suggests that cultural resources may exist, a Phase I cultural resources study shall be performed by a qualified professional meeting the Secretary of the Interior's (SOI) Professional Qualification Standard (PQS) for archaeology and/or architectural history, as appropriate (NPS 1983).

A Phase I cultural resources study shall include a pedestrian survey of the project site and sufficient background research and field sampling to determine whether subsurface prehistoric or historic remains may be present. Archival research should include a records search at the Central Coast Information Center (CCIC) and a Sacred Lands File (SLF) search with the Native American Heritage Commission (NAHC). Where identified or potential resources are of Native American origin, the appropriate Native American tribe(s) will participate with the qualified professional. The technical report documenting the study shall include recommendations to avoid or, if avoidance is not feasible, reduce impacts to cultural resources.

Significance After Mitigation

Impacts to cultural and historic resources would be less than significant with implementation of Measures CR-1(a) and CR-1(b), which would update the General Plan and LCP Update to include a policy and implementation action to address potential impacts to historical and unique archaeological resources on a project-by-project basis by requiring cultural resource studies for projects within the city and the implementation of further requirements to avoid or reduce impacts to those resources.

Threshold 4: Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

Impact CR-2 DEVELOPMENT FACILITATED BY THE GENERAL PLAN AND LCP UPDATE HAS THE POTENTIAL TO ADVERSELY AFFECT PREVIOUSLY UNKNOWN HUMAN BURIALS BUT WOULD BE REQUIRED TO ADHERE TO EXISTING REGULATIONS REGARDING THE TREATMENT OF HUMAN REMAINS. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Human burials outside of formal cemeteries often occur in prehistoric archaeological contexts. The potential exists for these resources to be present in areas where development has not yet occurred. Excavation during construction activities in the planning area would have the potential to disturb these resources, including Native American burials.

Human burials, in addition to being potential archaeological resources, are subject to specific provisions for treatment in PRC Section 5097. The California Health and Safety Code (Sections 7050.5, 7051, and 7054) has specific provisions for the protection of human burial remains. Existing regulations prohibit interfering with human burial remains; protect human remains from disturbance, vandalism, or destruction; and establish procedures to be implemented if Native American skeletal remains are discovered. PRC Section 5097.98 also addresses the disposition of Native American burials, protects such remains, and established the NAHC to resolve any related disputes.

All development facilitated by the General Plan and LCP Update would be required to adhere to existing regulations regarding the treatment of human remains. Therefore, this impact would be less than significant.

Mitigation Measures

No mitigation measures are required.

c. Cumulative Impacts

Development in the San Luis Obispo County region (the cumulative impact analysis area) would increase under buildout of the General Plan and LCP Update. The increase in growth in previously undisturbed areas would contribute to regional impacts on existing and previously undisturbed and undiscovered historical and archaeological resources. While most cultural resources are site-specific with impacts that are project-specific, other cultural resources may have regional significance (for example, a historical structure that represents the last known example of its kind). For such a resource, cumulative impacts would be potentially significant.

Implementation of the General Plan and LCP Update goals, policies, and implementation actions listed in Impact CR-1 are intended to provide a plan for developing project-level mitigation necessary to ensure protection of cultural resources during future development in the planning

area. Additionally, future development under the General Plan and LCP Update would be subject to the provisions of applicable federal and State cultural resource regulations (discussed in subsection 4.4.1(f), *Regulatory Setting*).

Although compliance with applicable regulations and implementation of General Plan and LCP Update goals and policies would minimize cumulative impacts to cultural resources, the General Plan and LCP Update does not include policy language or implementation actions to address potential impacts to cultural resources on a project-by-project basis. Therefore, the General Plan and LCP Update would contribute to potentially significant impacts to cultural resources. However, as described in Impact CR-1, implementation of Measures CR-1(a) and CR-1(b) would update the General Plan and LCP Update to include implementation actions to address potential impacts to cultural resources on a project-by-project basis by requiring cultural resource studies for projects within the city and the implementation of further requirements to avoid or reduce impacts to cultural resources. Implementation of Mitigation Measures CR-1(a) and CR-1(b) would ensure that potential impacts to cultural resources would not be cumulatively considerable, and cumulative impacts to such resources would be reduced to a less than significant level.

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4.5 Geology and Soils

This section of the EIR analyzes the potential physical environmental effects related to seismic hazards, underlying soil characteristics, slope stability, erosion, and paleontological resources from implementation of the proposed General Plan and LCP Update.

4.5.1 Setting

a. Geologic Setting

Morro Bay lies at the tectonically active southern end of the Coast Ranges geomorphic province and contains geologic units ranging in age from Jurassic to recent (CGS 2002). A list of the geologic units mapped at the surface within Morro Bay is presented in Table 4.5-1 and mapped in Figure 4.5-1.

Table 4.5-1 Geologic Units in the City of Morro Bay

Major Rock Type	Geologic Unit ¹	Description	Age
Sedimentary	(af) artificial fill	Human construction-related deposits, including engineered and nonengineered fill	Latest Holocene
Sedimentary	(Qa) Quaternary alluvial flood-plain deposits	Active and recently active floodplain deposits of cobbles, gravel, sand, and silt	Late Holocene
Sedimentary	(Qpe) Quaternary paralic estuarine deposits	Unconsolidated estuarine deposits of fine-grained sand and clay	Late Holocene
Sedimentary	(Qe, Qs) Quaternary eolian deposits	Unconsolidated, well-sorted white to brown windblown sand. Forms active dunes along west side of Morro Bay	Holocene
Sedimentary	(Qls) Quaternary landslide deposits	Highly fragmented to largely coherent landslide deposits	Holocene and Pleistocene
Sedimentary	(Qya) Quaternary young alluvial floodplain deposits, undivided	Unconsolidated sand, silt, and clay-bearing alluvium deposited on floodplains and along valley floors	Holocene and late Pleistocene
Sedimentary	(Qoa) Quaternary old alluvial floodplain deposits	Moderately consolidated, slightly dissected gravel, sand, silt and clay-bearing alluvium, capped by moderate to well-developed soils	Late to middle Pleistocene
Sedimentary	(Qoe) Quaternary old eolian deposits	Old stabilized sand dune deposits of moderately consolidated, well-sorted brown windblown sand, capped by moderately well-developed soils	Late to middle Pleistocene
Igneous	(Toi) Tertiary porphyritic dacite of Morro Rock-Islay Hill intrusive complex	Porphyritic dacite with altered plagioclase, biotite, glass, quartz, and hornblende groundmass	Oligocene
Igneous	(Toif) Tertiary fine-grained dacite of Morro Rock-Islay Hill intrusive complex	Fine-grained dacite flows, with rare phenocrysts	Oligocene
Sedimentary	(KJfm) Franciscan Complex melange	Chaotic mixture of fragmented rock and metasandstone	Cretaceous to Jurassic
Sedimentary	(KJfch) Franciscan Complex chert	Red and green radiolarian chert	Cretaceous to Jurassic

Major Rock Type	Geologic Unit ¹	Description	Age
Igneous/Metamorphic	(KJfmv) Franciscan Complex metavolcanics	Greenstone, pillow basalts	Cretaceous to Jurassic
Metamorphic	(Jos) Serpentinized ultramafic rocks	Peridotite, dunite, serpentinite	Jurassic

¹Rock unit abbreviation depends on geologic map source.

Sources: Dibblee 2006a, 2006b; Wiegers 2009

b. Geologic and Seismic Hazards

Geologic and seismic hazards are caused by the movement of the earth’s surface. The most common geologic or seismic hazards are associated with earthquakes, which cause the earth’s surface to move rapidly and the ground to shake. Morro Bay has experienced the effects of several seismic events in the past 150 years. The most recent earthquake that impacted Morro Bay was the San Simeon earthquake in 2003, which resulted in building damage and small fires.

There are seven seismically active faults that have been identified in San Luis Obispo County, with potential to affect the General Plan and LCP Update planning area. These faults include the Los Osos Fault, the Hosgri fault, the Oceanic-West Huasna fault, the Rinconada fault, the East Huasna fault, the La Panza fault, and the San Andreas fault. Other faults not included in this list, including the Cambria fault as well as faults outside of the Morro Bay region, may be capable of generating earthquakes that could cause damage in the planning area. In addition, there may be unknown faults in the area that could cause significant ground shaking or fault rupture. Figure 4.5-2 identifies the location of known fault lines in the vicinity of Morro Bay.

Seismic activity can trigger other types of hazards, including surface rupture, groundshaking, liquefaction, landslides, subsidence and tsunamis. The effects of tsunamis are discussed in detail in Section 4.7, *Hydrology and Water Quality*. These effects of surface rupture, groundshaking, liquefaction, landslides, and subsidence are described below.

Fault Rupture

Fault rupture is the movement of the ground surface along a fault line when the plates slip past each other. Depending on the type of fault, the movement may be vertical, horizontal, or both. The damage can be severe, as any building or structure that straddles the fault is effectively pulled in two directions at once. However, the damage area from fault rupture is generally limited to locations on the fault itself. Some earthquakes can occur without causing fault rupture. Such earthquakes are usually small, but some can be much more substantial, such as the 2003 San Simeon earthquake. These events are known as “blind thrust earthquakes.” As shown on Figure 4.5-2, the Cambria Fault runs through potential future sphere of influence area within the planning area.

Figure 4.5-1 Geologic Units in the City of Morro Bay

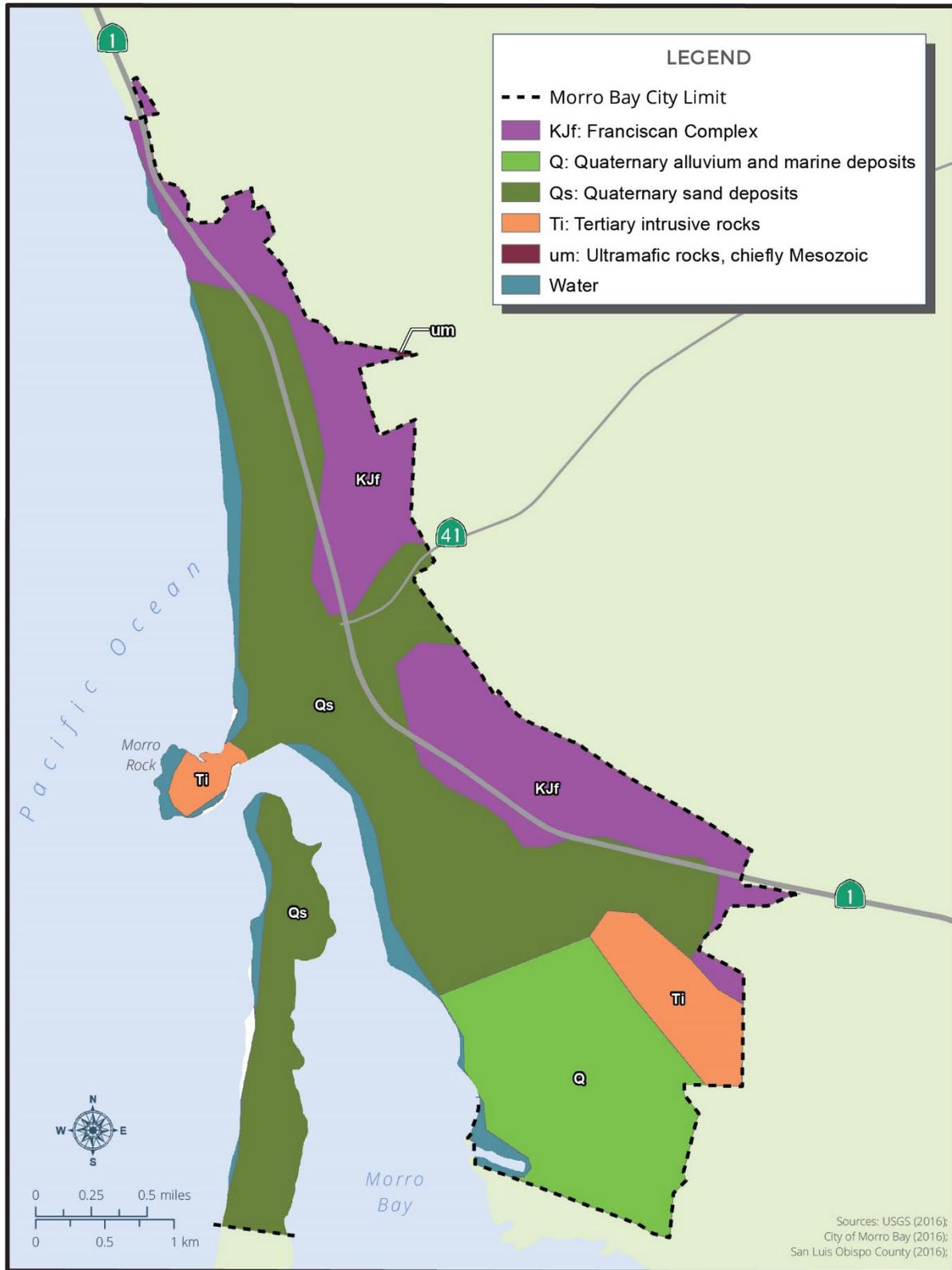
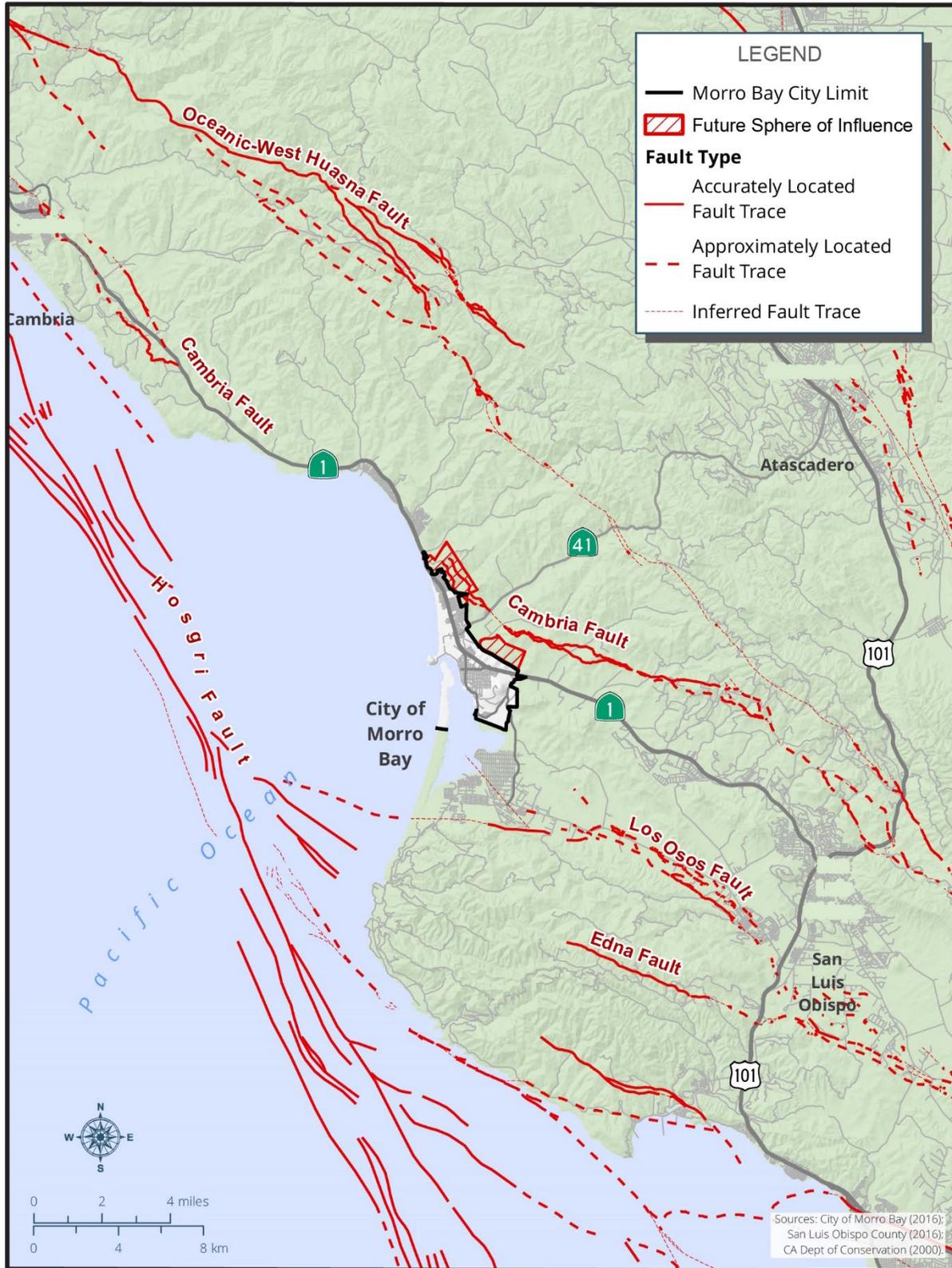


Figure 4.5-2 Regional Fault Lines



Groundshaking

Groundshaking occurs when the passage of seismic waves causes the ground to shake, resulting in damage to structures. Groundshaking is triggered by seismic activity on faults and is most likely to occur near regional fault lines shown on Figure 4.5-2.

Liquefaction

Liquefaction occurs when loose soil loses strength and behaves like a liquid during an earthquake, creating the potential for structural damage to buildings in the vicinity. Figure 4.5-3 shows the level of potential liquefaction risk in and around the planning area. As shown in Figure 4.5-3, Morro Bay's coastline is at high risk for liquefaction, with the exception of the area near Morro Rock and northernmost coastline area. The high-risk areas extend inland in southern Morro Bay, from downtown to SR 1. Inland neighborhoods in northern Morro Bay have a moderate risk for liquefaction.

Landslides

Landslides can be caused by shaking of an earthquake causing loose material to slide down a slope. Figure 4.5-4 shows the level of potential landslide risk in and around the planning area. As shown in Figure 4.5-4, landslide risks in Morro Bay are relatively low, but the risk is higher in the eastern portion of the city. Very small sections of the city near Morro Bay State Park and the estuary are considered high or very high risk. Some residential, commercial, and natural lands east of SR 1 are considered high risk for landslides. These areas include a small neighborhood framed by Downing Street and SR 1, and a portion of the neighborhood framed by SR 41 and SR 1 in northern Morro Bay.

Coastal Bluff Erosion

High tides and waves can cause erosion of beach environments, including sand dunes, at varying rates, depending of the types of geologic units in the area (refer to Figure 4.5-1). Over time, erosion can degrade coastal access, decrease beach quality, and weaken dunes that help to protect coastal structures. While erosion is driven by natural processes, human activities such as shoreline hardening, dredging, and coastal structures can alter natural processes and exacerbate erosion.

The wide beach and tall sand dunes present in southern Morro Bay protect this section of the community from substantial erosion risk, although the beach and dunes themselves may be eroded during severe storms. Northern Morro Bay, which is directly exposed to the ocean and is not protected by the bay and sandspit, has a higher erosion risk. However, northern Morro Bay also has a wide sloping beach and a series of small sand dunes which act as an erosion buffer for homes in this part of the community. The beach and dunes can be eroded by storms, but they are generally replenished during the summer through natural processes (City of Morro Bay 2006).

c. Previously Identified Paleontological Resources

Most of the geologic units mapped in the city have not produced any fossils. However, the Pismo Formation and Pleistocene-aged alluvial deposit geologic units located in the vicinity of Morro Bay can contain significant paleontological resources. Six known vertebrate fossil localities have been identified near the city from the Pismo Formation, although this formation does not occur in the city itself. Quaternary older alluvium (Pleistocene-age) is highly sensitive for paleontological resources in

Figure 4.5-3 Liquefaction Susceptibility

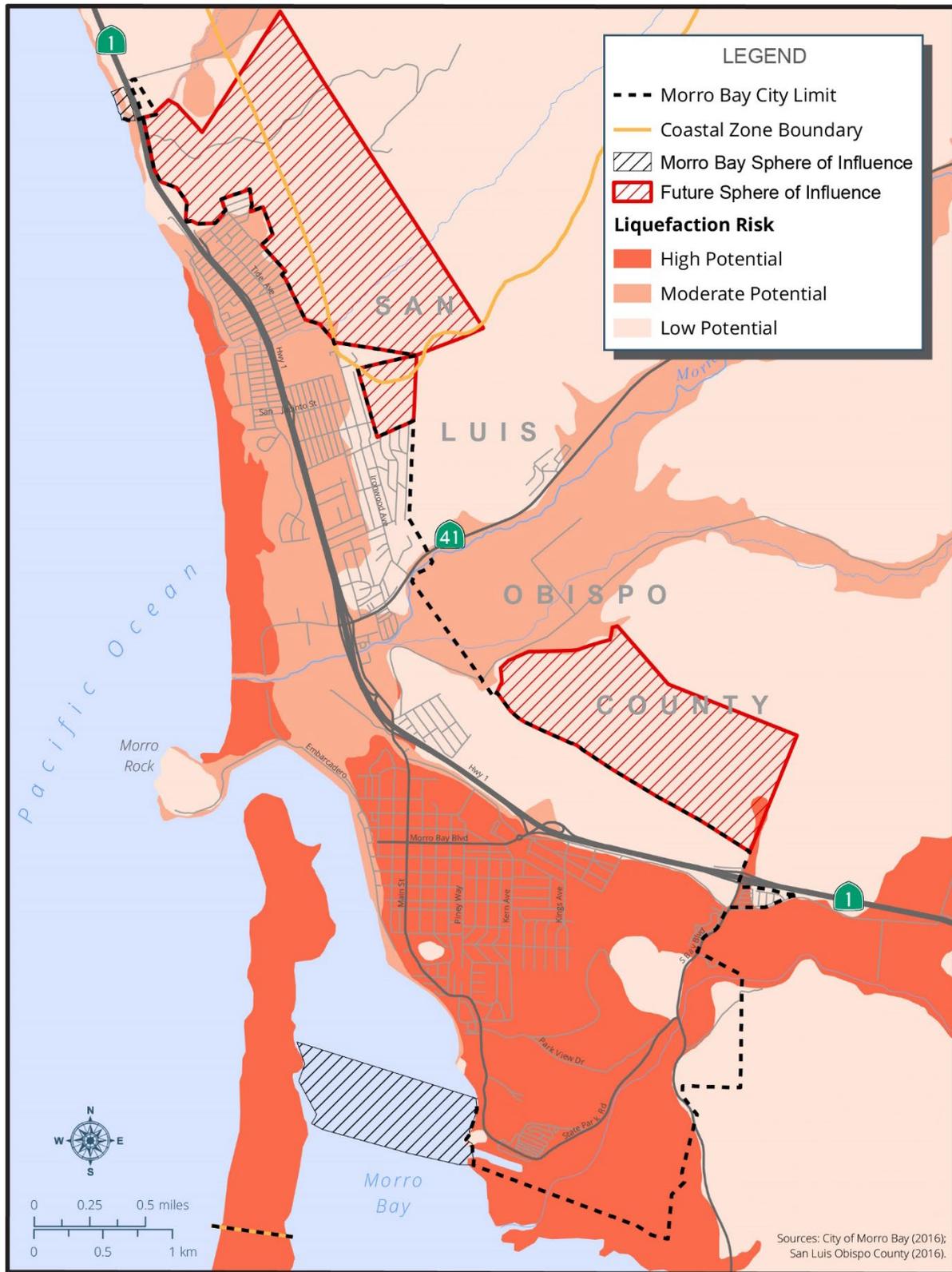
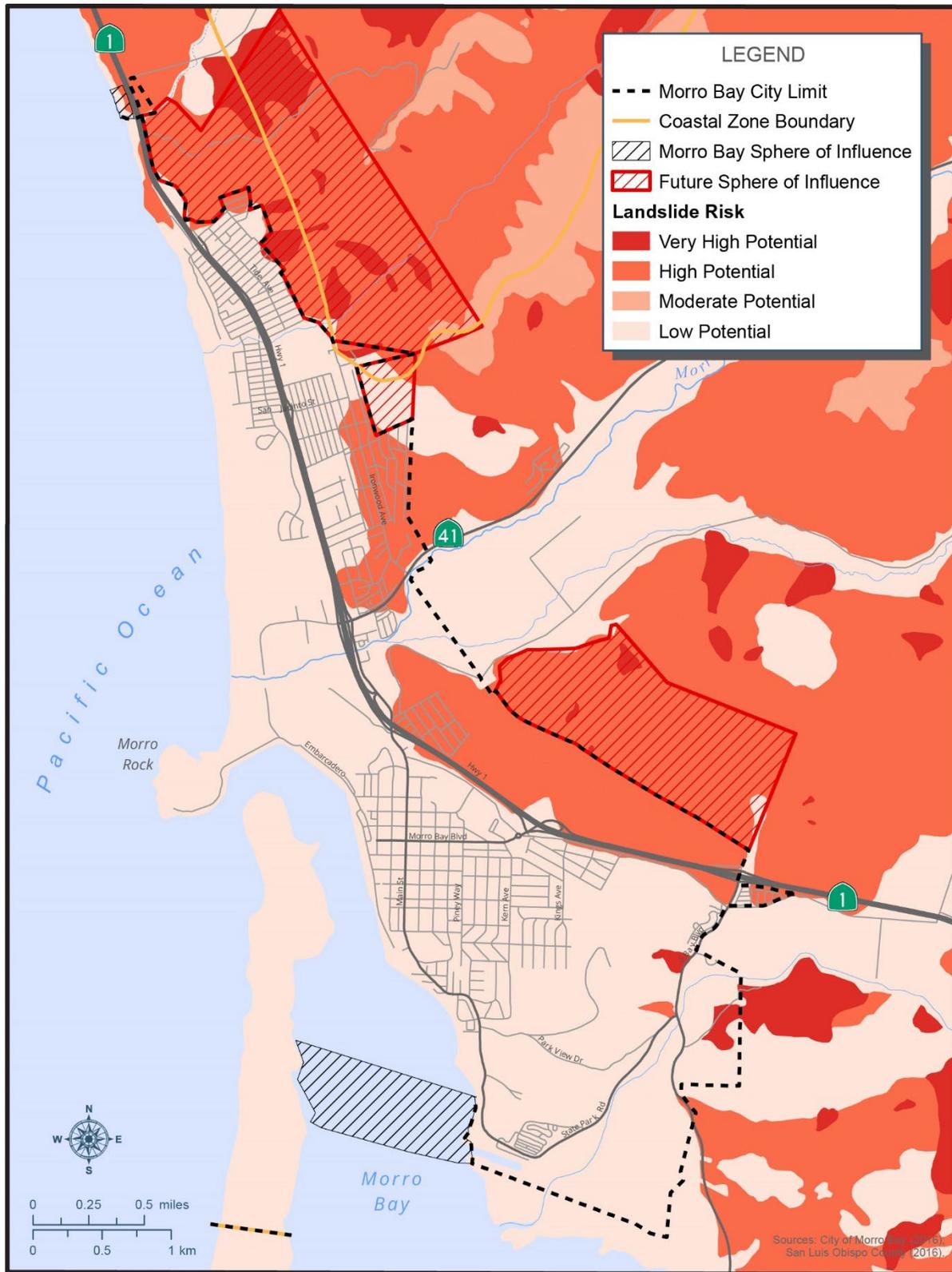


Figure 4.5-4 Landslide Susceptibility



California, but no records of fossil localities from this geologic unit have been identified in the vicinity of the city (refer to Appendix B).

d. Regulatory Setting

Federal

Clean Water Act

Congress enacted the Clean Water Act (CWA), formerly the Federal Water Pollution Control Act of 1972, with the intent of restoring and maintaining the chemical, physical, and biological integrity of the waters of the United States. The CWA requires states to set standards to protect, maintain, and restore water quality through the regulation of point source and non-point source discharges to surface water. Those discharges are regulated by the National Pollutant Discharge Elimination System (NPDES) permit process (CWA Section 402). NPDES permitting authority is administered by the California State Water Resources Control Board (SWRCB) and its nine Regional Water Quality Control Boards (RWQCBs). Morro Bay is within a watershed administered by the Central Coast RWQCB.

Individual projects within the City 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 Best Management Practices (BMPs) the discharger would use to prevent and retain storm water runoff and to prevent soil erosion.

Disaster Mitigation Act of 2000

Congress passed the Disaster Mitigation Act of 2000 to amend the Robert T. Stafford Disaster Relief and Emergency Assistance Act by invoking new and revitalized approaches to mitigation planning. Section 322 of the Act emphasized the need for state and local government entities to closely coordinate on mitigation planning activities and makes the development of a hazard mitigation plan a specific eligibility requirement for any local government applying for federal mitigation grant funds. Communities with an adopted and federally-approved hazard mitigation plan thereby become pre-positioned and more apt to receive available mitigation funds before and after the next declared disaster.

To implement the new Stafford Act provisions, FEMA published requirements and procedures for local hazard mitigation plans in the Code of Federal Regulations (CFR) at Title 44, Chapter 1, Part 201.6. These regulations specify minimum standards for developing, updating, and submitting local hazard mitigation plans for FEMA review and approval at least once every five years.

State

California Building Code

The California Building Code (CBC), Title 24, Part 2 provides building codes and standards for the design and construction of structures in California. The 2019 CBC is based on the 2018 International Building Code with the addition of more extensive structural seismic provisions. Chapter 16 of the CBC contains definitions of seismic sources and the procedure used to calculate seismic forces on structures.

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act of 1972 was passed into law following the destructive February 9, 1971 San Fernando earthquake. The Alquist-Priolo Act provides a mechanism for reducing losses from surface fault rupture on a statewide basis. The intent of the Alquist-Priolo Act is to ensure public safety by prohibiting the siting of most structures for human occupancy across traces of active faults that constitute a potential hazard to structures from surface faulting or fault creep. The Alquist-Priolo Act groups faults into categories of active, potentially active, and inactive. Historic and Holocene age faults are considered active, Late Quaternary and Quaternary age faults are considered potentially active, and pre-Quaternary age faults are considered inactive.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (the Act) of 1990 was passed into law following the destructive October 17, 1989 Loma Prieta earthquake. The Act directs the CGS to delineate Seismic Hazard Zones. The purpose of the Act is to reduce the threat to public health and safety and to minimize the loss of life and property by identifying and mitigating seismic hazards. Cities, counties, and State agencies are directed to use seismic hazard zone maps developed by CGS in their land-use planning and permitting processes. The Act requires that site-specific geotechnical investigations be performed prior to permitting most urban development projects within seismic hazard zones.

California Environmental Quality Act

The *CEQA Guidelines* (Article 1, Section 15002(a)(3)) state that CEQA is intended to prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible. If paleontological resources are identified as being within the proposed project area, the project effects on the resources must be evaluated.

Local

Morro Bay Municipal Code

The Buildings and Construction Ordinance of the City of Morro Bay, Title 14 of the Morro Bay Municipal Code, adopts by reference the 2019 CBC (Volumes 1 and 2). Municipal Code Section 14.18.010 includes design standards for seismic safety requiring structural analysis of buildings to be conducted by a civil or structural engineer or architect licensed by the state and requires any noncomplying structures to be altered or demolished (Appendix B). Municipal Code Chapter 17.45 regulates bluff development, sets standards for development that protect coastal bluffs in Morro Bay from erosion, and establishes a bluff and bluff setback zones where projects may be required to apply for conditional use permit and undergo review by the Community Development Department to ensure erosion and other seismic and geologic hazards are minimized. Municipal Code Section 13.12.230 regulates discharge from septic tanks in the city by prohibiting dumping or discharging septic tank cleanings or any raw or chemically treated sewage from septic tanks.

Morro Bay Local Hazard Mitigation Plan

The Morro Bay Local Hazard Mitigation Plan (LHMP) is a plan to improve resiliency in the community by identifying natural hazards present in Morro Bay, determining the community's vulnerability to each hazard, and identifying development mitigation strategies to reduce vulnerability before

emergency situations develop. The LHMP identifies earthquakes (including fault rupture and liquefaction), floods, landslides, and hazardous material releases as the most significant hazards present in the community, and includes goals, objectives, and mitigation to improve resiliency to these hazards. The City is in the process of updating the LHMP and is currently developing mitigation strategies for identified hazards. The City's LHMP is part of the County of San Luis Obispo's Multi-Jurisdictional LHMP.

4.5.2 Impact Analysis

a. Methodology

This section describes the potential environmental impacts of the General Plan and LCP Update relevant to geology and soils. The impact analysis is based on conditions of the planning area outlined in the Community Baseline Assessment for the General Plan and LCP Update (Appendix B), including topography, geologic and soil conditions, and seismic hazards, as described under Section 4.5.1, *Setting*. This analysis identifies potential impacts based on the predicted interaction between the affected environment and construction, operation, and maintenance activities related to development facilitated by the project. This section describes impacts in terms of location, context, duration, and intensity.

Paleontological Resources

Paleontological sensitivity refers to the potential for a geologic unit to produce scientifically significant fossils. Direct impacts to paleontological resources occur when earthwork activities, such as grading or trenching, cut into the geologic deposits (formations) within which fossils are buried and physically destroy the fossils. Such impacts have the potential to be significant and, under the *CEQA Guidelines*, may require mitigation. Sensitivity is determined by rock type, past history of the geologic unit in producing significant fossils, and fossil localities recorded from that unit. Paleontological sensitivity is derived from the known fossil data collected from the entire geologic unit, not just from a specific survey. Geological units having the potential to contain vertebrate fossils are considered the most sensitive.

The Society for Vertebrate Paleontology (SVP) Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources (SVP 2010) provide guidelines for categorizing paleontological sensitivity of geologic units within a project area. The SVP (2010) describes sedimentary rock units as having a high, low, undetermined, or no potential for containing significant nonrenewable paleontological resources. Significant paleontological resources are fossils or assemblages of fossils, which are unique, unusual, rare, uncommon, diagnostically or stratigraphically, taxonomically, or regionally. Rincon has evaluated the paleontological sensitivity of the planning area according to the following SVP (2010) categories:

High Potential (Sensitivity)

Rock units from which significant vertebrate or significant invertebrate fossils or significant suites of plant fossils have been recovered are considered to have a high potential for containing significant non-renewable fossiliferous resources. These units include but are not limited to, sedimentary formations and some volcanic formations which contain significant nonrenewable paleontological resources anywhere within their geographical extent, and sedimentary rock units temporally or lithologically suitable for the preservation of fossils.

Low Potential (Sensitivity)

Sedimentary rock units that are potentially fossiliferous but have not yielded fossils in the past or contain common and/or widespread invertebrate fossils of well documented and understood taphonomic, phylogenetic species and habitat ecology.

Undetermined Potential (Sensitivity)

Specific areas underlain by sedimentary rock units for which little information is available are considered to have undetermined fossiliferous potentials.

No Potential

Rock units of metamorphic or igneous origin are commonly classified as having no potential for containing significant paleontological resources.

In general, full-time monitoring is recommended during any project-related ground disturbance for geologic units with high sensitivity. Protection or salvage efforts typically are not required for geologic units with low sensitivity. Field surveys by a qualified paleontologist are usually recommended to determine the paleontological potential of the rock units present within the study area for geologic units with undetermined sensitivity. For geologic units with no sensitivity, a paleontological monitor is not required.

b. Significance Thresholds

The following thresholds of significance are based on Appendix G of the *CEQA Guidelines*. For the purposes of this EIR, implementation of the General Plan and LCP Update may have a significant adverse impact if it would do any of the following:

1. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - a. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault
 - b. Strong seismic ground shaking
 - c. Seismic-related ground failure, including liquefaction
 - d. Landslides
2. Result in substantial soil erosion or the loss of topsoil
3. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse
4. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property
5. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater
6. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

c. Project Impacts and Mitigation Measures

Threshold 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?

Threshold 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 GEO-1 CONSTRUCTION AND OCCUPANCY OF NEW BUILDINGS UNDER THE GENERAL PLAN AND LCP UPDATE COULD RESULT IN EXACERBATED HAZARDS ASSOCIATED WITH GEOLOGIC HAZARDS. ADHERENCE TO REQUIREMENTS OF THE CALIFORNIA BUILDING CODE AND IMPLEMENTATION OF THE GOALS AND POLICIES OF THE GENERAL PLAN AND LCP UPDATE WOULD MINIMIZE THE POTENTIAL FOR LOSS, INJURY, OR DEATH FOLLOWING A SEISMIC EVENT, LANDSLIDE, LIQUEFACTION, OR OTHER GEOLOGIC HAZARDS. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

As discussed in Section 4.5.1, *Setting*, there are seven seismically active faults that have been identified in San Luis Obispo County, with potential to affect the General Plan and LCP Update planning area. Faults depicted in Figure 4.5-2, as well as unknown faults may also be capable of generating earthquakes.

Development under the General Plan and LCP Update would result in additional residential and nonresidential development in the city. Additional residents and employees would be exposed to the effects of seismic hazards, including fault rupture, seismic groundshaking, liquefaction, and landslides from local and regional earthquakes. New structures built in the planning area under the General Plan and LCP Update could experience damage during seismic groundshaking or fault rupture due to the faults that run through or near the planning area, as shown on Figure 4.5-2. Structures built on steep slopes could be exposed to an existing risk of landslide or if improperly constructed could exacerbate existing landslide conditions shown on Figure 4.5-4. The General Plan and LCP Update would encourage infill development and redevelopment of existing underutilized land uses, which would in some cases replace older buildings subject to seismic damage with newer structures built to current seismic standards that would better withstand the adverse effects of strong ground shaking. Potential structural damage and exposure of people to the risk of injury or death from structural failure would be minimized through required compliance with CBC engineering design and construction measures. Foundations and other structural support features are required to be designed to resist or absorb damaging forces from strong ground shaking and liquefaction.

In addition to mandatory compliance with CBC requirements, implementation of the following General Plan and LCP Update Public Safety Element goals and policies would further reduce the potential for loss, injury, or death from seismic hazards by resisting the structural effects of seismic events and unstable geologic units, maintaining adequate resources to respond to a seismic event, and educating the public about the dangers of and appropriate response to a seismic event.

Goal PS-1 Damage from natural disasters is minimized and repaired quickly.

Policy PS-1.1 Vulnerable Assets. Examine all vulnerable assets and develop a plan to minimize risks and respond quickly to damage.

- Policy PS-1.2 Emergency Response.** Provide adequate warning and evacuation assistance in the event of natural disasters such as a tsunami, flood, and earthquake-related events.
- Policy PS-1.3 Education and Awareness.** Provide public information regarding natural hazard risks and resiliency strategies.
- Policy PS-1.4 Climate Change.** Consider how climate change impacts may change anticipated hazard conditions when planning for emergency response.

Goal PS-2 Development is protected from natural disasters to the greatest extent possible.

- Policy PS-2.2 New Development in High-Risk Areas.** Require new development to be located outside of areas subject to natural hazards from tsunami, geologic, flood, and wildfire conditions to the maximum feasible extent. If development must occur in such high-risk areas, including if development cannot be feasibly sited in a manner that avoids such areas entirely, ensure that such development is sited, designed, and conditioned to minimize risks to life and property while mitigating the development's impacts to coastal resources, particularly to public recreational beach access. Development shall also ensure stability and structural integrity; shall not create nor contribute significantly to erosion, geologic instability, or destruction of the site; shall not substantially alter natural landforms; and shall not include shoreline protective devices.
- Policy PS-2.8 Structural Stability.** Require new development to ensure structural stability while not creating or contributing to erosion or geologic instability or destruction of the site or surrounding area.
- Policy PS-2.9 New Development in High-Risk Areas.** Require that new development in areas subject to liquefaction and/or landslide hazards is located in a manner that will minimize risks to life and property.
- Policy PS-2.10 Building Retrofits.** Encourage building retrofits that improve resiliency to geologic and seismic hazards.
- Policy PS-2.11 New Development Proposals.** Require new development proposals in seismic hazard areas to consider risks caused by seismic activity and to include project features that minimize these risks.
- Policy PS-2.12 Grading and Cut-and-Fill Operations.** Require new development to minimize grading and cut-and-fill operations.
- Policy PS-2.13 Additional Standards for Development Subject to Geologic and Seismic Hazards.** In addition to other hazard requirements that may apply, development in areas that are potentially subject to geologic hazards, (including Alquist-Priolo earthquake hazard zones and areas subject to landslides, liquefaction, steep slopes averaging greater than 30 percent, and unstable slopes regardless of steepness) shall comply with the seismic safety standards of the Alquist-Priolo Act (California Public Resources Code Sections 2621. et seq.) and all applicable seismic provisions and criteria in the most recent version of State and County codes; shall incorporate siting and design techniques to mitigate any such geologic hazards; and shall not create a hazard or diminish the stability of the area.

Goal PS-4 Response to emergencies is quick, efficient, and effective.

- Policy PS-4.1 Update Emergency Response Plan.** Regularly update the Morro Bay Emergency Response Plan with updated evacuation routes and hazard information. Publicize evacuation routes and other relevant emergency procedures.
- Policy PS-4.4 Interagency Cooperation.** Work cooperatively with public agencies with responsibility for natural and environmental hazards.
- Policy PS-4.5 Transportation Requirements.** Establish minimum road widths and clearances around structures to improve transportation in the event of an emergency.
- Policy PS-4.6 Resiliency Hubs.** Work with local schools and community centers to create “resiliency hubs” that can serve as gathering places during emergencies and interruptions in services, and contain access to water, electricity, and other needed services.
- Policy PS-4.7 Passive Resiliency.** Ensure, to the greatest extent possible, that new and significantly remodeled buildings will maintain livable conditions in the event of extended loss of power or heating.

Implementation of these General Plan and LCP Update goals and policies would minimize risks associated with potential fault rupture, seismic shaking, and other geologic hazards in the planning area. Policy PS-2.9 would limit new development in areas subject to liquefaction and/or landslide hazards. A detailed review of design and construction plans and incorporation of additional structural safety features would be required on a project-by-project basis, as necessary, for structures that would be located on steep slopes or in areas subject to seismic hazards such as extreme ground shaking or high risk liquefaction areas of the city shown in Figure 4.5-3. These policies would also ensure that adequate emergency response is available during seismic events and would educate the public on earthquake preparedness. Implementation of these goals and policies, in addition to compliance with applicable laws and regulations, would minimize the potential for loss, injury, or death following a seismic event. Therefore, this impact would be less than significant.

Mitigation Measures

No additional policy-oriented mitigation would be required to address this impact. As individual development projects are proposed, focused, project-level environmental review may be required, which could result in the implementation of project-specific mitigation measures.

Threshold 2: Would the project result in substantial soil erosion or the loss of topsoil?
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Impact GEO-2 CONSTRUCTION OF NEW DEVELOPMENT UNDER THE GENERAL PLAN AND LCP UPDATE WOULD INCLUDE GROUND DISTURBANCE THAT WOULD RESULT IN LOOSE OR EXPOSED SOIL THAT COULD BE ERODED BY WIND OR DURING A STORM EVENT, RESULTING IN THE LOSS OF TOPSOIL. COMPLIANCE WITH APPLICABLE REGULATIONS, INCLUDING THE CLEAN WATER ACT, AND IMPLEMENTATION OF THE GOALS AND POLICIES OF THE GENERAL PLAN AND LCP UPDATE WOULD MINIMIZE THE POTENTIAL FOR EROSION AND LOSS OF TOPSOIL AND WOULD ENSURE THIS IMPACT WOULD REMAIN LESS THAN SIGNIFICANT.

New development in Morro Bay under the General Plan and LCP Update would involve construction activities such as stockpiling, grading, excavation, paving and other earth disturbing activities. These construction activities may result in loose and disturbed soils in the planning area, which can increase the potential for erosion and loss of topsoil.

Construction activities that disturb one or more acres of land surface are subject to the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2012-0006-DWQ) adopted by the State Water Resources Control Board (SWRCB) under the Clean Water Act. The City of Morro Bay is in compliance with the NPDES General Permit for the discharge of stormwater from small Municipal Separate Storm Sewer Systems (MS4). Compliance with the permit requires each qualifying development project to file a Notice of Intent with the SWRCB. Permit conditions require development of a SWPPP, which must describe the site, the facility, and BMPs to prevent and retain storm water runoff and to prevent soil erosion. More specifically, the SWPPP must describe erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of construction sediment and erosion control measures, maintenance responsibilities, and non-storm water management controls. Inspection of construction sites before and after storms is also required to identify storm water discharge from the construction activity and to identify and implement erosion controls, where necessary.

Compliance with the Construction General Permit is enforced in Section 14.48 of the Municipal Code, which regulates storm water discharge in the city and requires the development of an erosion and sediment control plan or Stormwater Control Plan (SWP) that is equivalent to the required SWPPP. The City has prepared the *Stormwater Management and Guidance Manual for Low Impact Development and Post-Construction Requirements*, and individual projects within the city that disturb more than one acre are required to obtain NPDES coverage under the Construction General Permit. Chapter 17.45 of the Municipal Code provides regulatory standards to ensure erosion associated with bluff development and other seismic and geologic hazards are minimized.

Adherence to the Clean Water Act NPDES permitting requirements and the Municipal Code requirements related to stormwater and bluff development would ensure that potential impacts associated with soil erosion and loss of topsoil would remain less than significant. Implementation of General Plan and LCP Update Public Safety Element Goal PS-2 and Policies PS-2.8 (Structural Stability) and PS-2.12 (Grading and Cut-and-Fill Operations) would reduce the potential for erosion and loss of topsoil. In addition, implementation of the following General Plan and LCP Update Public Safety Element and Conservation Element goals and policies would further reduce the potential of erosion and loss of topsoil.

Goal PS-3 Morro Bay is prepared for and responsive to the effects of sea level rise and other coastal hazards in both the short and longer term future.

Policy PS-3.3 Monitor Beaches. Monitor beaches for sea level rise impacts such as erosion and changes in beach widths in order to identify trigger points for various adaptation strategies.

Policy PS-3.4 Property Owner Information. Provide information to property owners about the risks associated with coastal erosion and flooding and encourage them to take adequate steps to prepare for these risks.

Policy PS-3.6 Shoreline Preservation as a City Goal. The Morro Bay shoreline is an irreplaceable resource and its preservation as a natural living shoreline is a matter of great public importance. Therefore, the intent of the Local Coastal Program is to ensure that shoreline protective devices and other shoreline altering development are only utilized in very rare situations and only when all coastal resource impacts are avoided, and where unavoidable are appropriately

and proportionately mitigated, including consistent with Policies PS-3.7, PS-3.12, and PS-13.

Policy PS-3.10 Shoreline Management Plan. The City shall prepare a Shoreline Management Plan for approval by the Coastal Commission as an amendment to the Local Coastal Program. The plan shall function as a tool to help implement coastal protections, maximize public access, and protect coastal resources along the City's shoreline, including building upon the City's Adaptation Strategy Report. The plan shall be prepared in coordination with relevant local, regional, and/or state agencies for the purpose of protecting coastal resources, as well as ensuring the resilience of coastal public infrastructure. The plan shall conduct the following:

- **Adaptation Triggers.** Refining adaptation triggers for actions to address sea level rise impacts for different areas and assets in Morro Bay, including monitoring beaches for sea level rise impacts such as erosion and changes in beach widths in order to identify trigger points for various adaptation strategies.
- **Site Reuse.** Considering appropriate uses for sites previously occupied by relocated assets, including parks, open space/natural areas, and other predominantly passive land uses.
- **Transfer of Development Rights (TDR).** Considering a TDR program to restrict development in areas that are vulnerable to sea level rise and allow the transfer of development rights to parcels with less vulnerability to hazards.
- **Sea Level Rise Hazard Overlay Zone.** Establishing a Sea Level Rise Hazard Overlay Zone (in the potential sea level rise hazard areas established in Figure PS-8) to address safety from flood and sea level rise related hazards, and recommend remedial actions. Establishing a program to inform owners of real estate in the Sea Level Rise Hazard Overlay Zone about coastal hazards or property vulnerabilities, including information about known current and potential future vulnerabilities to sea level rise, and disclosing permit conditions related to coastal hazards to prospective buyers prior to closing escrow.

The Shoreline Management Plan may be amended every five to ten years, as appropriate, by the City Council, and adopted by the Coastal Commission through the Local Coastal Program amendment process.

For all other areas outside of the Harbor, Marina, area immediately adjacent to the shoreline, and Working Waterfront Area, development shall be sited and designed in a manner consistent with the following policies.

Policy PS-3.17 Resilient Buildings. Require new and significantly renovated buildings and all public buildings to be designed and constructed to withstand severe storms, flooding, and other impacts that are expected to result from a changing climate.

Goal C-7 Morro Bay water is safe, available, and used in an environmentally responsible manner.

Policy C-7.13 Drainage Technologies. Require that new development projects employ innovative and efficient drainage technologies that comply with federal and state water quality requirements and reduce runoff and water quality impacts to downstream environments.

Implementation of these General Plan and LCP Update goals and policies would ensure that Morro Bay continues to develop policies that support erosion minimization and control loss of topsoil. Implementation of these goals and policies, in addition to compliance with applicable laws and regulations related to stormwater, would minimize the potential for erosion and loss of topsoil. Therefore, this impact would be less than significant.

Mitigation Measures

No additional policy-oriented mitigation would be required to reduce this impact. As individual development projects are proposed, focused, project-level environmental review may be required, which could result in the implementation of project-specific mitigation measures.

Threshold 4: Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Impact GEO-3 DEVELOPMENT FACILITATED BY THE GENERAL PLAN AND LCP UPDATE COULD RESULT IN CONSTRUCTION OF STRUCTURES ON EXPANSIVE SOILS. COMPLIANCE WITH THE REQUIREMENTS OF THE CALIFORNIA BUILDING CODE, AS WELL AS APPLICABLE MUNICIPAL CODE REQUIREMENTS AND GENERAL PLAN AND LCP UPDATE GOALS AND POLICIES, WOULD ENSURE THAT POTENTIAL IMPACTS ASSOCIATED WITH EXPANSIVE SOILS WOULD REMAIN LESS THAN SIGNIFICANT.

As shown in Figure 4.5-1, the majority of soil in the city is composed of sand soil types, which are not expansive. However, new development facilitated by the General Plan and LCP Update constructed on expansive soils could be subject to damage or could become unstable when the underlying soil shrinks or swells. The CBC includes requirements to address soil-related hazards. Typical measures to treat hazardous soil conditions involve removal, proper fill selection, and compaction. In cases where soil remediation is not feasible, the CBC requires structural reinforcement of foundations to resist the forces of expansive soils. Compliance with the soil-related hazard requirements of the CBC as well as Section 14.18.010 of the Morro Bay Municipal Code, requiring structural analysis of buildings to be conducted by a civil or structural engineer or architect licensed by the state, would ensure that impacts related to expansive soils would remain less than significant.

In addition to compliance with mandatory CBC requirements and local regulations, implementation of General Plan and LCP Update Public Safety Element Goal PS-2 and Policies PS-2.8 (Structural Stability) and PS-2.10 (Building Retrofits) would further reduce the potential substantial risk to life and property from expansive soils. Implementation of these goals and policies, in addition to compliance with applicable laws and regulations for structural development to address soil-related hazards, would minimize the potential for risks to life or property associated with soil expansion. Therefore, this impact would be less than significant.

Mitigation Measures

No additional policy-oriented mitigation would be required to address this impact. As individual development projects are proposed, focused, project-level environmental review may be required, which could result in the implementation of project-specific mitigation measures.

Threshold 5: Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

Impact GEO-4 NEW DEVELOPMENT FACILITATED BY THE GENERAL PLAN AND LCP UPDATE WOULD OCCUR WHERE EXISTING SEWER SYSTEMS ARE IN PLACE, MINIMIZING THE NEED FOR DEVELOPMENT OF NEW WASTEWATER DISPOSAL SYSTEMS. THE MUNICIPAL CODE PROHIBITS DUMPING OR DISCHARGING FROM SEPTIC TANKS. THEREFORE, THE PROJECT WOULD NOT RESULT IN A SIGNIFICANT IMPACT TO SOILS THAT ARE INCAPABLE OF SUPPORTING SEPTIC TANKS OR ALTERNATIVE WASTEWATER DISPOSAL SYSTEMS.

The General Plan and LCP Update encourages growth management and development within city limits, specifically on the Morro Bay Power Plant and City wastewater treatment plant sites, as well as parts of downtown and the adjacent SR 1 corridor, North Main Street, and SR 41 areas. Focusing development in these areas would minimize encroachment into open space areas where wastewater infrastructure does not currently exist. In general, new development under the General Plan and LCP Update would occur where existing roads, water, and sewer systems are in place, minimizing the need to develop new wastewater disposal systems. Section 13.12.230 of the Morro Bay Municipal Code prohibits dumping or discharging from septic tanks, avoiding impacts to soils from such systems. Therefore, the project would not result in a significant impact associated with soils that are incapable of supporting septic tanks or alternative wastewater disposal systems.

Mitigation Measures

No mitigation measures are required.

Threshold 6: Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Impact GEO-5 DEVELOPMENT FACILITATED BY THE GENERAL PLAN AND LCP UPDATE HAS THE POTENTIAL TO IMPACT PALEONTOLOGICAL RESOURCES. FOSSIL-BEARING SEDIMENTS IN THE MORRO BAY AREA ARE PREDOMINANTLY LOCATED ON STATE PARKS LAND AND OFFSHORE. IMPLEMENTATION OF APPLICABLE GENERAL PLAN AND LCP UPDATE GOALS AND POLICIES WOULD MINIMIZE OR AVOID POTENTIAL ADVERSE IMPACTS TO PALEONTOLOGICAL RESOURCES. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Paleontological resources may be present in fossil-bearing sediments and geologic units either at or below the ground surface. Ground-disturbing activities associated with development in geologic units with high paleontological sensitivity have the potential to damage or destroy paleontological resources that may be present on or below the ground surface, especially in areas with high paleontological sensitivity. Potential impacts to paleontological resources are most likely to occur in areas that have not previously been developed with urban uses, have not been studied through a paleontological resource investigation, or when excavation extends to new depths.

The Pismo Formation and Pleistocene-aged alluvial deposit geologic units in the vicinity of Morro Bay are known to contain substantial paleontological resources. Additionally, quaternary older

alluvium (Pleistocene-age), mapped in the city, is highly sensitive for paleontological resources in California. Consequently, damage to or destruction of fossils could occur as a result of development under the proposed General Plan and LCP Update. However, there is no mapped Pismo Formation within city limits, and fossil-bearing sediments in the Morro Bay area are predominantly located on State parks land and offshore.

The General Plan and LCP Update does not include goals, policies, or implementation actions that specifically address paleontological resources. However, implementation of the General Plan and LCP Update goals and policies described in Section 4.4, *Cultural Resources*, would reduce potential adverse impacts to paleontological resources in the planning area. Therefore, impacts to paleontological resources would be less than significant.

Mitigation Measures

No mitigation measures are required.

d. Cumulative Impacts

Cumulative geology, soils, seismicity, and paleontological impacts may be related to increased exposure to seismic hazards, increased erosion and/or loss of topsoil, the presence of unstable/expansive soils and alternative waste disposal or septic systems. These effects occur independently of one another and result from site-specific and project-specific characteristics and conditions. In addition, existing regulations, such as the CBC, specify mandatory actions that must occur during project development, which minimize effects from construction and operation of new structures related to geology, soils, and seismicity as discussed above. Therefore, cumulative impacts related to geology, soils, and seismicity would be less than significant, and the General Plan and LCP Update would not make a cumulatively considerable contribution to cumulative geology, soils, or seismicity impacts.

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4.6 Greenhouse Gas Emissions

This section discusses the potential for the General Plan and LCP Update to result in impacts related to climate change. The analysis in this section includes a qualitative analysis of potential GHG emissions generated by the General Plan and LCP Update and evaluates the General Plan and LCP Update's consistency with applicable GHG reduction plans, policies, and regulations, including the City's Climate Action Plan. Potential flooding effects associated with sea level rise are discussed in Section 4.8, *Hydrology and Water Quality*.

4.6.1 Setting

a. Climate Change and Greenhouse Gases

Gases that absorb and re-emit infrared radiation in the atmosphere are called greenhouse gases (GHGs). The gases that are widely seen as the principal contributors to human-induced climate change include carbon dioxide (CO₂), methane (CH₄), nitrous oxides (N₂O), fluorinated gases such as hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). Water vapor is excluded from the list of GHGs because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

GHGs are emitted by both natural processes and human activities. Of these gases, CO₂ and CH₄ are emitted in the greatest quantities from human activities. Emissions of CO₂ are largely by-products of fossil fuel combustion, whereas CH₄ results from off-gassing associated with agricultural practices and landfills.

Man-made GHGs, many of which have greater heat-absorption potential than CO₂, include fluorinated gases and SF₆ (California Environmental Protection Agency [CalEPA] 2006). Different types of GHGs have varying global warming potentials (GWPs). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO₂) is used to relate the amount of heat absorbed to the amount of the gas emissions, referred to as "carbon dioxide equivalent" (CO₂e), and is the amount of a GHG emitted multiplied by its GWP. Carbon dioxide has a 100-year GWP of one. By contrast, methane CH₄ has a GWP of 25, meaning its global warming effect is 25 times greater than carbon dioxide on a molecule per molecule basis (IPCC 2007).

b. Greenhouse Gas Emissions Inventory

California Emissions Inventory

Based on the California Air Resources Board (ARB) California Greenhouse Gas Inventory for 2000-2014, California produced 440.4 MMT CO₂e in 2015 (ARB 2017a). The largest single source of GHG in California is transportation, contributing 39 percent of the state's total GHG emissions. Industrial sources are the second largest source of the State's GHG emissions, contributing 23 percent of the State's GHG emissions (ARB 2017a). California emissions are due in part to its large size and large population compared to other states. However, the state's mild climate reduces California's per capita fuel use and GHG emissions as compared to other states. ARB has projected statewide unregulated GHG emissions for the year 2020 will be 509.4 MMT CO₂e (ARB 2017b). These projections represent the emissions that would be expected to occur in the absence of any GHG reduction actions.

Local Emissions Inventory

In January 2014, Morro Bay adopted a Climate Action Plan (CAP), which includes a 2005 baseline inventory of GHG emissions resulting from community-wide activities and City government facilities and operations within Morro Bay. It also includes a 2020 business-as-usual forecast of how emissions would change over time as a result of population and job growth if consumption trends and efficiencies remained at their 2005 levels, absent of any new policies or actions that would reduce emissions. Since 2005, several State regulations and local initiatives have been implemented that would reduce Morro Bay's GHG emissions in comparison to the 2020 business-as-usual forecast. Therefore, the CAP GHG emissions inventory also included a 2020 adjusted forecast to account for the impact of these measures to provide a more accurate picture of future emissions growth in 2020.

The community-wide GHG emissions inventory identified that the City's 2005 GHG emissions were 55,677 MT CO₂e. The 2020 adjusted forecast, which accounted for growth from 2005 to 2020, but also anticipated GHG reductions from State and local emissions reduction measures, estimated that the City's 2020 GHG emissions would be 51,258 MT CO₂e (Morro Bay 2014).

c. Potential Effects of Climate Change

Globally, climate change has the potential to affect numerous environmental resources through potential impacts related to future air temperatures and precipitation patterns. Scientific modeling predicts that continued GHG emissions at or above current rates would induce more extreme climate changes during the 21st century than were observed during the 20th century. Long-term trends have found that each of the past three decades has been warmer than all the previous decades in the instrumental record, and the decade from 2000 through 2010 has been the warmest. The global combined land and ocean temperature data show an increase of about 0.89°C (0.69°C–1.08°C) over the period 1901–2012 and about 0.72°C (0.49°C–0.89°C) over the period 1951–2012 when described by a linear trend. Several independently analyzed data records of global and regional Land-Surface Air Temperature (LSAT) obtained from station observations are in agreement that LSAT as well as sea surface temperatures have increased. In addition to these findings, there are identifiable signs that global warming is currently taking place, including substantial ice loss in the Arctic over the past two decades (IPCC 2014).

Potential impacts of climate change in California may include loss of snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (CalEPA 2010). Below is a summary of some of the potential effects that could be experienced in California as a result of climate change.

Air Quality

Higher temperatures, which are conducive to air pollution formation, could worsen air quality in California. Climate change may increase the concentration of ground-level ozone, but the magnitude of the effect, and therefore its indirect effects, are uncertain. If higher temperatures are accompanied by drier conditions, the potential for large wildfires could increase, which, in turn, would further worsen air quality. However, if higher temperatures are accompanied by wetter, rather than drier conditions, the rains would tend to temporarily clear the air of particulate pollution and reduce the incidence of large wildfires, thereby ameliorating the pollution associated with wildfires. Additionally, severe heat accompanied by drier conditions and poor air quality could

increase the number of heat-related deaths, illnesses, and asthma attacks throughout the state (California Energy Commission [CEC] 2009).

Water Supply

Analysis of paleoclimatic data (such as tree-ring reconstructions of stream flow and precipitation) indicates a history of naturally and widely varying hydrologic conditions in California and the west, including a pattern of recurring and extended droughts. Uncertainty remains with respect to the overall impact of climate change on future water supplies in California. However, the average early spring snowpack in the Sierra Nevada decreased by about 10 percent during the last century, a loss of 1.5 million acre-feet of snowpack storage. During the same period, sea level rose eight inches along California's coast. California's temperature has risen 1°F, mostly at night and during the winter, with higher elevations experiencing the highest increase. Many Southern California cities have experienced their lowest recorded annual precipitation twice within the past decade. In a span of only two years, Los Angeles experienced both its driest and wettest years on record (California Department of Water Resources [DWR] 2008; CCCC 2009).

This uncertainty complicates the analysis of future water demand, especially where the relationship between climate change and its potential effect on water demand is not well understood. The Sierra snowpack provides the majority of California's water supply by accumulating snow during the state's wet winters and releasing it slowly during the state's dry springs and summers. Based on historical data and modeling DWR projects that the Sierra snowpack will experience a 25 to 40 percent reduction from its historic average by 2050. Climate change is also anticipated to bring warmer storms that result in less snowfall at lower elevations, reducing the total snowpack (DWR 2008).

Hydrology and Sea Level Rise

As discussed above, climate change could potentially affect: the amount of snowfall, rainfall, and snow pack; the intensity and frequency of storms; flood hydrographs (flash floods, rain or snow events, coincidental high tide and high runoff events); sea level rise and coastal flooding; coastal erosion; and the potential for salt water intrusion. According to *The Impacts of Sea-Level Rise on the California Coast*, prepared by the California Climate Change Center (CCCC) (CCCC 2009), climate change has the potential to induce substantial sea level rise this century. The rising sea level increases the likelihood and risk of flooding. The rate of increase of global mean sea levels over the 2001-2010 decade, as observed by satellites, ocean buoys and land gauges, was approximately 3.2 mm per year, which is double the observed 20th century trend of 1.6 mm per year (World Meteorological Organization 2013). As a result, sea levels averaged over the last decade were about 8 inches higher than those of 1880 (WMO 2013). The most recent IPCC report predicts a mean sea-level rise of 11-38 inches by 2100 (IPCC 2013). This prediction is more than 50 percent higher than earlier projections of 7-23 inches, when comparing the same emissions scenarios and time periods. A rise in sea levels could result in coastal flooding and erosion and could jeopardize California's water supply due to salt water intrusion. In addition, increased CO₂ emissions can cause oceans to acidify due to the carbonic acid it forms. Increased storm intensity and frequency could affect the ability of flood-control facilities, including levees, to handle storm events.

Agriculture

California has a \$30 billion annual agricultural industry that produces half of the country's fruits and vegetables. Higher CO₂ levels can stimulate plant production and increase plant water-use efficiency. However, if temperatures rise and drier conditions prevail, water demand could increase;

crop-yield could be threatened by a less reliable water supply; and greater air pollution could render plants more susceptible to pest and disease outbreaks. In addition, temperature increases could change the time of year certain crops, such as wine grapes, bloom or ripen, and thereby affect their quality (CCCC 2006).

Ecosystems and Wildlife

Climate change and the potential resulting changes in weather patterns could have ecological effects on a global and local scale. Increasing concentrations of GHGs are likely to accelerate the rate of climate change. Scientists project that the average global surface temperature could rise by 1.0-4.5°F (0.6-2.5°C) in the next 50 years, and 2.2-10°F (1.4-5.8°C) in the next century, with substantial regional variation. Soil moisture is likely to decline in many regions, and intense rainstorms are likely to become more frequent. Rising temperatures could have four major impacts on plants and animals: (1) timing of ecological events; (2) geographic range; (3) species' composition within communities; and (4) ecosystem processes, such as carbon cycling and storage (Parmesan 2006).

Local Effects

Rising temperatures affect local and global climate patterns, and these changes are forecasted to manifest themselves in a number of ways that may impact the central coast region. Potential climate changes that could occur in Morro Bay by the end of this century are discussed in detail in the Morro Bay CAP (Morro Bay 2014) and the Community Vulnerability and Resilience Assessment (CVRA) prepared in conjunction with the Community Baseline Assessment for the General Plan and LCP Update (Appendix B), and include:

- Increased temperatures – Average temperatures in San Luis Obispo County may increase by 2 to 4 degrees by mid-century and up to 4 to 8 degrees by late century. Greater warming is expected to occur in the summer months compared to winter.
- Sea level rise – Using the 2012 National Research Council report *Sea-Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future*, sea level is projected to rise between six inches to just over three feet above current levels by 2100 in Morro Bay. Coastal resources in Morro Bay vulnerable to sea level rise in year 2100 are summarized as follows:
 - Transportation – State Route (SR) 1, south of Toro Creek, vulnerable to flooding and erosion in 2030. Coleman Drive and the Morro Rock parking lot are vulnerable to flooding in 2050. Main Street/State Park Road vulnerable to flooding in 2100.
 - Environmentally Sensitive Lands – Wetlands, intertidal, and subtidal habitats impacted by increased tidal inundation in 2030. Impacts more substantial in 2050 and beyond as steep topography and development limit the ability of habitats to adapt.
 - State Parks – Dune system and Morro Strand campground vulnerable to flooding and erosion in 2030, more so in 2050 and 2100.
 - Beaches – Flooding, erosion, and inundation of sandy beaches, dunes, and bluffs. Substantial loss of beach area expected for 2050 and 2100.
 - Coastal Development – Moderate vulnerability to coastal development in 2050 due to storm-related flooding. Increased vulnerability in 2100 as flooding, dune erosion, and bluff erosion impact oceanfront parcels.
 - Utilities – The wastewater treatment plant site was found to be vulnerable to coastal flooding by the 2100 time horizon.

- Storm surges – Sea level rise combined with the tidal effect of larger and more intense oceanic storms is expected to create higher periodic storm surges. These storm surges can cause impacts over and above those predicted to occur as a result of sea level rise.
- Erosion – Beaches and bluffs are subject to gradual wave-driven erosion, and naturally move landward over time. Projected sea level rise and larger storm events would accelerate the rate and extent of erosion and retreat as higher water levels create greater wave energy reaching the shoreline. Beach erosion will be greatest along Morro Strand Beach, the Morro Bay State Park beach, and the seaward sides of Morro Rock.
- Changed precipitation – Climate models forecast drier conditions throughout San Luis Obispo County by 2075. As a result, droughts may become more frequent, longer and more severe.

d. Regulatory Setting

Federal

In *Massachusetts et al. v. Environmental Protection Agency et al.* ([2007] 549 U.S. 05-1120), the U.S. Supreme Court held that the U.S. EPA has the authority to regulate motor-vehicle GHG emissions under the federal Clean Air Act. The U.S. EPA issued a Final Rule for mandatory reporting of GHG emissions in October 2009. This Final Rule applies to fossil fuel suppliers, industrial gas suppliers, direct GHG emitters, and manufacturers of heavy-duty and off-road vehicles and vehicle engines, and requires annual reporting of emissions. In 2012, the U.S. EPA issued a Final Rule that establishes the GHG permitting thresholds that determine when Clean Air Act (CAA) permits under the New Source Review Prevention of Significant Deterioration (PSD) and Title V Operating Permit programs are required for new and existing industrial facilities.

In 2014, the U.S. Supreme Court held that U.S. EPA may not treat GHGs as an air pollutant for purposes of determining whether a source is a major source required to obtain a PSD or Title V permit (*Utility Air Regulatory Group v. EPA* [134 S. Ct. 2427]). The Court also held that PSD permits that are otherwise required (based on emissions of other pollutants) may continue to require limitations on GHG emissions based on the application of Best Available Control Technology (BACT).

State

ARB is responsible for the coordination and oversight of State and local air pollution control programs in California. California has numerous regulations aimed at reducing the State's GHG emissions. These initiatives are summarized below.

California Advanced Clean Car Standards

Assembly Bill (AB) 1493 (2002), California's Advanced Clean Cars (referred to as "Pavley"), requires ARB to develop and adopt regulations to achieve "the maximum feasible and cost-effective reduction of GHG emissions from motor vehicles." On June 30, 2009, the U.S. EPA granted the waiver of CAA preemption to California for its greenhouse gas emission standards for motor vehicles beginning with the 2009 model year. Pavley I regulates model years from 2009 to 2016 and Pavley II, which is now referred to as "LEV (Low Emission Vehicle) III GHG" regulates model years from 2017 to 2025. The clean car standards are now grouped under the ARB's Advanced Clean Cars program, which was adopted by ARB in 2012 (ARB 2017c). The program, developed in coordination with the U.S. EPA and National Highway Traffic Safety Administration (NHTSA), establishes emission requirements for passenger vehicles, model years 2015 through 2025, and manufacturer requirements to provide Zero Emissions Vehicles (ZEV).

Executive Order S-3-05

In 2005, the Governor issued Executive Order (EO) S-3-05, which identifies Statewide GHG emission reduction targets to achieve long-term climate stabilization as follows:

- Reduce GHG emissions to 1990 levels by 2020; and
- Reduce GHG emissions to 80 percent below 1990 levels by 2050.

In response to EO S-3-05, the CalEPA created the Climate Action Team (CAT), which in March 2006 published the Climate Action Team Report (the “2006 CAT Report”) (CalEPA 2006). The 2006 CAT Report identified a recommended list of strategies that the State could pursue to reduce GHG emissions. These are strategies that could be implemented by various State agencies to ensure that the emission reduction targets in EO S-3-05 are met and can be met with existing authority of the State agencies. The strategies include the reduction of passenger and light duty truck emissions, the reduction of idling times for diesel trucks, an overhaul of shipping technology/infrastructure, increased use of alternative fuels, increased recycling, and landfill methane capture, etc.

Assembly Bill 32

California’s major initiative for reducing GHG emissions is outlined in Assembly Bill 32 (AB 32), the “California Global Warming Solutions Act of 2006,” signed into law in 2006. AB 32 codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020, and requires ARB to prepare a Scoping Plan that outlines the main State strategies for reducing GHGs to meet the 2020 deadline. In addition, AB 32 requires ARB to adopt regulations that require reporting and verification of statewide GHG emissions. The Scoping Plan was approved by ARB on December 11, 2008, and included GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste. Many of the GHG reduction measures included in the Scoping Plan (e.g., Low Carbon Fuel Standard, Advanced Clean Car standards, and Cap-and-Trade) have been adopted since approval of the Scoping Plan.

In May 2014, ARB approved the first update to the AB 32 Scoping Plan. The 2013 Scoping Plan update defines ARB’s climate change priorities for the next five years and sets the groundwork to reach post-2020 statewide goals. The update highlights California’s progress toward meeting the “near-term” 2020 GHG emission reduction goals defined in the original Scoping Plan. It also evaluates how to align the State’s longer-term GHG reduction strategies with other State policy priorities, such as for water, waste, natural resources, clean energy and transportation, and land use (ARB 2014).

Executive Order B-30-15

In April 2015, the Governor issued EO B-30-15, establishing the State’s most aggressive greenhouse gas reduction target of 40 percent below 1990 levels by 2030. This target is aimed at meeting the State’s ultimate goal of reducing GHG emissions to 80 percent below 1990 levels by 2050 set in EO S-3-05.

Senate Bill 32

Senate Bill 32 (SB 32) became effective on January 1, 2017 and requires ARB to develop technologically feasible and cost effective regulations to achieve the targeted 40 percent GHG emission reduction by 2030 set in EO B-30-15. On December 14, 2017, ARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. To meet reduction targets,

the 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, as well as implementation of recently adopted policies, such as SB 350 and SB 1383 (see below). The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan Update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally-appropriate quantitative thresholds consistent with a statewide per capita goal of six metric tons (MT) CO₂e by 2030 and two MT CO₂e by 2050 (ARB 2017d). As stated in the 2017 Scoping Plan, these goals are appropriate for plan-level analyses (city, county, subregional, or regional level), but not for specific individual projects because they include all emissions sectors in the State.

Senate Bill X1 2 and Senate Bill 350

In April 2011, the governor signed SB 2X requiring California to generate 33 percent of its electricity from renewable energy by 2020. SB 350, the Clean Energy and Pollution Reduction Act of 2015, builds on the target set in 2020 and was approved in October 2015. SB 350 has two objectives: to increase the procurement of electricity from renewable sources from 33 percent to 50 percent by 2030 and to double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation.

Senate Bill 97

Senate Bill (SB) 97, signed in August 2007, acknowledges that climate change is an environmental issue that requires analysis in CEQA documents. In March 2010, the California Resources Agency (Resources Agency) adopted amendments to the *CEQA Guidelines* for the feasible mitigation of GHG emissions or the effects of GHG emissions. The adopted guidelines give lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHG and climate change impacts.

Senate Bill 375

Senate Bill (SB) 375, signed in August 2008, enhances the State's ability to reach AB 32 goals by directing ARB to develop regional GHG emission reduction targets to be achieved from passenger vehicles for 2020 and 2035. In addition, SB 375 directs each of the state's 18 major Metropolitan Planning Organizations (MPO) to prepare a "sustainable communities strategy" (SCS) that contains a growth strategy to meet these emission targets for inclusion in the Regional Transportation Plan (RTP). On September 23, 2010, ARB adopted final regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035. The reduction targets designated from the San Luis Obispo Council of Governments (SLOCOG) region are 8% per capita by 2020 (compared to 2005), and 8% per capita by 2035.

Senate Bill 1383

Adopted in September 2016, SB 1383 requires ARB to approve and begin implementing a comprehensive strategy to reduce emissions of short-lived climate pollutants. The bill requires the strategy to achieve the following reduction targets by 2030:

- Methane: 40% below 2013 levels
- Hydrofluorocarbons: 40% below 2013 levels
- Anthropogenic black carbon: 50% below 2013 levels

The bill also requires CalRecycle, in consultation with the State board, to adopt regulations that achieve specified targets for reducing organic waste in landfills.

California Environmental Quality Act

Pursuant to the requirements of SB 97, the Resources Agency has adopted amendments to the *CEQA Guidelines* for the feasible mitigation of GHG emissions or the effects of GHG emissions. The adopted *CEQA Guidelines* provide general regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, while giving lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts. To date, a variety of air districts have adopted quantitative significance thresholds for GHGs.

Local

Morro Bay Climate Action Plan

In 2014, the City of Morro Bay adopted a CAP to guide the reduction of GHG emissions, in accordance with AB 32. The CAP describes community and municipal GHG emissions, compares future emissions to state-designated targets, and defines actions and strategies the City will take to meet both state and local GHG reduction goals. Both community-wide and government operations emissions were inventoried for the CAP, studying emissions from energy use, transportation, waste, water, and off-road emissions, resulting in specific and attainable goals for GHG reductions. The City's CAP was developed to be consistent with *CEQA Guidelines* Section 15183.5 and SLOAPCD's *CEQA Air Quality Handbook* to mitigate emissions and climate change impacts and serves as a Qualified GHG Reduction Strategy for the City of Morro Bay. The CAP's target mirrors that of AB 32, setting a goal of 15 percent below baseline (2005) levels by 2020.

4.6.2 Impact Analysis

a. Methodology

Operational emissions for buildout of the General Plan and LCP Update were modeled based on the potential development capacity in 2040 relative to existing conditions using the California Emissions Estimator Model (CalEEMod), version 2016.3.2 (i.e., the project comprises the net change between existing and 2040 conditions). Information presented in Table 2-4 in Section 2.0, *Project Description*, was used to determine the proposed project's land uses, number of residential units, and non-residential areas, which were entered into CalEEMod. A detailed accounting of the methods and assumptions used to derive these inputs, along with the CalEEMod outputs, are provided in Appendix C.

Because project-level details are not currently known and it was assumed that full buildout of the updated General Plan land use plan would occur, the operational emissions as modeled provide a conservative estimate of future GHG emissions in Morro Bay and are included in this EIR for informational purposes. Construction emissions were not modeled due to the high dependence of emission estimates on project-level construction details, which are not known at this time.

Electricity

Building energy use is typically divided into energy consumed by the built environment and energy consumed by uses that are independent of the building, such as plug-in appliances. Non-building energy use, or "plug-in energy use," can be further subdivided by specific end-use (refrigeration,

cooking, office equipment, etc.). In California, Title 24 governs energy consumed by the built environment, mechanical systems, and some types of fixed lighting. Energy usage from single-family residential usage was reduced by 7 percent and non-residential energy usage was reduced by 30 percent to account for the requirements of 2019 Title 24 standards (CEC 2019). This analysis also accounts for the fact that the proposed project would include solar photovoltaic systems on all low-rise residential buildings (single-family residential buildings and multi-family residential buildings that are three stories or less) with annual electrical output equal to or greater than the dwellings' annual electrical usage in compliance with Section 150.1(c)14 of the 2019 Building Energy Efficiency Standards. Therefore, based on the calculation method contained in Section 150.1(b)14, new development planned under the General Plan and LCP Update would be required to include a minimum of 487 kW of PV solar panels, which would generate approximately 924,622 kWh per year (see Appendix C).

Monterey Bay Community Power (MBCP), which provides carbon-free electricity, is the default energy provider in the planning area. However, future residents and tenants of Morro Bay could opt out of MBCP and connect to Pacific Gas and Electric (PG&E), which does not provide carbon-free electricity. According to MBCP, approximately 97 percent of accounts in the MBCP service area maintain enrollment in MBCP; the remaining 3 percent of accounts opt out and connect to PG&E (MPCP 2019). Because MBCP procures a greater percentage of its electricity from renewable sources, electricity generated by MBCP produces fewer GHG emissions than electricity generated by PG&E. Therefore, to account for the possibility of dual electricity providers with the planning area, this analysis assumes that 97 percent of electricity demand generated by the proposed project would be supplied by MBCP and the remaining 3 percent of electricity demand would be supplied by PG&E (MBCP 2019). Because CalEEMod cannot account for dual electricity providers, CalEEMod was utilized to estimate the amount of electricity demand from the proposed project, and the resultant GHG emissions were calculated separately in a standalone document included in Appendix C based on the emission calculation methodology used in CalEEMod (CAPCOA 2017, Appendix A).

MBCP's energy intensity factor for CO₂ (i.e., the amount of CO₂ per megawatt-hour [MWh]) is approximately 2 pounds per MWh (Monterey Bay Community Power 2018). Due to a lack of available data, it was conservatively assumed that the energy intensity factors for CH₄ and N₂O would be the same as those for PG&E in 2040, which are further detailed below and in Table 4.6-1.¹ Because MBCP has already achieved carbon-free electricity, it has already met its mandated RPS targets. Therefore, this analysis assumes that MBCP's current energy intensity factors will remain the same through 2040. PG&E's estimated energy intensity factors (i.e., the amount of CO₂, CH₄, and N₂O per MWh) for 2040 are based on the CalEEMod default factors and the regulatory requirements of the RPS. The default energy intensity factors included in CalEEMod are based on data from 2009 at which time PG&E had only achieved a 14 percent procurement of renewable energy. However, per SB 100, the statewide Renewable Portfolio Standard (RPS) Program requires electricity providers to increase procurement from eligible renewable energy sources to 60 percent by 2030 and 100 percent by 2045. Therefore, because full buildout of the General Plan would occur in 2040, the estimated renewables portfolio and corresponding energy intensity factors for PG&E in 2040 were

¹ This assumption is conservative because MBCP currently has a greater percentage of renewables procurement than is assumed for PG&E in 2040; therefore, its energy intensity factors for CH₄ and N₂O are likely lower.

reduced using linear interpolation between the mandated RPS targets for 2030 and 2045.² PG&E energy intensity factors that include this reduction are shown in Table 4.6-1.

Table 4.6-1 Pacific Gas & Electric Energy Intensity Factors

	2009 (lbs/MWh) ¹	2030 (lbs/MWh) ²	2040 (lbs/MWh) ³	2045 (lbs/MWh) ²
Percent procurement	14%	60%	86.67%	100%
Carbon dioxide (CO ₂)	641.35	298.30	117.88	0
Methane (CH ₄)	0.029	0.013	0.005	0
Nitrous oxide (N ₂ O)	0.006	0.003	0.001	0

¹ Source: California Public Utilities Commission 2011

² RPS goals established by SB 100

³ Linear interpolation of RPS goals for 2030 and 2045

Water

CalEEMod does not incorporate water use reductions achieved by 2016 CALGreen (Part 11 of Title 24). New development would be subject to CALGreen, which requires a 20 percent increase in indoor water use efficiency. Thus, in order to account for compliance with CALGreen, a 20 percent reduction in indoor water use was included in the water consumption calculations for new development.

Transportation

Trip generation rates for new residential and non-residential land uses were estimated using default values for the local air basin available in CalEEMod, which are recommended by SLOAPCD. Vehicle miles traveled (VMT) associated with new development are based on trip generation rates and trip length and characteristics associated with the local transportation network. Estimates of local development population and employment density incorporated into the CalEEMod tool to account for local trip characteristics are described in Appendix C. CalEEMod does not estimate N₂O emissions from mobile combustion; therefore, mobile N₂O emissions estimated using the California Climate Action Registry General Reporting Protocol (January 2009) direct emissions factors for mobile combustion (see Appendix C for calculations).

b. Significance Thresholds

Based on Appendix G of the *CEQA Guidelines*, impacts related to GHG emissions would be significant if the project would:

1. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; and/or
2. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

² Linear interpolation estimates an interim value between two known values by assuming a steady rate of growth between the two known values. In this instance, it was assumed that PG&E's renewable energy percent procurement would increase by approximately 2.67 percent each year from 2030 to 2045 in order to increase its renewable energy percent procurement from 60 percent in 2030 to 100 percent in 2045.

The significance of GHG emissions may be evaluated based on locally adopted quantitative thresholds, or consistency with a regional GHG reduction plan, such as the CAP. As stated above, the 2017 Scoping Plan does not provide specific guidance to local jurisdictions for determining the amount of emission reductions to be achieved from land use plans or projects. Instead, it recommends that local governments adopt policies and locally-appropriate quantitative thresholds consistent with a statewide per capita goal of six MT CO₂e by 2030 and two MT CO₂e by 2050 (ARB 2017c).

SLOAPCD has adopted an annual efficiency threshold of 4.9 MT per service population (service population = number of residents + employees) to achieve consistency with the 2020 target set by AB 32 (SLOAPCD 2012) and has not yet updated this threshold to achieve consistency with the 2030 target set by SB 32. In the absence of an updated threshold, the City of Morro Bay has determined that the SLOAPCD efficiency threshold remains an appropriate threshold for evaluating the significance of project-level GHG emissions. SLOAPCD has not adopted a quantitative emissions threshold that is intended to be applied to programmatic air quality analysis.

The CAP provides qualitative thresholds consistent with AB 32 Scoping Plan measures and goals. As identified in SLOAPCD's *CEQA Air Quality Handbook*, if a project is consistent with an adopted Qualified GHG Reduction Strategy, such as a CAP, that addresses the project's GHG emissions, it can be presumed that the potential climate change impact of the project's GHG emissions would be less than significant. This approach is consistent with *CEQA Guidelines* Section 15064(h) and 15183.5(b). The CAP was developed to be consistent with *CEQA Guidelines* Section 15183.5 and SLOAPCD's *CEQA Air Quality Handbook* to mitigate emissions and climate change impacts and serves as a Qualified GHG Reduction Strategy for the City of Morro Bay.

The General Plan and LCP Update would update the Morro Bay's land use designations to provide parameters for future development in the city. Because project-level details associated with buildout of the envisioned land uses are not known at this time, quantification of General Plan and LCP Update emissions are provided primarily for informational purposes. Therefore, the General Plan and LCP Update's GHG emission impacts are addressed based on the following approach: potential sources of GHG emissions associated with buildout of the General Plan and LCP Update are identified and policies included in the General Plan and LCP Update are evaluated to determine whether they would be sufficient to reduce GHG emissions from implementation of the General Plan and LCP Update to a less than significant level.

c. Project Impacts and Mitigation Measures

Threshold 1: Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Threshold 2: Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Impact GHG-1 BUILDOUT OF THE GENERAL PLAN AND LCP UPDATE UNDER BUSINESS AS USUAL CONDITIONS WOULD RESULT IN NEW GHG EMISSIONS THAT MAY EXCEED APPLICABLE GHG THRESHOLDS ON A PROJECT-BY-PROJECT BASIS. THE GENERAL PLAN AND LCP UPDATE ESTABLISHES POLICIES TO REDUCE GHG EMISSIONS, INCLUDING SETTING REDUCTION TARGETS CONSISTENT WITH STATEWIDE GHG REDUCTION GOALS, AND UPDATING THE CLIMATE ACTION PLAN TO ENSURE FUTURE DEVELOPMENT IS CONSISTENT WITH STATEWIDE TARGETS. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

General Plan and LCP Update Emissions Inventory

Table 4.6-2 provides an estimate of the annual GHG emissions associated with potential new development under the General Plan and LCP Update, which were modeled using CalEEMod based on methods described in Section 4.6.2(a).

Table 4.6-2 General Plan and LCP Update Greenhouse Gas Emissions (New Development)

Emission Source	CO ₂	CH ₄	N ₂ O	CO ₂ e
Annual Emissions (metric tons/year)				
Area	19.5	<0.1	0.0	20.0
Energy ¹	339.7	7.8	18.5	366.0
Mobile ²	53,145.0	1.5	7.7	55,572.7
Waste	2,002.1	118.3	0.0	4,960.2
Wastewater	448.2	1.5	1.0	777.3
Project Total	65,142.8	121.5	8.9	61,696.2
GHG Emissions Efficiency Estimates				
New Service Population (New Residential Population + New Employment) ³				15,534
General Plan and LCP Update 2040 MT CO₂e per Service Population				4.0
SLOAPCD 2020 per-Service Population GHG threshold				4.6
Morro Bay 2040 Population				12,062
General Plan and LCP Update 2040 MT CO₂e per Capita				5.1
2017 Scoping Plan Statewide 2030 per Capita GHG goal				6.0
2040 per Capita Trajectory Consistent with 2017 Scoping Plan 2050 goal				4.0
2017 Scoping Plan Statewide 2050 per Capita GHG goal				2.0
Notes: Emissions were modeled in CalEEMod. See Appendix C for modeling worksheets. Some numbers may not sum exactly due to rounding. Emission data is from “mitigated” results, which account for compliance with applicable regulations (Title 24, CALGreen) and project design features (circulation plan and VMT-reducing bicycle, pedestrian, and transit amenities).				
¹ Assumes 97 percent of electricity provided by MBCP and 3 percent provided by PG&E. MBCP and PG&E energy intensity factors discussed in Section 4.6.2(a).				
² CalEEMod does not estimate N ₂ O emissions from mobile combustion; therefore, mobile N ₂ O emissions estimated using the California Climate Action Registry General Reporting Protocol (January 2009) direct emissions factors for mobile combustion (see Appendix C for calculations).				
³ Sum of projected 2040 population minus existing (2016) population (12,062 – 10,714 = 1,348 new residents) and projected future employment (14,168) estimated based on median sf/employee for Other Retail/Svc from Southern California Association of Governments (SCAG) <i>Employee Density Study</i> (SCAG 2001).				

The GHG emissions estimate in Table 4.6-2 provides an approximate, conservative inventory of potential new GHG emissions associated with building of the planning area under the General Plan and LCP Update. Individual project details are not known at this time and this analysis assumes that maximum build-out of the proposed land use plan would occur by 2040. Thus, these estimates should be considered conservative, and are provided for informational purposes only.

SLOAPCD has not adopted quantitative emissions thresholds that are intended to be applied to programmatic air quality analysis. However, as discussed in Section 4.6.2(b), SLOAPCD has adopted an annual efficiency threshold of 4.9 MT per service population. New GHG emissions under buildout of the General Plan and LCP Update would be consistent with this adopted threshold.

The 2017 Scoping Plan recommends that local governments adopt policies and locally-appropriate quantitative thresholds consistent with a statewide per capita goal of six MT CO₂e by 2030 and two MT CO₂e by 2050. New GHG emissions under buildout of the General Plan in 2040 emissions would

not exceed the 2030 statewide goal but would not be on a trajectory consistent with the 2050 goal (four MT CO₂e per capita by 2040). Because individual project details are not known at this time, new individual development projects in Morro Bay could result in GHG emissions that would be inconsistent with statewide per capita emissions goals established in the 2017 Scoping Plan and may exceed applicable SLOAPCD or City thresholds on a project-by-project basis.

Morro Bay Climate Action Plan Consistency

Appendix C of the Morro Bay CAP contains a CAP Compliance Worksheet, which includes mandatory and voluntary emissions reduction measures used by the City to demonstrate project-level compliance with the CAP. The City requires applicants for new development to comply with mandatory measures from Appendix C of the CAP through Conditions of Approval to be found consistent with the CAP. Mandatory measures in the CAP Compliance Worksheet include:

- Bicycle connectivity and parking;
- Pedestrian linkages and interconnectivity;
- Traffic calming improvements (e.g., marked crosswalks, count-down signal timers, curb extensions, speed tables, raised crosswalks, median islands, mini-circles, tight corner radii, etc.);
- Consistency with adopted land use and zoning requirements; and
- Construction equipment energy-efficiency requirements and idling restrictions.

In addition, the City tracks compliance with voluntary measures, which include:

- Exceeding Title 24 Building Energy Efficiency Standards;
- Installation of small-scale on-site solar PV systems and/or solar hot water heaters;
- Reduced parking requirements;
- Electric or other alternative fueling stations;
- Traffic calming improvements (e.g., marked crosswalks, count-down signal timers, curb extensions, speed tables, raised crosswalks, median islands, mini-circles, tight corner radii, etc.);
- “Smart growth” techniques, including mixed-use, higher density, and/or infill development near transit routes and community centers; and
- Planting of drought-tolerant trees.

For projects that are not found consistent with the CAP, project applicants are required to demonstrate that the project’s GHG emissions fall below SLOAPCD’s adopted GHG significance thresholds, and that the project would not substantially interfere with implementation of the CAP.

The General Plan and LCP Update would revise and update the General Plan land use designations and policy provisions of the City’s General Plan, and would result in new infill development, located in close proximity to transit, City services, and employment centers. The Morro Bay CAP Climate Action Measure TL-6 recognizes that energy-efficient designs or growth that facilitates mixed-use, higher density, and infill development near transit stops, in existing community centers, allows for more efficient use of existing infrastructure and improves city-wide efforts to reduce GHG emissions (City of Morro Bay 2014). Therefore, the General Plan and LCP Update would facilitate the consistency of future development projects with both mandatory and voluntary measures of the CAP.

General Plan and LCP Update Policies to Reduce GHG Emissions

The General Plan and LCP Update includes goals and policies intended to reduce GHG emissions from future development in Morro Bay. These include policies previously listed in Section 4.2, *Air Quality*, which would reduce energy consumption and mobile source emissions by promoting mixed-use and infill development and supporting bike, pedestrian, and mass transit.

Implementation of the goals and policies in the General Plan and LCP Update Land Use, Economic Development, and Circulation Elements listed below would minimize adverse effects associated with GHG emissions. These include:

- Policy LU-1.3 Access to Daily Needs.** Create sustainable development patterns characterized by mixed uses, walkable neighborhoods, and multimodal connections that allow residents to meet their daily needs for food, goods and services, employment, and other resources.
- Policy LU-3.1 Growth Limits.** Continue to limit the amount of development, including future population growth accommodated by Plan Morro Bay, to a level supported by adequate and long-term sustainable available land, water supply, and other infrastructure and service capacity.
- Policy LU-3.3 Future Growth.** Accommodate future growth of housing and jobs in Morro Bay that is consistent with the vision, values, policies, and actions of the plan through both infill and potential limited expansion of the sphere of influence.
- Policy LU-3.5 Jobs/Housing Ratio.** At buildout of Plan Morro Bay, the jobs/housing ratio should be as close to balanced (1.0) as possible.
- Policy LU-3.6 Infill Development.** Promote infill development on vacant or underutilized properties in the city as the preferred strategy for most new development in Morro Bay.
- Policy ED-1.4 Technology Resources.** Make needed and desired renewable energy and modern technology resources readily available to businesses.
- Policy ED-3.2 Environmental Guidelines.** Develop guidelines that describe desired environmentally conscious building landscapes, designs, features, and practices that will be used to give recommendations to businesses and to provide City staff with suggested conditions of approval for permitting new or significantly renovated homes and businesses.
- Policy CIR-1.1 Balanced Transportation.** Work to complete a balanced multimodal transportation system that meets the needs of all users, including pedestrians, cyclists, motorists, children, seniors, and people with disabilities.
- Policy CIR-1.3 System Connectivity.** Develop a complete and connected network of accessible sidewalks, crossings, paths, and separated bike lanes that are convenient and attractive throughout the city.
- Policy CIR-1.4 Future Enhancements.** Identify streets in the city that can be made “complete,” and plan for new bikeways, sidewalks, and crosswalks on these streets by reallocating how space within the public right-of-way is used.

- Policy CIR-1.5 Regional Transit.** Coordinate with the San Luis Obispo Regional Transit Authority to ensure local transit connects smoothly with regional transit and possible future route and schedule expansions.
- Policy CIR-1.6 Local Transit Improvement.** Continue to improve the local Morro Bay Transit Deviated Fixed Route and Call-A-Ride services and ensure connections to regional transit and active transportation facilities.
- Policy CIR-1.12 Climate Change Impacts on Transportation.** Require ongoing evaluation of the transportation infrastructure system and its ability to withstand future effects of climate change. Identify future points to begin incorporating resilient strategies and materials into design, using the most up-to-date guidance from the Federal Highway Administration.
- Policy CIR-2.1 Compact Development.** Support mixed-use, compact-style, and other land use development patterns within existing developed areas so as to facilitate easy active transportation and transit use. (see also Policies LU-3.1, LU-3.3, LU-3.6, and LU-3.7)
- Policy CIR-2.4 Active Transportation Amenities.** Provide facilities and amenities for active transportation users at public facilities, including bicycle storage and seating areas. (See also Policies LU-8.4 and OS-1.8.)
- Policy CIR-2.5 Prioritizing Improvements.** Prioritize infrastructure improvements that benefit bicycle and pedestrian safety and convenience around community facilities and locations in pedestrian-oriented areas. (See also Policy OS-1.8 and Implementation Action OS-1.)
- Policy CIR-2.6 Destination Facilities.** Require and place access areas and facilities for bicycle, pedestrian, and transit travel in front of major destinations, such as shopping centers, parks, and schools. Facilities may include any or a combination of the following: designated passenger drop-off and pickup zones, benches, lighting, secure bike parking, shelters, and street trees. (See also Policies LU-2.3 and PS-2.1.)
- Policy CIR-3.2 VMT Thresholds.** Achieve State-mandated reductions in VMT by establishing a VMT standard. This standard will be for roadway segments and intersections during PM peak hour.

In addition to these policies to directly reduce energy and mobile GHG emissions from future development in the planning area, the General Plan and LCP Update Conservation Element and Environmental Justice Element also includes goals and policies that require the city to update and refine existing GHG planning efforts and thresholds. These include:

- Policy C-4.1 Emissions Reduction Target.** By 2020, reduce community-wide greenhouse gas emissions to 15 percent below 2005 levels. By 2040, reduce greenhouse gas emissions by 53.33 percent below the 2020 target, placing the community on a path to meet the state’s 2050 greenhouse gas emissions reduction goals.
- Policy C-4.2 Climate Action Plan.** Continue to implement and regularly evaluate the Morro Bay Climate Action Plan and greenhouse gas inventory to evaluate progress, celebrate successes, and adjust strategies as needed to meet emissions goals.
- Policy C-4.3 Greenhouse Gas Inventory.** Continue to update the greenhouse gas inventory to determine whether emissions are within recommended levels.

- Policy C-4.4 Greenhouse Gas Reduction Strategies.** Pursue a variety of greenhouse gas reduction strategies across the transportation, residential, waste, and commercial sectors, commensurate with their share of the community’s greenhouse gas emissions.
- Policy C-5.2 Energy Efficiency Standards.** Construct all new City facilities to be more energy efficient than the minimum energy efficiency standards in the California Building Standards Code, and achieve zero net energy performance for new City facilities when possible.
- Policy C-6.1 Renewable Energy Incentive Programs.** Create incentives that promote renewable energy systems as a component of new development or reuse projects.
- Policy C-6.2 Renewable Energy in Home and Commercial Uses.** Encourage the use of solar energy systems in homes and commercial businesses as a form of renewable energy, including in support of zero net energy goals.
- Policy C-6.3 Renewable Energy in Municipal Uses.** Maximize renewable energy capacity on municipal property and renewable energy use in City-sponsored projects and activities.
- Policy EJ-4.1 Plan Updates.** Recognize and address the health effects of climate change when updating local hazard mitigation plans, hazard emergency plans, specific plans, and other policies and ordinances.
- Policy EJ-4.3 Climate Change Response Plan.** Prepare a response plan to be used in the implementation of Measure A-2 of the CAP to ensure the protection of vulnerable populations during times of high heat, extended drought, flooding, or other extreme weather events.

Implementation of General Plan and LCP Update Conservation Element Policy C-4.1 would establish GHG reduction goals consistent with the State’s 2030 and 2050 greenhouse gas emissions reduction goals. Conservation Element Policies C-4.2, C-4.3, and C-4.4 would require the City to update the CAP to comply with evolving state goals and requirements and would ensure that the CAP continues to provide measures for future development projects in the planning area to assess their consistency with City GHG reduction goals. Therefore, the General Plan and LCP Update would be consistent with regional and State plans, policies, and regulations adopted for the purpose of reducing GHG emissions, and this impact would be less than significant.

Mitigation Measures

No mitigation would be required. As individual development projects are proposed, focused, project-level environmental review may be required, which could result in the implementation of project-specific mitigation measures to reduce GHG emissions.

d. Cumulative Impacts

GHG emissions are, by definition, cumulative impacts, as they add to the global accumulation of greenhouse gases in the atmosphere. As discussed in Impact GHG-1, new individual development projects in Morro Bay could result in GHG emissions that would be inconsistent with statewide per capita emissions goals established in the 2017 Scoping Plan and may exceed applicable SLOAPCD or City thresholds on a project-by-project basis. However, the General Plan and LCP Update would

establish GHG reduction goals consistent with the State’s 2030 and 2050 greenhouse gas emissions reduction goals, and the General Plan and LCP Update would be consistent with regional and State plans, policies, and regulations adopted for the purpose of reducing GHG emissions. Therefore, the project’s contribution to cumulative GHG and climate change impacts would be less than significant.

4.7 Hazards and Hazardous Materials

This section addresses impacts associated with hazardous materials use and transportation, the accidental release of hazardous materials, new development or re-development on contaminated sites, air traffic hazards, interference with emergency response and evacuation plans, and the risk of exposure to wildland fires.

4.7.1 Setting

a. Definition of Hazardous Materials

A material is considered hazardous if it appears on a list of hazardous materials prepared by a federal, state, or local agency, or if it has characteristics defined as hazardous by such an agency. A hazardous material is defined in Title 22 of the California Code of Regulations as follows:

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 reversible, illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of or otherwise managed (California Code of Regulations, Title 22, Section 66261.10).

Chemical and physical properties cause a substance to be considered hazardous. Such properties include toxicity, ignitability, corrosiveness, and reactivity. California Code of Regulations, Title 22, Sections 66261.20 through 66261.24 defines the aforementioned properties. The release of hazardous materials into the environment can contaminate soils, surface water, and groundwater supplies.

b. Land Use Patterns

Past and present land use patterns are good predictors of the potential for past contamination by hazardous materials and the current use and storage of hazardous materials. Military, industrial, and certain commercial land uses, such as dry cleaners and auto service, are more likely to use and store large quantities of hazardous materials than residential land uses. Small quantities of hazardous materials are also routinely used and stored in other commercial and retail businesses, educational facilities, medical facilities, and households. Commercial land uses in the city are concentrated along major transportation corridors, such as SR 1, Main Street, and Morro Bay Blvd. Light industrial and warehousing uses are located mainly along the north end of Embarcadero Boulevard.

Land use patterns are also useful for identifying the location of sensitive receptors, such as schools, day-care facilities, hospitals, and nursing homes. Figure 2-3 in Section 2, *Project Description*, shows the existing location of school land uses in Morro Bay.

c. Existing Hazardous Material Contamination

Hazardous waste sites in the planning area are primarily located in the Embarcadero area of the city, with two military cleanup sites located in the southern and western parts of the city. Of the hazardous waste sites in the planning area, there are no Federal Superfund sites. Federal Superfund sites are sites that are contaminated from dumping, exposed, or otherwise improperly managed

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hazardous waste (United State Environmental Protection Agency [USEPA] 2018). According to the California State Water Resources Control Board (SWRCB) GeoTracker database and the California Department of Toxic Substances Control (DTSC) EnviroStor database, the planning area has four open or active cleanup sites, in addition to 16 closed cleanup sites. These cleanup sites are identified by DTSC as sites where hazardous materials are present and cleanup activities are necessary. Table 4.7-1 shows the status of each of the four open or active hazardous waste sites identified in the planning area.

Table 4.7-1 Hazardous Materials Sites in the Planning Area

Site Name/Site ID	Address	Potential Contaminants of Concern	Site Type	Status/Date Recorded
Texaco Bulk Plant (former)	3072 Main Street Morro Bay, CA	Petroleum Fuels/Oils		Open-Inactive 12/31/2015
Morro Bay Power Plant – PG&E	1290 Embarcadero Morro Bay, CA	Metals/Heavy Metals, Arsenic, other spill		Open Verification Monitoring as of 12/27/2012*
Estero Bay Defense Fuel Supply Point	3300 Panorama Drive Morro Bay, CA	TPH-Jet Fuel	Military Evaluation	No Further Action 6/30/1997

Sources: SWRCB 2016a, DTSC, 2018.

* The Morro Bay Power Plant was constructed by PG&E in the early 1950s. Ownership of plant has changed over the years, and the facility is currently owned by Vistra Energy. As of November 2014, the power plant is no longer active.

DTSC maintains a list known as the Cortese List, which identifies sites where hazardous materials are present and cleanup activities are necessary. There are no facilities in Morro Bay on the Cortese List. The nearest hazardous materials sites documented on the Cortese List include:

- The Baywood Park Training Area (also listed in Table 4.7-1, now partially included in Montana de Oro State Park, is a 9,100-acre former Department of Defense site located approximately 1 mile west of the planning area, was previously used as a National Guard post and an army camp, and may also have leftover munitions and unexploded ordnance (DTSC 2005a).
- Camp San Luis, located approximately six miles east of the planning area, was previously used as a National Guard post and an army camp, and may possibly contain leftover munitions and unexploded ordnances (DTSC 2005a).

As described in the Community Baseline Assessment for the General Plan and LCP Update, there are four known facilities that are not currently subject to state or federal response activities where hazardous materials are still present or may be present in the city. The closed Morro Bay Power Plant has undergone extensive remediation activities to remove hazardous materials. DTSC declared in 2014 that the site poses no significant health or environmental hazard (DTSC 2014). In March 2020 DTSC released a Statement of Basis for managing impacts by implementing a land use covenant that restricts select areas of the site to future commercial/industrial uses and restricting use of groundwater across the site. Two additional former military sites (one near the intersection of Panorama Drive and Nevis Street, the other near the intersection of Embarcadero and Coleman Street) require additional evaluation according to DTSC, and one additional site (in the foothills near Little Morro Creek Road) has been remediated such that no further action is recommended by DTSC (DTSC 1997, 2005b, 2005c).

The SWRCB maintains a separate list of sites with hazardous materials that may contaminate groundwater supplies. There are 21 of these facilities located in Morro Bay, some of which are also listed by DTSC. Of these 21 facilities, 18 have completed all cleanup activities and formal case closure decisions have been issued, although any future development activities on these sites may require remediation activities and special permitting to ensure that people and the environment are not exposed to a newly unearthed contaminated material. Cases for three facilities are still open: the Morro Bay Power Plant, where cleanup actions have finished and monitoring activities are ongoing to ensure the cleanup was successful; the former Texaco facility near Del Mar Park, now owned by Chevron, which is subject to evaluation activities; and the Chevron Estero Bay Marine Terminal at SR 1 and Morro Road, where remediation activities are ongoing (SWRCB 2016a). There are 15 permitted underground storage tanks (USTs) in Morro Bay, which may store hazardous or potentially hazardous materials (SWRCB 2016b).

The risk from pipelines in Morro Bay involves existing in-service natural gas pipelines and abandoned pipelines once use for petroleum and related products. The Southern California Gas Company (SoCalGas), which provides natural gas service to Morro Bay, operates pipelines in the community. A large transmission line intended to transport natural gas across significant distances enters Morro Bay from the east along SR 1, running alongside SR 1 until it terminates near where Main Street crosses under SR 1. Two high-volume distribution lines run north from this point: one continuing along SR 1 north to Cambria, the other running northeast toward Atascadero (Appendix B). The City designates these pipelines as very low risk. There are a number of abandoned pipelines in the community, some of which have been fully decontaminated and decommissioned. The other abandoned pipelines are generally not expected to pose a threat to human health and safety, although they may threaten ecological health (City of Morro Bay 2006).

As discussed in the Community Baseline Assessment for the General Plan and LCP Update, one other facility in the vicinity which may pose a hazardous materials risk is the Diablo Canyon Power Plant located about 10 miles south of Morro Bay. Diablo Canyon is the one remaining operational nuclear power plant in California and is expected to remain in operation until its license expires in 2025. The facility is built on a fault line and is located on the coast, exposing it to seismic hazards and coastal hazards such as tsunamis, although Diablo Canyon is designed to be highly resilient to these emergency situations (Appendix B).

d. Airports and Airport Hazards

Airport-related hazards can occur if departing or landing aircraft pose a safety risk to nearby development, or vice versa. The nearest airport to the planning area is the San Luis Obispo County Regional Airport which is 17 miles away from the City of Morro Bay. The planning area is located outside of the existing and proposed safety zones associated with runway activities at this airport (San Luis Obispo County Airport Land Use Commission 2018).

e. Emergency Response Plans

The City of Morro Bay developed its own Local Hazard Mitigation Plan (LHMP) in 2006. Although the plan is meant to be a multi-hazard plan, its primary function is to address mitigation for natural hazards and other environmentally related, human caused events or incidents (Morro Bay 2006). One of the main goals of the LHMP is to speed recovery and redevelopment following future disaster events. The LHMP incorporates all applicable operations plans and geo-technical reports in relevant hazard mitigation ordinances, regulations, and plans. The LHMP coordinates activities between agencies, provides safety information and establishes training and exercise goals related to

emergency management. The City is in the process of updating the LHMP and is currently developing the mitigation strategies for identified hazards. The City's LHMP is part of the County of San Luis Obispo's Multi-Jurisdictional LHMP.

In addition, the City of Morro Bay has a Comprehensive Emergency Response Plan revised in 2019 and developed by the Morro Bay Fire Department. The Emergency Response Plan covers policies and concepts for responding to any and all emergencies that could affect the health, safety, and property of the public within city limits, including earthquakes, hazardous materials, multi-casualty events, storms and floods, wildland fires, terrorism, nuclear power plant events, and tsunamis (City of Morro Bay 2019).

f. Wildland Fire Hazards

Fires in wildland areas can destroy vegetation and wildlife, and threaten urban areas located on the fringe of wildland areas. Wildland fires can also have serious impacts on downstream development and water supplies. When vegetation is burned away, erosion becomes a more serious problem, especially during the rainy season. Consequently, mudslides and landslides can threaten downhill development as a result of wildland fires.

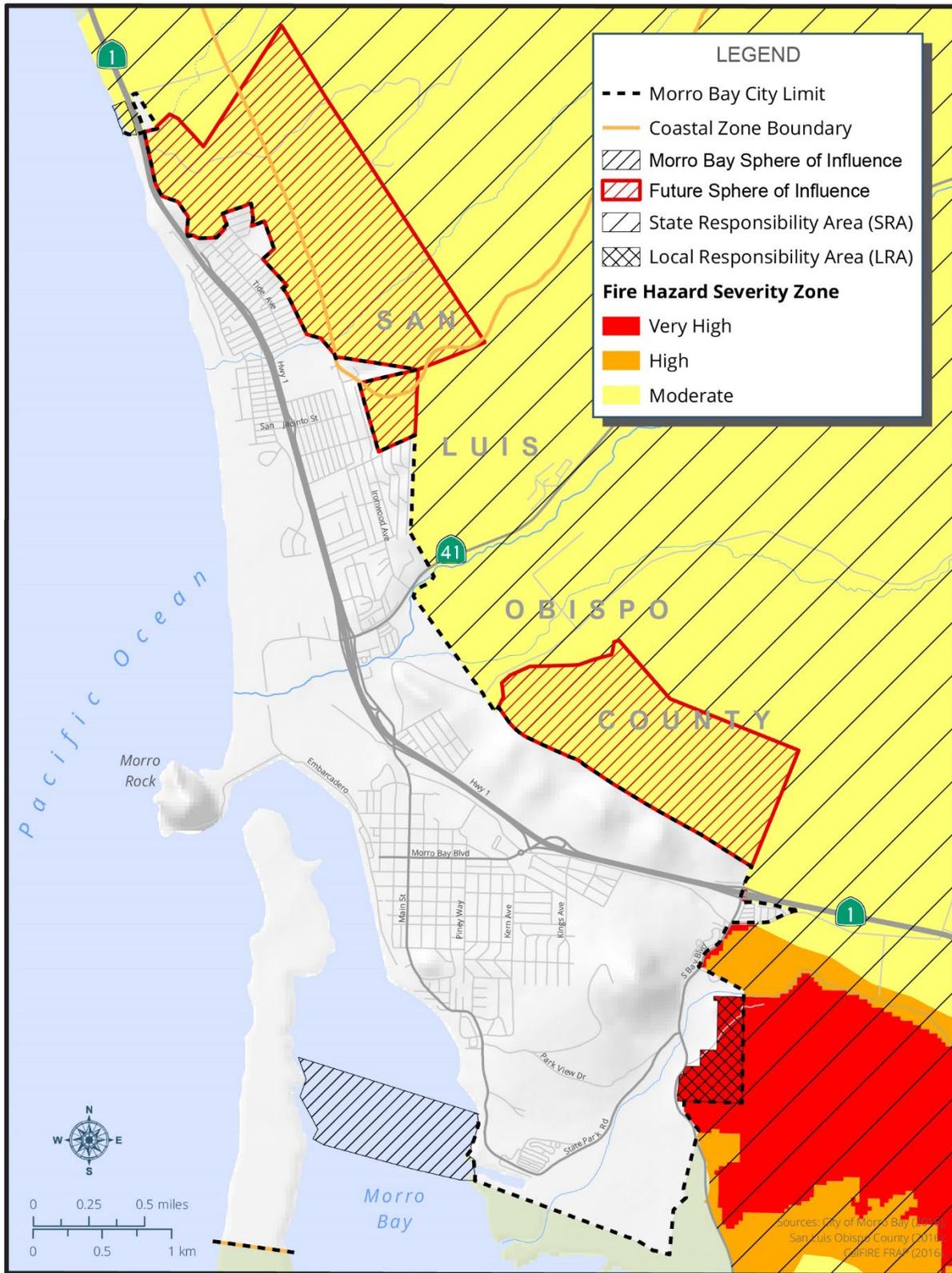
Wildland fire risk is determined by a combination of factors including precipitation, winds, temperature, and landscape and vegetation conditions. Based on these factors, Morro Bay has been identified by the California Department of Forestry and Fire Protection (CAL FIRE) as being within a wildland-urban interface (CAL FIRE 2018a), which includes areas where homes or other structures are built near or among lands prone to wildland fire. Morro Bay's proximity to undeveloped natural areas increases the potential for exposure to wildland fire.

CAL FIRE determines fire hazard severity zones based on the potential fire hazard that is expected to prevail there. Factors in determining fire hazard severity zones include fuel (material that can burn), slope, and weather. CAL FIRE identifies three zones, based on increasing hazard severity: moderate, high, and very high. Moderate hazard zones are typically identified as either wildland areas supporting areas of typically low fire frequency and relatively modest fire behavior, or are developed/urbanized areas with a very high density of inflammable surfaces including roadways, irrigated lawn/parks, and low total vegetation cover (less than 30 percent) that is highly fragmented and low in flammability (e.g., irrigated, manicured, managed vegetation). There is one area within the limits of the City of Morro Bay with very-high fire hazard. The majority of the developed portion of Morro Bay is located outside of a mapped fire hazard severity zone. Figure 4.7-1 below illustrates Fire Hazard Severity zones in the planning area.

Development within very high fire hazard areas is unsafe where fire suppression is impeded by lack of water, rugged terrain, and delayed response times. The city is designated as a Local Responsibility Area (LRA), wherein the local government has responsibility for fire protection (CAL FIRE 2018b).

Climate change is expected to exacerbate periodic drought conditions, potentially increasing the frequency of wildfires and altering the distribution and character of natural vegetation. The California Climate Change Center reported a projected increase wildfire frequency, statewide, between 11 percent under a lower-range warming scenario and 55 percent under a medium-range warming scenario (California Climate Change Center 2006).

Figure 4.7-1 Fire Hazard Severity Zones



CAL FIRE works in cooperation with the Governor’s Office of Emergency Services (CalOES, formerly California Emergency Management Agency [CalEMA]), as well as neighboring state governments through a network of mutual aid agreements to fight wildland fires. CAL FIRE is also a dedicated firefighting partner to the federal government, with experience contributing to firefighting efforts on the 45 million acres of federal lands in California. CAL FIRE is the largest multipurpose fire protection agency in the United States, responsible for wildland fire protection of over 31 million acres of California’s privately owned watershed lands, as well as services in 150 counties, cities, and districts via contracts with local governments.

g. Coastal Hazards

Coastal hazards in Morro Bay pose a threat due to risk of coastal flooding. Coastal flooding has occurred on occasion in the past and strong storm events may become more frequent and/or more severe in Morro Bay (Oskin 2014). Additionally, tsunamis may also occur along the shore, although the risk of a serious tsunami for Morro Bay remains low.

Sea level rise is a future hazard. Although sea levels have generally not risen enough to pose a substantial threat to Morro Bay, future sea level rise may be great enough to create hazardous conditions. Projections of future sea level rise vary, but some studies indicate that by 2100, ocean levels may have increased by as much as 66 inches, or 5.5 feet (Appendix B). At 5 feet of sea level rise, projections show that the marina, parts of the Morro Bay Golf Course, and the inlets of Morro and Toro Creeks would be inundated. Additionally, large sections of the beach north of Morro Rock would be underwater. At six or more feet of sea level rise, the Embarcadero area may be inundated (Appendix B). Sea level rise also increases the risk of coastal flooding and erosion by moving the ocean level closer to existing structures decreasing the required severity of a flood or erosion event before it begins to have an impact on homes, businesses, or infrastructure (Appendix B). For more information on flood hazards related to tsunami and seiches, refer to Section 4.7, *Hydrology and Water Quality*.

h. Regulatory Setting

The management of hazardous materials and hazardous wastes is regulated at the federal, state, and local levels, including through programs administered by the USEPA; agencies within the California Environmental Protection Agency (CalEPA), such as the DTSC; Federal and State occupational safety agencies; and the San Luis Obispo County Environmental Health Services (EHS), Hazardous Materials Program, which is designated as the local Certified Unified Program Agency (CUPA).

Federal

The Federal Toxic Substances Control Act (1976) and the Resource Conservation and Recovery Act of 1976 (RCRA)

These acts established a program administered by the USEPA for the regulation of the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA was amended in 1984 by the Hazardous and Solid Waste Act (HSWA), which affirmed and extended the “cradle to grave” system of regulating hazardous wastes. Among other things, the use of certain techniques for the disposal of some hazardous wastes was specifically prohibited by HSWA.

The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (enacted 1980), amended by the Superfund Amendments and Reauthorization Act (SARA) (1986)

This law provides broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. Among other things, CERCLA established requirements concerning closed and abandoned hazardous waste sites, provided for liability of persons responsible for releases of hazardous waste at these sites, and established a trust fund to provide for cleanup when no responsible party could be identified. CERCLA also enabled revision of the National Contingency Plan (NCP), which provided the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants. The NCP also established the National Priorities List (NPL).

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

FIFRA (7 USC 136 et seq.) provides Federal control of pesticide distribution, sale, and use. USEPA was given authority under FIFRA not only to study the consequences of pesticide usage, but also to require users (farmers, utility companies, and others) to register when purchasing pesticides. Later amendments to the law required users to take exams for certification as applicators of pesticides. All pesticides used in the United States must be registered (licensed) by USEPA. Registration assures that pesticides will be properly labeled and that, if used in accordance with specifications, they will not cause unreasonable harm to the environment.

Lead-Based Paint Elimination Final Rule 24 Code of Federal Regulations

Regulations for Lead-Based Paint (LBP) are contained in the Lead-Based Paint Elimination Final Rule 24 Code of Federal Regulations (CFR) 33, governed by the U.S. Housing and Urban Development (HUD), which requires sellers and lessors to disclose known LBP and LBP hazards to prospective purchasers and lessees. Additionally, all LBP abatement activities must be in compliance with California and Federal OSHA and with the State of California Department of Health Services requirements. Only LBP-trained and -certified abatement personnel are allowed to perform abatement activities. All LBP removed from structures must be hauled and disposed of by a transportation company licensed to transport this type of material at a landfill or receiving facility licensed to accept the waste.

U.S. Environmental Protection Agency

USEPA is the agency primarily responsible for enforcement and implementation of Federal laws and regulations pertaining to hazardous materials. Applicable Federal regulations pertaining to hazardous materials are contained in the Code of Federal Regulations (CFR) Titles 29, 40, and 49. Hazardous materials, as defined in the CFR, are listed in 49 CFR 172.101. The management of hazardous materials is governed by the following laws:

- Resource Conservation and Recovery Act of 1976 (RCRA) (42 U.S. Code [USC] 6901 et seq.); Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA, also called the Superfund Act) (42 USC 9601 et seq.);
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) (7 USC 136 et. Seq.); and
- Superfund Amendments and Reauthorization Act (SARA) of 1986 (Public Law 99 499).

These laws and associated regulations include specific requirements for facilities that generate, use, store, treat, and/or dispose of hazardous materials. USEPA provides oversight and supervision for Federal Superfund investigation/remediation projects, evaluates remediation technologies, and develops hazardous materials disposal restrictions and treatment standards.

National Fire Plan

The National Fire Plan was developed under Executive Order 11246 in August 2000, following a historic wildland fire season. Its intent is to establish plans for active response to severe wildland fires and their impacts to communities while ensuring sufficient firefighting capacity. The plan addresses firefighting, rehabilitation, hazardous fuels reduction, community assistance, and accountability.

State

Department of Toxic Substances Control

As a department of the CalEPA, the DTSC is the primary agency in California that regulates hazardous waste, cleans up existing contamination, and looks for ways to reduce the hazardous waste produced in California. DTSC regulates hazardous waste in California primarily under the authority of RCRA and the California Health and Safety Code.

DTSC also administers the California Hazardous Waste Control Law (HWCL) to regulate hazardous wastes. While the HWCL is generally more stringent than RCRA, until USEPA approves the California program, both state and federal laws apply in California. The HWCL lists 791 chemicals and approximately 300 common materials that may be hazardous; establishes criteria for identifying, packaging, and labeling hazardous wastes; prescribes management controls; establishes permit requirements for treatment, storage, disposal, and transportation; and identifies some wastes that cannot be disposed of in landfills.

Government Code Section 65962.5 requires the DTSC, the State Department of Health Services, the SWRCB, and CalRecycle to compile and annually update lists of hazardous waste sites and land designated as hazardous waste sites throughout the state. The Secretary for Environmental Protection consolidates the information submitted by these agencies and distributes it to each city and county where sites on the lists are located. Before the lead agency accepts an application for any development project as complete, the applicant must consult these lists to determine if the site at issue is included.

If any soil is excavated from a site containing hazardous materials, it would be considered a hazardous waste if it exceeded specific criteria in Title 22 of the California Code of Regulations. Remediation of hazardous wastes found at a site may be required if excavation of these materials is performed, or if certain other soil disturbing activities would occur. Even if soil or groundwater at a contaminated site does not have the characteristics required to be defined as hazardous waste, remediation of the site may be required by regulatory agencies subject to jurisdictional authority. Cleanup requirements are determined on a case-by-case basis by the agency taking jurisdiction.

Hazardous Waste Control Act

The hazardous waste management program enforced by DTSC was created by the Hazardous Waste Control Act (California Health and Safety Code Section 25100 et seq.), which is implemented by regulations described in CCR Title 26. The State program is similar to, but more stringent than, the

Federal program under RCRA. The regulations list materials that may be hazardous, and establish criteria for their identification, packaging, and disposal. Environmental health standards for management of hazardous waste are contained in California Code of Regulations (CCR) Title 22, Division 4.5. In addition, as required by California Government Code Section 65962.5, DTSC maintains a Hazardous Waste and Substances Site List for the State called the Cortese List.

California Department of Pesticide Regulation, Department of Food and Agriculture, and the Department of Public Health

The California Department of Pesticide Regulations (DPR), a division of CalEPA, in coordination with the California Department of Food and Agriculture (CDFA), a division of Measurement Standards and the California Department of Public Health (CDPH) have the primary responsibility to regulate pesticide use, vector control, food, and drinking water safety. CCR Title 3 requires the coordinated response between the County Agricultural Commissioner and SBDEH to address the use of pesticides used in vector control for animal and human health on a local level. DPR registers pesticides, and pesticide use is tracked by the County. Title 22 is used also to regulate both small and large CDPH water systems.

California Fire Code (2019)

The 2019 California Fire Code is based on the 2018 International Fire Code. The California Fire Code establishes the minimum requirements consistent with nationally recognized good practices to safeguard the public health, safety, and general welfare for the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures and premises, and to provide safety and assistance to firefighters and emergency responders during emergency operations. The provisions of this code apply to the construction, alteration, movement enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure or any appurtenances connected or attached to such building structures throughout the State of California.

The California Fire Plan

The Strategic Fire Plan for California is the State's road map for reducing the risk of wildfire. The most recent version of the Plan was finalized in August 2018 and directs each CAL FIRE Unit to prepare a locally specific Fire Management Plan (CAL FIRE 2018c). In compliance with the California Fire Plan, individual CAL FIRE units are required to develop Fire Management Plans for their areas of responsibility. These documents assess the fire situation within each of the 21 CAL FIRE units and six contract counties. The plans include stakeholder contributions and priorities and identify strategic areas for pre-fire planning and fuel treatment as defined by the people who live and work with the local fire problem. The plans are required to be updated annually.

Wildland Urban Interface Building Standard

On September 20, 2007 the Building Standards Commission approved the Office of the State Fire Marshal emergency regulations amending the California Code of Regulations, Title 24, Part 2, known as the 2007 California Building Code. These codes include provisions for ignition-resistant construction standards in the wildland urban interface.

State Emergency Plan

The foundation of California’s emergency planning and response is a statewide mutual aid system which is designed to ensure that adequate resources, facilities, and other support is provided to jurisdictions whenever their own resources prove to be inadequate to cope with a given situation.

The California Disaster and Civil Defense Master Mutual Aid Agreement (California Government Code Sections 8555–8561) requires signatories to the agreement to prepare operational plans to use within their jurisdiction, and outside their area. These plans include fire and non-fire emergencies related to natural, technological, and war contingencies. The State of California, all state agencies, all political subdivisions, and all fire districts signed this agreement in 1950.

Section 8568 of the California Government Code, the “California Emergency Services Act,” states that “the State Emergency Plan shall be in effect in each political subdivision of the state, and the governing body of each political subdivision shall take such action as may be necessary to carry out the provisions thereof.” The Act provides the basic authorities for conducting emergency operations following the proclamations of emergencies by the Governor or appropriate local authority, such as a City Manager. The provisions of the act are further reflected and expanded on by appropriate local emergency ordinances. The Act further describes the function and operations of government at all levels during extraordinary emergencies, including war.

All local emergency plans are extensions of the State of California Emergency Plan. The State Emergency Plan conforms to the requirements of California’s Standardized Emergency Management System (SEMS), which is the system required by Government Code 8607(a) for managing emergencies involving multiple jurisdictions and agencies (California Emergency Management Agency [CalEMA]¹ 2009). The SEMS incorporates the functions and principles of the Incident Command System (ICS), the Master Mutual Aid Agreement (MMAA), existing mutual aid systems, the operational area concept, and multi-agency or inter-agency coordination. Local governments must use SEMS to be eligible for funding of their response-related personnel costs under state disaster assistance programs. The SEMS consists of five organizational levels that are activated as necessary, including: field response, local government, operational area, regional, and state. CalOES divides the state into several mutual aid regions. The City of Morro Bay is located in Mutual Aid Region I, which includes San Luis Obispo, Santa Barbara, Ventura, Los Angeles and Orange Counties (CalEMA 2011).

Regional

County of San Luis Obispo Environmental Health Services Hazardous Materials Program

San Luis Obispo County EHS’s, Hazardous Materials Program is designated as the local CUPA. This agency is responsible for inspecting facilities in the County to verify proper storage, handling and disposal of hazardous materials and hazardous wastes. The Hazardous Materials Program administers programs for Hazardous Materials Business Plans, hazardous waste generator requirements, USTs, above ground petroleum storage, prevention of accidental releases (California Accidental Release Prevention program), and hazardous materials management plans.

¹ California Emergency Management Agency is now called the California Governor’s Office of Emergency Services (CalOES).

Local

Airport Land Use Compatibility Plans

The Section 65302.3 of the Government Code requires general plans and applicable specific plans to be consistent with amended Comprehensive Airport Land Use Plans (CALUP). The nearest airports to the planning area include the San Luis Obispo County Regional Airport, located approximately 17 miles to the southeast, and the Paso Robles Municipal Airport located 32 miles to the northeast. The planning area is not located in the airport land use plan area for either of these airports.

Morro Bay Local Hazard Mitigation Plan

The Morro Bay LHMP is a plan to improve the resiliency in the community by identifying natural hazards present in Morro Bay, determining the community's vulnerability to each hazard, and identifying development mitigation strategies to reduce vulnerability before emergency situations develop. Morro Bay's LHMP was adopted in 2006 and addresses nine hazards. The LHMP also contains nine goals to improve resiliency. Objectives and mitigation actions are associated with each goal. Morro Bay's LHMP identifies earthquakes (including fault rupture and liquefaction), floods, landslides, and hazardous materials releases as the most significant hazards present in the community. The City is in the process of updating the LHMP and is currently developing the mitigation strategies for identified hazards. The City's LHMP is part of the County of San Luis Obispo's Multi-Jurisdictional LHMP.

Morro Bay Comprehensive Emergency Response Plan

The Comprehensive Emergency Response Plan contains City Policies and operational concepts for responding to emergency situations and is generally only consulted when an emergency occurs. Most of the hazards in the response plan are also contained in the LHMP. The policies and general approach to emergency situations delineated in the plan follow a number of widely adopted emergency response standards and operations protocols, including the National Incident Management System, the State Emergency Management System, and the Incident Command System.

4.7.2 Impact Analysis

a. Methodology

This section describes the potential environmental impacts of the proposed project relevant to hazards and hazardous materials. The impact analysis is based on an assessment of baseline conditions for the General Plan and LCP Update planning area, including locations of hazardous materials use and storage, existing contaminated sites, air traffic hazards, emergency response and evacuation plan requirements, and the risk of exposure to wildland fires. This analysis identifies potential impacts based on the predicted interaction between the affected environment and construction, operation, and maintenance activities related to the predicted development that would occur under the proposed project. This section describes impacts in terms of location, context, duration, and intensity.

b. Significance Thresholds

The following thresholds of significance are based on Appendix G of the *CEQA Guidelines*. For the purposes of this EIR, implementation of the proposed project may have a significant adverse impact related to hazards or hazardous materials if it would do any of the following:

1. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
2. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
3. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
4. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment;
5. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area;
6. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; and/or
7. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

Additional hazard related issues are addressed in other sections of this EIR. Hazards associated with tsunamis, seiches, and floods are addressed in Section 4.7, *Hydrology and Water Quality*.

According to Appendix G to the *CEQA Guidelines*, impacts related to wildfire hazards may significant if the project is located in or near state responsibility areas or lands classified as very high fire hazard severity zones and:

1. Substantially impair an adopted emergency response plan or emergency evacuation plan;
2. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire;
3. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment;
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; and/or
5. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

c. Project Impacts and Mitigation Measures

- Threshold 1:** Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- Threshold 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 HAZ-1 IMPLEMENTATION OF THE GENERAL PLAN AND LCP UPDATE COULD RESULT IN AN INCREMENTAL INCREASE IN THE OVERALL ROUTINE TRANSPORT, USE, STORAGE, AND DISPOSAL OF HAZARDOUS MATERIALS IN THE PLANNING AREA, AND INCREASE THE RISK OF RELEASE OF HAZARDOUS MATERIALS. COMPLIANCE WITH APPLICABLE REGULATIONS RELATED TO THE HANDLING, TRANSPORT, DISPOSAL, AND STORAGE OF HAZARDOUS MATERIALS AND ADHERENCE TO PROPOSED GENERAL PLAN AND LCP UPDATE POLICIES WOULD MINIMIZE THE RISK OF SPILLS AND THE PUBLIC'S POTENTIAL EXPOSURE TO THESE SUBSTANCES AND REDUCE THE RISK OF ADVERSE IMPACTS OF HAZARDOUS MATERIALS. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Implementation of the General Plan and LCP Update would facilitate new development in the planning area, increasing the number of residents and workers in Morro Bay who could be exposed to hazardous materials from routine transport, use, storage, and disposal. New development would result from conversion of uses in response to market demand and would change land use patterns in the planning area. Additional residents and workers in the planning area would increase the number of people and residents near transportation corridors where hazardous materials may be transported. Commercial land uses in the planning area are concentrated along major transportation corridors, such as SR 1, Main Street, and Morro Bay Boulevard. Light industrial and warehousing uses are located mainly along Embarcadero Boulevard and Quintana Road. An additional 1,348 residents may be added to the planning area by the year 2040, resulting in increased risk of an accidental release of hazardous materials on a transportation route and exposure to hazardous materials.

New residential, industrial, and commercial development may involve the routine use, storage, and disposal of hazardous materials. Buildout of the planning area envisioned in the General Plan and LCP Update would facilitate up to 8.3 million new square feet of non-residential land uses by the year 2040. Commercial and industrial land uses could use and store hazardous materials in proximity to residential uses. Specifically, mixed use areas that are identified in the planning area may result in new residential units adjacent to commercial and industrial land uses. Mixed uses would be focused at the edge of downtown and in locations where downtown transitions to residential areas. Mixed uses may also be located adjacent to the light industrial area behind Quintana Road near the southeastern edge of the city. The General Plan and LCP Update identifies 17.6 acres of mixed use development by 2040 in the planning area, which could potentially increase hazardous materials exposure for residents as mixed use sites may be located adjacent to commercial and industrial areas.

Hazardous Materials Storage and Disposal

Although the overall quantity of hazardous materials and waste generated in the planning area could incrementally increase as a result of implementation of the General Plan and LCP Update, all new developments that handle or use hazardous materials would be required to comply with the regulations, standards, and guidelines established by the USEPA, the State of California, San Luis

Obispo County, and the City of Morro Bay related to storage, use, and disposal of hazardous materials. The San Luis Obispo County EHS is designated as the local CUPA and performs inspections to prevent exposure to environmental health hazards for businesses and residents in San Luis Obispo County, including in the City of Morro Bay.

CBC requirements prescribe safe accommodations for materials that present a moderate explosion hazard, high fire or physical hazard, or health hazards. Compliance with all applicable federal and State laws related to the storage of hazardous materials would maximize containment (through safe handling and storage practices described above) and provide for prompt and effective cleanup if an accidental release occurs.

CalEPA requires all businesses that handle more than specified amounts of hazardous materials to submit business plans through the California Environmental Reporting System (CERS). Specifically, any new business that meets the specified criteria must submit a full hazardous materials disclosure report that includes an inventory of the hazardous materials generated, used, stored, handled, or emitted; and emergency response plans and procedures to be used in the event of a significant or threatened significant release of a hazardous material. The report must identify the procedures to follow for immediate notification to all appropriate agencies and personnel in the event of a release, identification of local emergency medical assistance appropriate for potential accident scenarios, contact information for all company emergency coordinators of the business, a listing and location of emergency equipment at the business, an evacuation plan, and a training program for business personnel.

For those employees that would work with hazardous materials, the amounts of hazardous materials that are handled at any one time are generally relatively small, reducing the potential consequences of an accident during handling. Business-specific practices would be required to comply with federal and State laws to eliminate or minimize the potential consequence of hazardous materials accidents. For example, employees who would work around hazardous materials are required to wear appropriate protective equipment, and safety equipment is routinely available in all areas where hazardous materials are used.

The San Luis Obispo County EHS allows businesses that handle and store hazardous materials above threshold quantities and are regulated by EHS through certification of Hazardous Materials Handler Annual Business Plan (San Luis Obispo County EHS 2018). CalOES provides emergency response to hazardous materials incidents in the planning area. Additional emergency response capabilities are not anticipated to be necessary to respond to the potential incremental increase in the number of incidents that could result from implementation of the General Plan and LCP Update. Further, adherence to applicable regulations as discussed above would be required to reduce any potential consequences of a hazardous materials operational accident.

Demolition Activities

Demolition activities related to future development and re-development projects in Morro Bay would potentially result in emission of lead and asbestos. Lead-based materials and asbestos exposure are regulated by the California Occupational Safety and Health Administration (Cal OSHA). The California Code of Regulations (CCR), §1532.1, requires testing, monitoring, containment, and disposal of lead-based materials such that exposure levels do not exceed Cal OSHA standards. Under this rule, construction workers may not be exposed to lead at concentrations greater than fifty micrograms per cubic meter of air averaged over an eight-hour period and exposure must be reduced to lower concentrations if the workday exceeds eight hours. Similarly, CCR §1529 sets requirements for asbestos exposure assessments and monitoring, methods of complying with

exposure requirements, safety wear, communication of hazards, and medical examination of workers.

The San Luis Obispo Air Pollution Control District (SLOAPCD) enforces Asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP), which regulate the control of asbestos during the renovation and demolition of buildings under the Federal Clean Air Act (FCCA; SLOAPCD 2018a; SLOAPCD 2018b). The FCCA requires a thorough inspection for asbestos where demolition will occur and specifies work practices to control emissions, such as removing all asbestos-containing materials, adequately wetting all regulated asbestos-containing materials, sealing the material in leak tight containers and disposing of the asbestos-containing waste material as expeditiously as practicable (USEPA 2016).

Hazardous Materials Transport

Hazardous materials may be transported into and throughout the planning area on SR 1 and SR 41, and accidents on these roadways could result in the release of hazardous materials. Additionally, hazardous materials may be transported via aircraft or watercraft in the planning area, resulting in potential for hazardous materials release from accidents involving such vessels.

The U.S. Department of Transportation's Office of Hazardous Materials Safety regulates the transportation of hazardous materials, as described in Title 49 of the Code of Federal Regulations and implemented by Title 13 of the CCR. Documentation of compliance with hazardous materials regulations codified in Titles 8, 22, and 26 of the California Code of Regulations, and their enabling legislation set forth in Chapter 6.95 of the California Health and Safety Code, is required for all hazardous waste transport. In addition, individual contractors and property owners are required to comply with all applicable federal, State, and local laws and regulations pertaining to the transport, use, disposal, handling, and storage of hazardous waste, including but not limited to, Title 49 of the Code of Federal Regulations. The provision of designated truck routes in the General Plan and LCP Update would, as outlined in General Plan and LCP Update Public Safety Element Policy PS-4.2, discourage truck travel through residential areas, reducing the risk of accidental release of hazardous materials in transport.

The Morro Bay Fire Department provides emergency response to hazardous materials incidents in the planning area. Major hazardous materials accidents associated with residential, industrial, and retail-commercial uses are infrequent, and additional emergency response capabilities are not anticipated due to implementation of the General Plan and LCP Update.

The goals and policies in the General Plan and LCP Update Public Safety Element listed below would minimize any impacts related to the use, storage, transport, and release of hazardous materials in the planning area. These policies direct the City to identify hazardous waste transportation routes, work cooperatively with other public agencies in emergency response, update the Emergency Response Plan and require businesses to take appropriate measures to protect public health and safety.

Goal PS-4 Response to emergencies is quick, efficient, and effective.

- Policy PS-4.1 Update Emergency Response Plan.** Regularly update the Morro Bay Emergency Response Plan with updated evacuation routes and hazard information. Publicize evacuation routes and other relevant emergency procedures.

- Policy PS-4.2 Hazardous Waste Transportation Routes.** Identify and establish specific routes for transporting hazardous materials and wastes. Consider avoiding residential areas, instead using state divided highways as preferred routes.
- Policy PS-4.3 Use, Storage, and Transportation of Hazardous Materials.** Require businesses that use, store, or transport hazardous materials to take adequate measures to protect public health and safety. Restrict access to these materials through setbacks and other measures.
- Policy PS-4.4 Interagency Cooperation.** Work cooperatively with public agencies with responsibility for natural and environmental hazards.
- Policy PS-4.5 Transportation Requirements.** Establish minimum road widths and clearances around structures to improve transportation in the event of an emergency.

Compliance with existing applicable regulations and General Plan and LCP Update policies would minimize risks from routine use, transport, handling, storage, disposal, and release of hazardous materials. Oversight by the appropriate federal, State, and local agencies and compliance by new development with applicable regulations related to the handling and storage of hazardous materials would minimize the risk of the public’s potential exposure to these substances. Therefore, impacts from a hazard to the public or the environmental through routine transport, use or disposal of hazardous materials would be less than significant.

Mitigation Measures

No mitigation would be required.

Threshold 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 HAZ-2 NEW DEVELOPMENT OF RESIDENTIAL, INDUSTRIAL, AND COMMERCIAL USES FACILITATED BY THE GENERAL PLAN AND LCP UPDATE COULD RESULT IN INCREASED USE AND STORAGE OF HAZARDOUS MATERIALS WITHIN ONE QUARTER MILE OF EXISTING OR PROPOSED SCHOOLS. COMPLIANCE WITH REGULATORY REQUIREMENTS OF THE SAN LUIS OBISPO COUNTY EHS AND EXISTING APPLICABLE STATE AND FEDERAL REGULATIONS WOULD ENSURE THAT RISKS FROM HAZARDOUS EMISSIONS OR HANDLING OF HAZARDOUS MATERIALS, SUBSTANCES, OR WASTE NEAR EXISTING OR PROPOSED SCHOOLS WOULD REMAIN LESS THAN SIGNIFICANT.

Under the General Plan and LCP Update, new development of residential, industrial, and commercial uses could result in increased use and storage of hazardous materials within one quarter mile of existing or proposed schools. Commercial uses that may use or store hazardous materials include gas stations, dry cleaners, auto-body shops, and medical laboratories. The locations of existing school land uses within the planning area are shown in Figure 2-3, Existing On-The-Ground Land Use, in Section 2.0, *Project Description*.

Since the General Plan and LCP Update does not include any specific development projects, the quantity of hazardous materials proposed for use by future commercial developments within the city is currently unknown. Accidental release or combustion of hazardous materials at new commercial and industrial developments could endanger residents or students in the surrounding community. However, the siting of school facilities would be subject to California Education Code

(Section 17210 et seq.), which outlines the requirements for siting near or on known or suspected hazardous materials sites, or near facilities that emit hazardous air emissions, handle hazardous or acutely hazardous materials, substances, or waste.

Hazardous materials and waste generated from future development would not pose a substantial health risk to nearby schools because all businesses that handle or have on-site storage of hazardous materials would be regulated by the San Luis Obispo County EHS and any additional elements as required in the California Health and Safety Code Article 1 Chapter 6.95 for Business Emergency Plan. As described in Section 4.6.1(h), both the federal and State governments require all businesses that handle more than a specified amount of hazardous materials to submit a business plan to San Luis Obispo County EHS. Compliance with regulatory requirements of the San Luis Obispo County EHS and existing applicable State and federal regulations would minimize the risks associated with exposure of sensitive receptors to hazardous materials. This impact would be less than significant.

Mitigation Measures

No mitigation would be required.

Threshold 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 create a significant hazard to the public or the environment?

Impact HAZ-3 IMPLEMENTATION OF THE GENERAL PLAN AND LCP UPDATE COULD RESULT IN DEVELOPMENT OF SITES CONTAMINATED WITH HAZARDOUS MATERIALS. HOWEVER, COMPLIANCE WITH APPLICABLE REGULATIONS RELATING TO SITE CLEANUP AND ADHERENCE TO THE GENERAL PLAN AND LCP POLICIES WOULD MINIMIZE IMPACTS RELATED TO DEVELOPMENT ON LISTED CONTAMINATED SITES. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

The DTSC maintains the Cortese List, which identifies sites where hazardous materials are present and cleanup activities are necessary. There are no facilities in the planning area on the Cortese List (DTSC 2018). The nearest hazardous materials sites documented on the Cortese List include the Baywood Park Training Area and Camp San Luis, which are both located outside of the planning area.

In Morro Bay, there are four known facilities that are not currently subject to State or federal response activities pursuant to the DTSC and where hazardous materials are still present or may be present (refer to Table 1). The closed Morro Bay Power Plant has undergone remediation to remove hazardous materials. DTSC has determined that the site poses no significant health or environmental hazard (DTSC 2014). According to DTSC, two additional former military sites (one near the intersection of Panorama Drive and Nevis Street, the other near the intersection of Embarcadero and Coleman Street) are in need of evaluation to determine the hazardous materials risk, and one additional site (in the foothills near Little Morro Creek Road) has been cleaned such that no further action is required (DTSC 1997, 2005b, 2005c). Tanks and associated piping at the former military site near the intersection of Panorama Drive and Nevis Street have been removed. The environmental document for this application identifies potential hazardous materials on the site, and requires site-specific mitigation intended to prevent public exposure to this hazard. There are no Federal Superfund sites in the planning area.

Currently, there are 15 permitted underground storage tanks (USTs) in the planning area (Appendix B). In addition to permitted USTs, it is also possible that unpermitted USTs that were in

use prior to permitting and recordkeeping requirements may be present in the planning area. In the event that an unidentified UST is uncovered or disturbed during construction activities, it would be closed and abandoned in place or removed, consistent with applicable regulations.

The following General Plan and LCP Update Public Safety Element policy directs the City to work with appropriate regulatory agencies in managing contaminated sites and is intended to facilitate compliance with regulatory requirements related to hazardous waste contamination described in Section 4.6.1(h) *Regulatory Setting*.

Policy PS-4.4 Interagency Cooperation. Work cooperatively with public agencies with responsibility for natural and environmental hazards.

Compliance with Policy PS-4.4, and existing federal and State regulatory requirements associated with hazardous waste contamination would minimize this impact. New development on documented hazardous materials sites in the planning area would be preceded by remediation under the supervision of applicable regulatory agencies. Therefore, this impact would be less than significant.

Mitigation Measures

No mitigation would be required.

Threshold 5: Would the project be 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?

Impact HAZ-4 THE PLANNING AREA IS OUTSIDE OF THE AIRPORT LAND USE PLANNING AREA AND ASSOCIATED SAFETY ZONES FOR THE SAN LUIS OBISPO COUNTY AIRPORT AND PASO ROBLES MUNICIPAL AIRPORT AND IS NOT LOCATED NEAR ANY OTHER AIRPORTS. THERE WOULD BE NO IMPACTS ASSOCIATED WITH AIRPORT-RELATED HAZARDS.

Airport-related hazards can occur if departing or landing aircraft pose a safety risk to nearby development, or vice versa. The nearest airports to the planning area include the San Luis Obispo County Regional Airport, located approximately 17 miles to the southeast, and the Paso Robles Municipal Airport located 32 miles to the northeast. The planning area is not located in the airport land use plan area or associated safety zones associated with runway activities for either of these airports (San Luis Obispo County Airport Land Use Commission 2018). Therefore, there would be no impacts related to airport-related hazards.

Mitigation Measures

No mitigation would be required.

Threshold 6: Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Impact HAZ-5 POPULATION GROWTH AND INCREASED DEVELOPMENT IN COASTAL AREAS COULD IMPACT EVACUATION ROUTES AND INCREASE THE NUMBER OF RESIDENTS SUSCEPTIBLE TO COASTAL HAZARDS IN THE PLANNING AREA AS A RESULT OF THE GENERAL PLAN AND LCP UPDATE. PROPOSED POLICIES AND MAPPED EVACUATION ROUTES IN THE GENERAL PLAN AND LCP UPDATE WOULD ENSURE EFFECTIVE EMERGENCY RESPONSE FOLLOWING A NATURAL OR HUMAN-CAUSED DISASTER. THEREFORE, THE GENERAL PLAN AND LCP UPDATE WOULD NOT RESULT IN INTERFERENCE WITH AN ADOPTED EMERGENCY RESPONSE PLAN OR EMERGENCY EVACUATION PLAN. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

The General Plan and LCP Update would facilitate increased urban development and population growth in the city. Population growth would incrementally increase traffic, impacting evacuation routes in the city, and increased development in coastal areas would increase the number of residents susceptible to coastal hazards described in the City's Multi-Hazard Emergency Response Plan or LHMP. The Public Safety Element of the General Plan and LCP Update identifies Goal PS-4 and Policy PS-4.1 through PS-4.5, described in Impact HAZ-1, as well as the following goals and policies to protect and maintain public safety in the event of an emergency.

Policy PS-4.6 Resiliency Hubs. Work with local schools and community centers to create "resiliency hubs" that can serve as gathering places during emergencies and interruptions in services, and contain access to water, electricity, and other needed services.

Policy PS-5.7: Passive Resiliency. Ensure, to the greatest extent possible, that new and significantly remodeled buildings will maintain livable conditions in the event of extended loss of power or heating.

Fire Department review of new development applications for adequate emergency access and evacuation routes, in addition to implementation of the General Plan and LCP Update Public Safety Element policies listed above, would ensure adequate emergency response. Therefore, potential impacts to emergency response and evacuation would be less than significant.

Mitigation Measures

No mitigation would be required.

- Threshold 7:** Would the project expose people or structures, directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?
- Threshold 8:** Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?
- Threshold 9:** Would the project, 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?
- Threshold 10:** Would the project 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?
- Threshold 11:** Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?
- Threshold 12:** Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Impact HAZ-6 THE GENERAL PLAN AND LCP UPDATE PLANNING AREA INCLUDES A DESIGNATED VERY HIGH FIRE HAZARD AREA. HOWEVER, LAND USE DESIGNATIONS WOULD LIMIT NEW DEVELOPMENT WITHIN DESIGNATED VERY HIGH FIRE HAZARD AREAS TO RECREATIONAL USES. ADDITIONALLY, GOALS AND POLICIES INCLUDED IN THE GENERAL PLAN AND LCP UPDATE WOULD MINIMIZE EXPOSURE OF PEOPLE OR STRUCTURES TO RISK OF LOSS, INJURY, OR DEATH INVOLVING WILDLAND FIRES. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

According to Appendix G of the CEQA Guidelines, impacts related to wildfire hazards may be significant if a project is located in or near state responsibility areas or lands classified as very high fire hazard severity zones. The City of Morro Bay has been identified by CAL FIRE as being within a wildland-urban interface (CAL FIRE 2018), which includes areas where homes or other structures are built near or among lands prone to wildland fire. Morro Bay's proximity to undeveloped natural areas increases the potential for exposure to wildland fire. The entire planning area is a Local Responsibility Area (LRA) wherein the City has responsibility for fire protection (CAL FIRE 2018b).

The majority of the developed portion of Morro Bay is located outside of a mapped fire hazard severity zone. However, as shown in Figure 4.7-1, there is one area within the planning area designated as a very high fire hazard zone located at the southern end of the planning area adjacent to State Park Road. Development within a very high fire hazard zone is unsafe when fire suppression activities would be impeded by lack of water, rugged terrain, or delayed response times. The area mapped as very high fire hazard zone would be designated as Open Space/Recreation under the General Plan and LCP Update. The Open Space/Recreation land use designation allows for improved and unimproved park facilities, open space areas, natural resource areas, and outdoor recreation. Therefore, this very high fire hazard zone would not be developed with residential dwelling units or other uses subject to substantial wildfire risk, and the project would not require installation or maintenance of associated infrastructure that would exacerbate fire risk in a designated as a high fire hazard severity zone.

Any new development located in a very high fire hazard zone within a LRA would be required to comply with standards in California Government Code 51182 to minimize fire risk. These standards

include maintaining a firebreak of at least 30 feet, removing all flammable vegetation and combustible growth, and additional firebreaks within 100 feet by the removal of all brush, flammable vegetation, or combustible growth. In addition, prior to construction of a new dwelling that requires a building permit, California Government Code 51182 requires that the owner obtain certification from the local building official that the building complies with all applicable state and local fire standards. New development also would be subject to statewide standards for fire safety in the California Fire Code. Therefore, land use designations and limitations on residential development would minimize direct and indirect exposure of people or structures to risk of loss, injury, or death involving wildland fires.

The Public Safety Element of the General Plan and LCP Update identifies Goal PS-4 and Policy PS-4.1 through PS-4.5, described in Impact HAZ-1, as well as the following General Plan and LCP Update Public Safety Element goals and policies, which provide guidance for preventative measures and practices to avoid and minimize wildland fire risks.

Goal PS-2 Development is protected from natural disasters and hazards to the greatest extent possible.

Policy PS-2.2 New Development in High-Risk Areas. Require new development to be located outside of areas subject to natural hazards from tsunami, geologic, flood, and wildfire conditions to the maximum feasible extent. If development must occur in such high-risk areas, including if development cannot be feasibly sited in a manner that avoids such areas entirely, ensure that such development is sited, designed, and conditioned to minimize risks to life and property while mitigating the development's impacts to coastal resources, particularly to public recreational beach access. Development shall also ensure stability and structural integrity; shall not create nor contribute significantly to erosion, geologic instability, or destruction of the site; shall not substantially alter natural landforms; and shall not include shoreline protective devices.

Policy PS-2.4 Construction in High-Risk Areas. Require that structures be built in fire defensible spaces and minimize the construction of public facilities in areas of high or very high wildfire risk, including as mapped by the California Department of Forestry and Fire Protection.

Policy PS-2.6 New Development in Wildfire High-Risk Areas. Require new developments in areas of high and very high wildfire risk to incorporate fire-safe building methods and site planning techniques into the development.

Policy PS-2.7 Additional Fire Protection Standards for All Development. In addition to other hazard requirements that may apply, the following fire protection standards apply to all development:

- a. **New Development and Fire Safety.** New development shall meet all applicable fire safety standards and shall be sited and designed to minimize fuel modification and brush clearance to the maximum feasible extent, and to avoid such activities within ESHA and ESHA buffers on-site and on neighboring property, as well as parkland. All such requirements shall be applied as conditions of approval applicable for the life of the development.
- b. **Existing Development and Fire Safety.** Removal of major vegetation adjacent to existing development for fire safety purposes shall only be

allowed upon a finding that fuel modification and brush clearance techniques are required in accordance with applicable fire safety regulations and are being carried out in a manner which reduces coastal resource impacts to the maximum feasible extent. In addition to the foregoing requirements, removal of ESHA, or removal of materials in an ESHA buffer, shall only be allowed for fire safety purposes if it is not already prohibited by coastal permit conditions; if there are no other feasible alternatives for achieving compliance with required fire safety regulations; and if all ESHA and related impacts are mitigated in a manner that leads to no net loss of ESHA resource value.

Compliance with the goals and policies listed above would minimize potential wildland fire impacts to future growth associated with the General Plan and LCP update. Additionally, with implementation of State requirements for very high fire hazard areas, California Fire Code standards for new structures, and fire hazard policies in the General Plan and LCP Update that apply to fire hazard areas, the impact of wildland fire hazards would be less than significant. Fire Department review of new development applications for adequate emergency access and evacuation routes, in addition to implementation of the General Plan and LCP Update Public Safety Element policies listed above, would ensure adequate emergency response. Therefore, potential impacts to emergency response and evacuation would be less than significant.

Mitigation Measures

No additional policy-oriented mitigation would be required to address this impact. As individual development projects are proposed, focused, project-level environmental review may be required, which could result in the implementation of project-specific mitigation measures to reduce impacts associated with wildland fires.

d. Cumulative Impacts

The analysis in this section examines impacts of the General Plan and LCP Update on hazards and hazardous materials throughout the County of San Luis Obispo (the cumulative impact analysis area) and is cumulative in nature. Some types of hazards and hazardous materials impacts are related to site- and project-specific characteristics and conditions and would not be significantly affected by other development outside of the planning area. As discussed in Impacts HAZ-1 and HAZ-2, there are existing federal, State, and local regulations that effectively reduce the inherent hazard associated with routine transport, use, storage, and disposal of hazardous materials. Regulations and oversight, as outlined in the impacts analysis above, would also effectively reduce the potential for individual projects to create a hazard to the public or the environment through reasonably foreseeable upset and accident conditions, within the planning area as well as in San Luis Obispo County. Thus, cumulative impacts related to the transport, use, storage, or disposal of hazardous materials, upset conditions, hazardous emissions near schools, and project locations on known or unknown hazardous materials sites, would be less than significant.

Similarly, impacts related to airport hazards are site-specific depending on the characteristics and design of individual projects and their location relative to distance and location of nearby airports. Existing regulations place limitations on the types of development that can be permitted within various aircraft zones surrounding an airport, such as building height restrictions or prohibiting residential occupancy. Mandatory compliance with these regulations would prevent substantial hazards related to airports.

Emergency response plans are generally specific to a particular city or county or parts thereof. For example, in the event of an imminent emergency in Morro Bay, emergency response would typically be from police, ambulance and fire departments local to the city or county (through mutual aid agreements), and not from areas outside of San Luis Obispo County. Thus, the cumulative impacts related to conflict with emergency response plans would be less than significant.

The land use plan in the General Plan and LCP Update would facilitate development near areas mapped as very high fire hazards. The risk of loss from existing development and the anticipated growth within San Luis Obispo County would result in cumulative impacts related to wildland fire hazards. As described in Impact HAZ-6, compliance with City and County policies related to fire protection, as well as implementation of State requirements for very high fire hazard areas, California Fire Code standards for new structures, and fire hazard policies in the General Plan and LCP Update that apply to fire hazard areas, would minimize potential cumulative wildland fire impacts.

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4.8 Hydrology and Water Quality

This section evaluates the potential environmental effects of the General Plan and LCP Update associated with regional and local watershed characteristics, including water quality, drainage and infiltration patterns, and flood hazards. The analysis includes a review of surface water, groundwater, flooding, storm water, and water quality. Water supply and wastewater conveyance and treatment are discussed in Section 4.14, *Utilities*. Issues regarding wetlands and waters of the U.S. are discussed in Section 4.3, *Biological Resources*.

4.8.1. Setting

The City of Morro Bay is located on the Central Coast of California, midway between San Francisco and Los Angeles. The city is surrounded by a buffer of undeveloped land on the north, east, and south and by the Pacific Ocean on the west.

The planning area is characterized by a typical Mediterranean coastal climate, which is generally dry in the summer with mild, wet winters. The U.S. Climate Data Center maintains average weather data for the city, within the General Plan and LCP Update planning area. Rainfall is concentrated in the winter months with the wettest months of the year being January, February, and March, with average monthly rainfall totals of 3.6, 3.8, and 3.3 inches, respectively (U.S. Climate Data 2018).

a. Surface Water

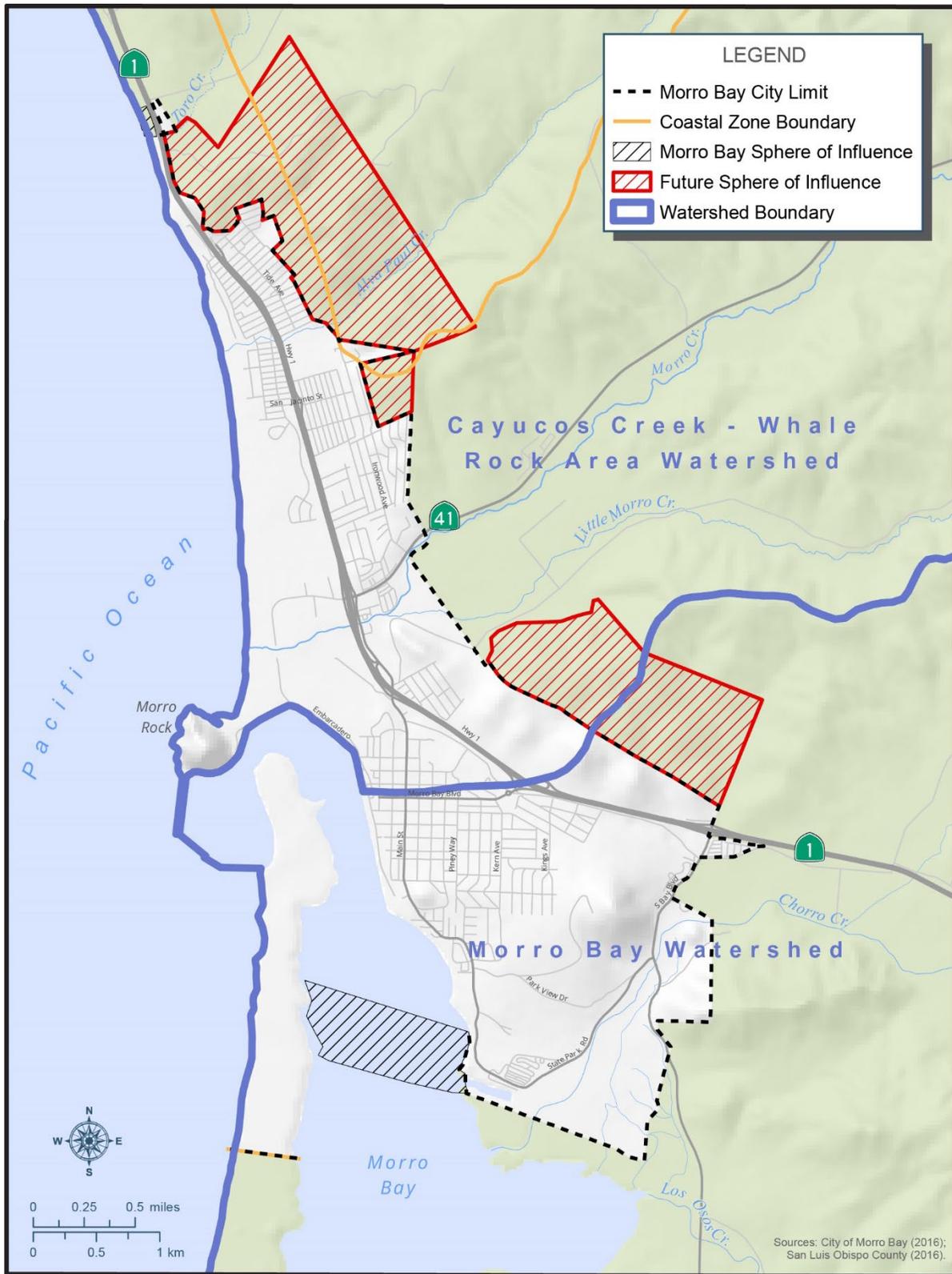
The California Department of Water Resources (DWR) divides surface watersheds in California into 10 hydrologic regions. The General Plan and LCP Update planning area lies within the Central Coast hydrologic region, a large coastal watershed in central California that consists of approximately 7.22 million acres (DWR 2003). The hydrologic region includes all of Santa Cruz, Monterey, San Luis Obispo, and Santa Barbara counties, most of San Benito County, and parts of San Mateo, Santa Clara, and Ventura counties. Major drainages in the Central Coast hydrologic region include the Salinas, Cuyama, Santa Ynez, Santa Maria, San Antonio, San Lorenzo, San Benito, Pajaro, Nacimiento, Carmel, and Big Sur rivers (DWR 2003).

The California DWR subdivides hydrologic regions into hydrologic units, and further into hydrologic areas and hydrologic subareas. Within the Central Coast hydrologic region, the planning area is located entirely in the Estero Bay hydrologic unit (California Department of Forestry and Fire Protection 2002). The Central Coast Regional Water Quality Control Board (RWQCB) governs basin planning and water quality within this hydrologic unit (Central Coast RWQCB 2019).

The majority of the city is in the Morro Bay Watershed, which covers 46,598 acres in the central, coastal area of San Luis Obispo County. Waters in the Morro Bay Watershed drain into Chorro and Los Osos Creeks and eventually into Morro Bay. A small portion of the city, north of Morro Bay Boulevard, is located within the Cayucos Creek-Whale Rock Watershed. Waters in the Cayucos Creek-Whale Rock Watershed drain into Morro Creek and discharge into the Pacific Ocean (Appendix B). The watershed boundaries and primary creeks providing drainage in the city are shown in Figure 4.8-1.

Morro Bay hosts one of the least disturbed wetland systems on the central and southern California Coast (Morro Bay National Estuary Program 2012). The bay is a shallow lagoon fed by tidal inflow and fresh water from Chorro Creek and Los Osos Creek. Figure 4.3-2 in Section 4.3, *Biological Resources*, shows the drainage and wetland systems in the planning area.

Figure 4.8-1 Morro Bay Watershed Boundaries and Drainages



b. Groundwater

Two groundwater basins underlie the project area: the Morro Valley Basin and the Chorro Valley Basin. The Morro Valley Basin occupies approximately 1,200 acres and is bounded by the Pacific Ocean to the west, the Morro Bay Estuary to the east and impermeable rock units to the north and south. Morro Valley Basin recharge comes primarily from percolation of stream flows (primarily from Morro Creek and Little Morro Creek), precipitation, and excess irrigation flow (DWR 2004a). However, deep percolation of precipitation and residential/agricultural return flows also contribute to the water recharge of this basin. The water supply aquifers are predominantly located within alluvial deposits drained by Morro Creek, which are comprised of gravel, sand, silt and clay (Appendix B). The total estimated groundwater storage capacity in the Morro Valley Basin historically ranged from 7,600 acre feet to 33,900 acre feet between 1975 and 1982. The perennial yield of the Morro Valley Basin is estimated to be 1,500 acre feet per year (AFY). During drought conditions, the operation of Morro Bay's seawater and freshwater supply wells from the Morro Valley Basin could be subject to seawater intrusion (Appendix B).

The Chorro Valley Basin is approximately 3,200 acres and is only bounded by the Morro Bay Estuary and impervious rock units. Recharge to the basin comes primarily from percolation of stream flows (primarily from Chorro Creek and tributaries) as well as from deep percolation of precipitation and residential agriculture (DWR 2004b). The water supply aquifers are alluvial deposits drained by Chorro Creek which are comprised of gravel, sand silt, and clay (Morro Bay 2017). Within the Chorro Valley Basin, the total groundwater storage capacity is approximately 9,600 acre feet. Of the total storage capacity, the estimated perennial yield of the basin is 2,210 AFY (Morro Bay 2017). Groundwater quality in the basins is discussed in more detail below under the heading *Water Quality*.

c. Water Quality

Water quality in the planning area is governed by the Central Coast RWQCB, which sets water quality standards in the *Water Quality Control Plan for the Central Coast Basin* (Basin Plan, Central Coast RWQCB 2019). The Basin Plan identifies beneficial uses for surface water and groundwater and establishes water quality objectives to attain those beneficial uses. The identified beneficial uses and the water quality objectives to maintain or achieve those uses are together known as water quality standards. The Central Coast RWQCB designates beneficial uses for some individual water bodies in the Central Coast Basin. All other water bodies not designated individually are assigned the designated uses of municipal and domestic water supply and protection of recreation and aquatic life. Table 4.8-1 presents the designated beneficial uses listed in the Basin Plan for these surface waters.

Table 4.8-1 Basin Plan Beneficial Uses

Water Body	Beneficial Uses
Morro Creek	Municipal and Domestic Supply; Agricultural; Groundwater Recharge, Water Contact Recreation; Non-Contact Water Recreation; Wildlife Habitat; Cold Fresh Water Habitat; Warm Fresh Water Habitat; Migration of Aquatic Organisms; Spawning, Reproduction, and/or Early Development; Rare, Threatened, or Endangered Species; Estuary; Fresh Water Replenishment; Commercial and Sport Fishing
Little Morro Creek	Municipal and Domestic Supply; Agricultural; Groundwater Recharge; Water Contact Recreation; Non-Contact Water Recreation; Wildlife Habitat; Cold Fresh Water Habitat; Migration of Aquatic Organisms; Spawning, Reproduction, and/or Early Development; Rare, Threatened, or Endangered Species; Commercial and Sport Fishing
Morro Bay Estuary	Industrial Service Supply; Water Contact Recreation; Non-Contact Water Recreation; Wildlife Habitat; Cold Fresh Water Habitat, Migration of Aquatic Organisms; Spawning, Reproduction, and/or Early Development; Preservation of Biological Habitats of Special Significance; Rare, Threatened, or Endangered Species; Estuary; Commercial and Sport Fishing, Aquaculture; Shellfish Harvesting
Chorro Creek	Municipal and Domestic Supply; Agricultural; Groundwater Recharge; Water Contact Recreation; Non-Contact Water Recreation; Wildlife Habitat; Cold Fresh Water Habitat; Warm Fresh Water Habitat; Migration of Aquatic Organisms; Spawning, Reproduction, and/or Early Development; Preservation of Biological Habitats of Special Significance; Rare, Threatened, or Endangered Species; Fresh Water Replenishment; Commercial and Sport Fishing

Source: Central Coast RWQCB 2019.

The Clean Water Act 303(d) list is a register of impaired and threatened waters which the Clean Water Act requires all states to submit for Environmental Protection Agency approval every two years. The list identifies all waters where the required pollution control measures have so far been unsuccessful in reaching or maintaining the required water quality standards. Waters that are listed are known as “impaired.” Impairment is measured by total maximum daily load (TMDL), which is the maximum amount of a pollutant that a body of water can receive while still meeting water quality standards (Appendix B). In the planning area, Chorro Creek and Morro Creek are listed as impaired, with one or more pollutants listed by the RWQCB above the TMDL threshold. Specific pollutants in these water bodies that exceed TMDL thresholds are Escherichia coli (E. coli), nutrients, sedimentation/siltation, dissolved oxygen, and pathogens.

The City of Morro Bay acts as the sole water supplier for the planning area. The City’s potable water supply quality depends on the quality of imported water and local groundwater, as well as the proportion in which the two sources are blended. Imported surface water utilized for potable uses has lower total dissolved solids (TDS) concentrations than local groundwater levels. The potable water supply provided by the City’s groundwater wells generally has a TDS concentration ranging from 460 parts per million (ppm) to 910 ppm. The City’s surface water supply imported by the State Water Project has a TDS concentration ranging from 340 ppm to 572 ppm (Appendix B).

The City’s water supply is tested at multiple locations annually. The City publishes a water quality report annually which details the water quality sampling results for City wells and State Water Project water. While the range of contamination in untreated well water may exceed drinking water standards, all of the water delivered to customers is blended or treated to reduce contaminant levels to acceptable levels to meet health and safety requirements.

d. Flood Hazards

Flood hazards occur when the amount of rainfall exceeds the infiltration capacity of the surrounding landscape or the conveyance capacity of the storm water drainage system. The Federal Emergency Management Agency (FEMA) delineates regional flooding hazards as part of the National Flood Insurance Program. FEMA identifies flood hazard risks through its Flood Insurance Rate Map (FIRM) program. Higher flood risk zones are called Special Flood Hazard Areas; these areas have a 1 percent chance or greater of flooding in any given year (also called the 100-year flood). Figure 4.8-2 shows the portions of the planning area that are located within the 100-year and 500-year FEMA designated flood hazard zones.

Additional flood hazards are posed by tsunamis and seiches. A tsunami is a wave generated by the sudden displacement of a large amount of water. Tsunamis can be triggered by earthquakes, volcanic eruptions, or similar events that occur under the water or the shore. Impacts of tsunamis can be both immediate and long-term. Seiches are a related hazard that can occur when a sudden displacement event or very strong winds happen in an enclosed or semi-enclosed body of water such as a lake or bay (Appendix B). While tsunamis are relatively rare, they pose risks to the entire waterfront commercial area and other low-lying areas of the city. These risks are generally greater in the northern portion of Morro Bay, which is directly exposed to the ocean and is not protected by the bay and sandspit. Figure 4.8-3 shows the potential tsunami inundation zone in Morro Bay. Some residential neighborhoods in northern Morro Bay near Beachcomber Street lie within the tsunami inundation zone.

e. Regulatory Setting

Federal

Clean Water Act

The federal Clean Water Act (CWA), enacted by Congress in 1972 and amended several times since, is the primary federal law regulating water quality in the United States and forms the basis for several State and local laws throughout the country. The CWA established the basic structure for regulating discharges of pollutants into the waters of the United States. The CWA gave the U.S. Environmental Protection Agency the authority to implement federal pollution control programs, such as setting water quality standards for contaminants in surface water, establishing wastewater and effluent discharge limits for various industry contaminants in surface water, establishing wastewater and effluent discharge limits for various industry categories, and imposing requirements for controlling nonpoint-source pollution. At the federal level, the CWA is administered by the U.S. Environmental Protection Agency and U.S. Army Corps of Engineers. At the state and regional levels in California, the CWA is administered and enforced by the SWRCB and the nine RWQCBs.

Clean Water Act Section 401

Under Section 401 of the CWA, the RWQCBs have regulatory authority over actions in waters of the United States and/or the State of California through the issuance of water quality certifications, which are issued in conjunction with any federal permit (e.g., permits issued by the U.S. Army Corps of Engineers under Section 404 of the CWA, described below). Section 401 of the CWA provides the SWRCB and the RWQCBs with the regulatory authority to waive, certify, or deny any proposed activity that could result in a discharge to surface waters of the State. To waive or certify an activity, these agencies must find that the proposed discharge would comply with State water quality

Figure 4.8-2 Morro Bay FEMA Flood Zones

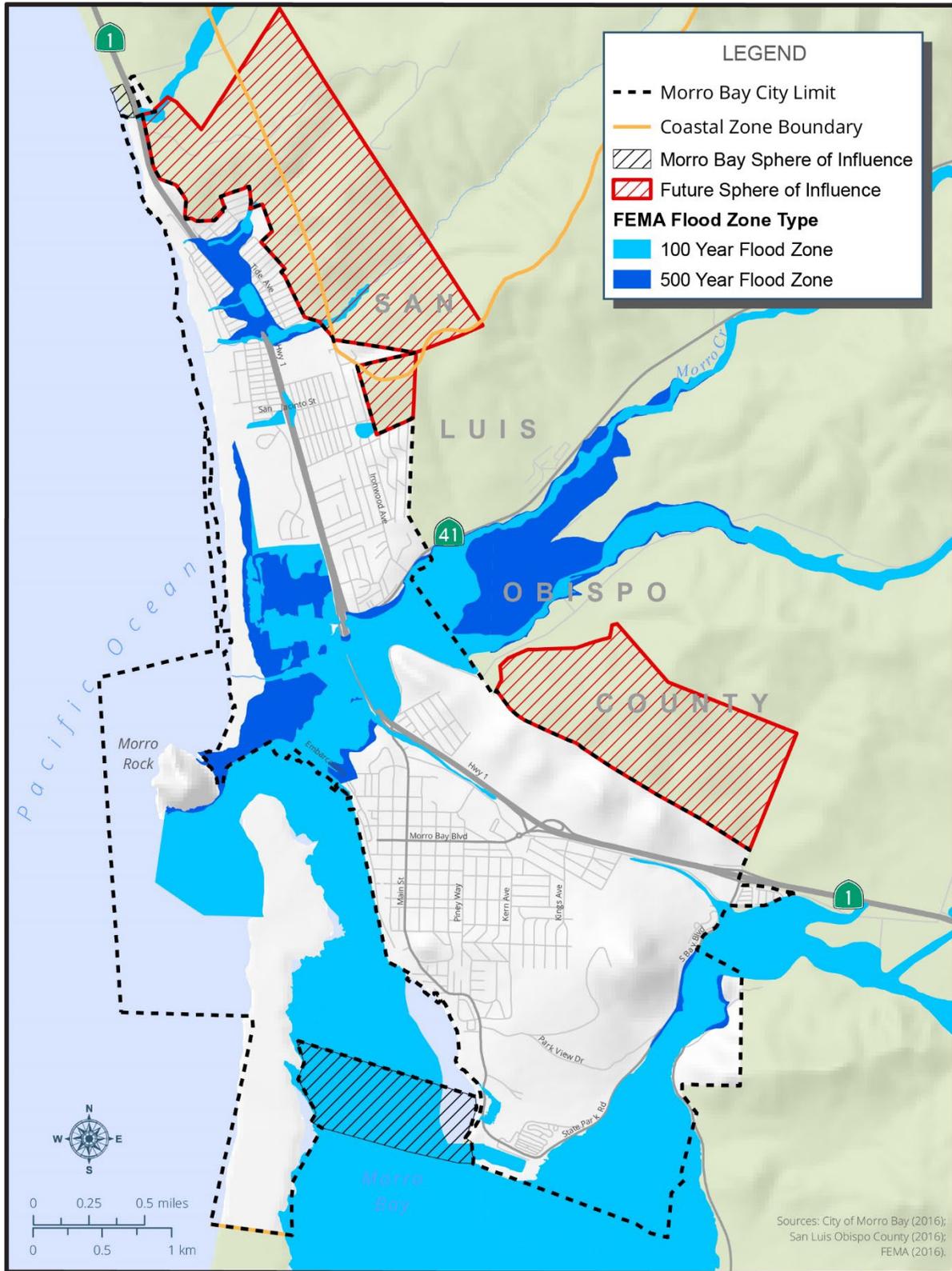
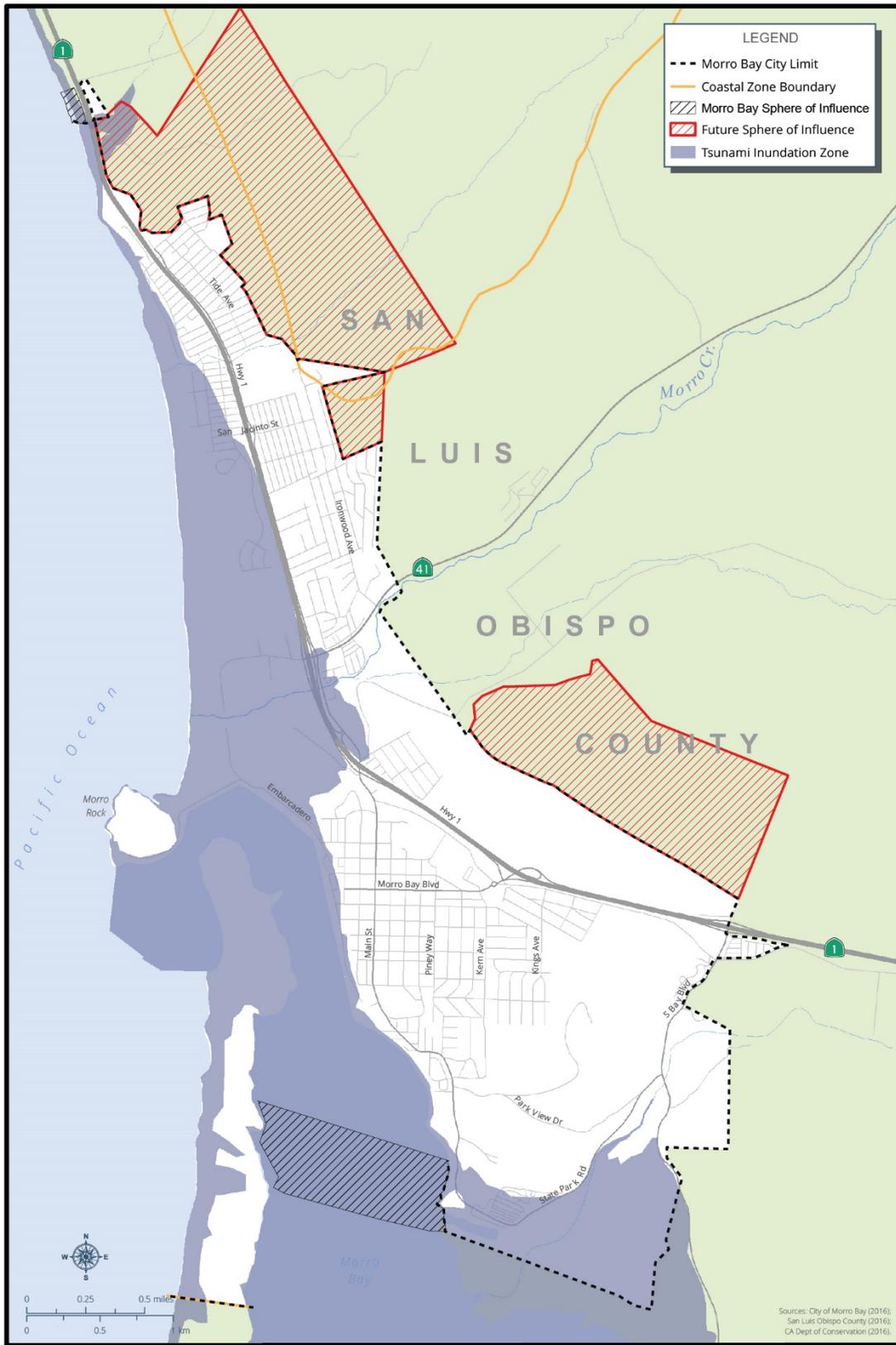


Figure 4.8-3 Tsunami Inundation Zone



standards, including those protecting beneficial uses and water quality. If these agencies deny the proposed activity, the federal permit cannot be issued. This water quality certification is generally required for projects involving the discharge of dredge or fill material to wetlands or other bodies.

Clean Water Act Section 402

Section 402 of the CWA requires that all construction sites on an acre or greater of land, as well as municipal, industrial and commercial facilities discharging wastewater or stormwater directly from a point source (e.g., pipe, ditch, or channel) into a surface water of the United States must obtain permission under the National Pollutant Discharge Elimination System (NPDES) permit. All NPDES permits are written to ensure that the surface water receiving discharges will achieve specified water quality standards.

According to federal regulations, NPDES permit coverage for stormwater discharges associated with construction activity can be obtained through individual state permits or general permits. Individual permitting involves the submittal of specific data on a single construction project to the appropriate permitting agency that will issue a site-specific NPDES permit to the project. NPDES coverage under a general permit involves the submittal of a Notice of Intent by the regulated construction project that they intend to comply with a general permit to be developed by U.S. Environmental Protection Agency or a state with delegated permitting authority. In California, the NPDES program is administered by the SWRCB through the nine RWQCBs. Further discussion of the NPDES program and permits in California relevant to the General Plan and LCP Update planning area is provided in discussion of State regulations, below.

Clean Water Act Section 404

Under Section 404 of the CWA, proposed discharges of dredged or fill material into waters of the United States require U.S. Army Corps of Engineers authorization. Waters of the United States generally include tidal waters, lakes, ponds, rivers, streams (including intermittent streams), and wetlands (with the exception of isolated wetlands). The U.S. Army Corps of Engineers identifies wetlands using a multi-parameter approach, which requires positive wetland indicators in three distinct environmental categories: hydrology, soils, and vegetation. According to the *Corps of Engineers Wetlands Delineation Manual* (1987), except in certain situations, all three parameters must be satisfied for an area to be considered a jurisdictional wetland. The *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (U.S. Army Corps of Engineers 2008) is also used when conducting jurisdictional wetland determinations in areas identified within the boundaries of the arid west, such as the Coachella Valley.

When an application for a Section 404 permit is made, the Applicant must show it has:

- Taken steps to avoid impacts to wetlands or waters of the U.S. where practicable;
- Minimized unavoidable impacts on waters of the U.S. and wetlands; and
- Provided mitigation for unavoidable impacts.

Drinking Water Regulations

The federal Safe Drinking Water Act was enacted in 1974 and allows the U.S. Environmental Protection Agency to promulgate national primary drinking water standards specifying Maximum Contaminants Levels for each contaminant present in a public water system with an adverse effect on human health. Primary Maximum Contaminants Levels have been established for approximately 90 contaminants in drinking water. The U.S. Environmental Protection Agency also adopts

secondary Maximum Contaminants Levels as non-enforceable guidelines for contaminants that may cause cosmetic or aesthetic effects. States have the discretion to adopt them as enforceable standards. U.S. Environmental Protection Agency has delegated to the California Department of Public Health the responsibility for administering California's drinking-water program. In 1976, two years after the federal Safe Drinking Water Act was passed, California adopted its own safe drinking water act (see below).

National Pollutant Discharge Elimination System Program

CWA Section 402 establishes the NPDES permit program, which sets nationwide permitting requirements for discharging pollutants into waterways. The limits vary by category of industry and based on a level of treatment that is achievable using the best available technology. CWA Section 402 prohibits the discharge of pollutants into waters of the United States from any point source without an NPDES permit. To regulate storm water (non-point source) discharges, the EPA developed a two-phased NPDES permit program, commonly referred to as Phase I and Phase II. The Phase I program for Municipal Sanitary Storm Sewer Systems (MS4s) requires operators of "medium" and "large" MS4s, that is, those that generally serve populations of 100,000 or greater, to implement a stormwater management program as a means to control polluted discharges from these MS4s. Stormwater discharges from MS4s in urbanized areas are a concern because of the high concentration of pollutants found in these discharges. The NPDES Phase II permit program also requires the development and implementation of stormwater management plans to reduce such discharges. The Phase II program is based on the use of federally enforceable NPDES permits. The Phase II program encourages the use of general permits; provides flexibility for regulated operators to determine the most appropriate stormwater controls; allows for the recognition and inclusion of existing NPDES and non-NPDES stormwater programs in Phase II permits; includes public education and participation efforts as primary elements of the small MS4 program; attempts to facilitate and promote watershed planning and to implement the stormwater program on a watershed basis; and works toward a unified and comprehensive NPDES stormwater program with Phase I of the program.

National Flood Insurance Program

The National Flood Insurance Program (NFIP) is a program administered by FEMA to provide subsidized flood insurance for property owners in communities. The NFIP established regulations that limit development in flood-prone areas. The boundaries of flood-prone areas are demined by FEMA's Flood Insurance Rates Maps, which provide flood information and identify the flood hazard in the community. In certain high-risk areas, federally regulated or insured lenders require property owners to have flood insurance before issuing a mortgage.

Executive Order 11988

Executive Order (EO) 11988 (1977) addresses floodplain issues related to public safety, conservation, and economics. It requires federal agencies that construct, permit, or fund project located in a flood plain to avoid development that is generally incompatible with the floodplain of would otherwise have adverse effects on flood risks. Development s to which EP 19988 applies should be consistent with the standards and criteria of the NFIP, and restore and preserve natural and beneficial floodplain values. Federal agencies are required to take floodplain management into account when creating or reviewing land use and water plans.

State

California Department of Water Resources Bulletin 118

The California DWR's Bulletin 118 is the State's official compendium on groundwater, and it defines the boundaries and describes the hydrologic characteristics of California's groundwater basins. The DWR periodically updates Bulletin 118, which includes revising the basin boundaries as applicable. An interim update of Bulletin 118 occurred in 2003 and again in 2016 (DWR 2018).

National Pollutant Discharge Elimination System Municipal Permits

The regional boards implement the municipal stormwater NPDES permit program. The state issues area-wide permits for urban areas that are considered sources of pollutants or contribute to water quality standard violations. Regardless of population, the area-wide permits cover all municipalities within the defined urban area. The main goal of the general permit is to protect water quality from the impacts of stormwater runoff from small MS4s. The intent is that stormwater quality impacts will be considered in all aspects of a municipality's activities and that multiple departments within the municipality will work together to implement stormwater best management practices (BMPs). Many activities that a municipality already does can be recognized as a benefit to stormwater or can be modified to add stormwater quality benefits. The general permit states that the permittee shall maintain, implement, and enforce an effective Stormwater Management Plan (SWMP) and develop adequate legal authority to implement and enforce the SWMP.

In February 2008, the Central Coast RWQCB sent a letter notifying the City of Morro Bay of the new enrollment process for the NPDES permit. This letter sets forth the RWQCB's expectations for the SWMP in order to be found in compliance with the general permit. The letter stated that the SWMP must include additional control measures including six minimum control measures: maximize infiltration of clean stormwater, and minimize runoff volume and rate; protect riparian areas, wetlands, and their buffer zones; minimize pollutant loading; and provide long-term watershed protection. In order to achieve the maximum extent practicable standard, the City has incorporated each of these conditions into the six minimum control measures.

California Coastal Act

The California Coastal Act of 1976 (Coastal Act) and the California Coastal Commission, the state's coastal protection and planning agency, were established by voter initiative in 1972 to plan for and regulate new development, and to protect public access to and along the shoreline. The Coastal Act considers water quality and water-related public safety concerns as issues of public importance. To provide maximum public access to the coast and public recreation areas, the Coastal Act directs each local government located within the coastal zone to prepare a Local Coastal Program consistent with Section 30501 of the Coastal Act, in consultation with the Coastal Commission and with public participation.

Porter-Cologne Water Quality Control Act

Under the Porter-Cologne Water Quality Control Act, the SWRCB has the primary authority over state water rights and the water quality policy. The SWRCB administers water rights, water pollution control, and water quality functions throughout the state, while the nine RWQCBs conduct planning, permitting, and enforcement activities. The RWQCBs also regulate water quality under this act through the regulatory standards and objectives set forth in Water Quality Control Plans (also referred to as Basin Plans) prepared for each region.

The planning area is located within the jurisdiction of the Central Coast RWQCB (Region 3). The most current version of the Central Coast RWQCB's Basin Plan was adopted in 2016. The Basin Plan has five major components: 1) identifies the waters of the region, including the Monterey Bay; 2) designates beneficial uses of those waters; 3) establishes water quality objectives for the protection of those uses; 4) prescribes an implementation plan; and 5) establishes a monitoring and surveillance program to assess implementation efforts. Water quality objectives of the Basin Plan are incorporated into individual NPDES permits authorized by the Central Coast RWQCB.

California Ocean Plan

The Water Quality Control Plan for Ocean Waters of California (or Ocean Plan) (State Water Resources Control Board, 2015) establishes water quality objectives and beneficial uses for waters of the Pacific Ocean adjacent to the California Coast outside of estuaries, coastal lagoons, and enclosed bays. The Ocean Plan establishes effluent quality requirements and management principles for specific waste discharges. The water quality requirements and objectives of the Ocean Plan are incorporated into NPDES permits for ocean discharges, such as permit for discharge of treated wastewater from the Morro Bay – Cayucos Sanitary District Wastewater Treatment Plant (WWTP) to Morro Bay and the Pacific Ocean.

California Safe Drinking Water Act

The U.S. Environmental Protection Agency has delegated to the California Department of Public Health the responsibility for administering California's drinking-water program. In 1976, two years after the federal Safe Drinking Water Act was passed, California adopted its own safe drinking water act (contained in the Health and Safety Code) and adopted implementing regulations (contained in Title 22 California Code of Regulations). California's program sets drinking water standards that are at least as stringent as the federal standards. Each community water system also must monitor for a specified list of contaminants, and the monitoring results must be reported to the state. Responsibility for the state's Drinking Water Program was transferred from the Department of Public Health to the Division of Drinking Water, which is a division of the SWRCB that was created in July 2014.

California Drainage Law, Government Code 65302

Government Code Section 65302(a) requires cities and counties to review the Land Use, Conservation, and Safety elements of the general plan "for the consideration of flood hazards, flooding, and floodplains" to address flood risks. The code also requires cities and counties to annually review the land use element within "those areas covered by the plan that are subject to flooding identified by floodplain mapping prepared by FEMA or the California DWR."

Regional and Local

Central Coast RWQCB Post-Construction Requirements

In July 2013, the Central Coast RWQCB adopted Resolution No. R3-2013-0032, which prescribes new Post-Construction Requirements for projects that create or replace 2,500 square feet or more of impervious area and receive their first discretionary approval for design elements after March 2014. The primary objective of these post-construction requirements is to ensure that the project permittee is reducing pollutant discharges to the maximum extent practicable and preventing stormwater discharges from causing or contributing to a violation of receiving water quality

standards in all applicable development projects that require approvals and/or permits. These post-construction requirements complement the MS4 General Permit for the storm drain system because post-construction runoff from project sites in the General Plan and LCP Update area would generally be captured in the storm drain system. Table 4.8-2 summarizes the post-construction requirements for different categories of projects.

Table 4.8-2 Central Coast RWQCB Post-Construction Requirements for Stormwater

Project Category	Performance Requirements
Tier 1 Projects: Projects that create or replace 2,500 square feet or more of impervious surface	Implement One or More Low Impact Design Measures <ul style="list-style-type: none"> ▪ Limit disturbance of natural drainage features; ▪ Limit clearing, grading, and soil compaction; ▪ Minimize impervious surfaces; ▪ Minimize runoff by dispersing runoff to landscape or using permeable pavements
Tier 2 Projects: Projects that create or replace 5,000 square feet or more net impervious surface	Tier 1 Requirements, Plus Treat runoff generated by the 85th percentile 24-hour storm event with an approved and appropriately sized low impact development treatment system prior to discharge from the site
Tier 3 Projects: Projects that create or replace 15,000 square feet or more of impervious surface	Tier 2 Requirements, Plus Prevent offsite discharge from events up to the 95th percentile rainfall event using stormwater control measures
Tier 4 Projects: Projects that create or replace 22,500 square feet or more of impervious surface	Tier 3 Requirements, Plus Control peak flows to not exceed pre-project flows for the 2-year through 10-year events

Source: Resolution No. R3-2013-0032, adopted by Central Coast RWQCB in July 2013

Wastewater treatment in the General Plan and LCP Update planning area is provided by the WWTP, jointly owned and managed by the City of Morro Bay and the Cayucos Sanitary District (CSD). The City has evaluated options for reconstruction and expansion of the wastewater treatment plant for a number of years, and approved a Coastal Development Permit (CDP) for a site on South Bay Boulevard and State Route (SR) 1 which is currently under construction.

OneWater Morro Bay Plan

The City’s OneWater Morro Bay Plan (2018) serves as a foundational document and source of information for Water Supply Assessments (SB 610) and Written Verifications of Water Supply (SB 221). The OneWater Morro Bay Plan ensures the City as a water provider has adequate water supplies available or planned infrastructure improvements to meet future demand in the face of diminishing water resources (Appendix B).

Morro Bay Municipal Code

Chapter 13.12 of the Morro Bay Municipal Code governs the connection, permitting, and design of new sewers as well as quality of sewer and stormwater discharge; grease, oil, and sand interceptors for construction; and both commercial and residential facility operations. It also identifies sewer charges and discharge fees. Chapter 14.48 covers building regulations, including illicit discharge and stormwater management control. It identifies the responsibilities of the discharger, illegal discharges, exceptions, and requirements to eliminate illegal discharges and remediate discharges.

Morro Bay Stormwater Management Plan

The Morro Bay SWMP identifies key BMPs of the NPDES permit (NPDES General Permit Order No. 2003-0005-DWQ). It outlines implementation tasks and additional continuing tasks for the 10 categories as outlined under Municipal Stormwater Permit Program, above.

Morro Bay Stormwater Management Guidance Manual for Low Impact Development and Post-Construction Requirements (and EZ Manual)

The City of Morro Bay is required by the Central Coast RWQCB to implement hydromodification criteria and low impact development (LID). As a site is developed, the site becomes less permeable and therefore less water can infiltrate back into the ground. LID techniques attempt to mimic the natural site hydrology before development in order to protect water quality and control runoff flows in new and significant redevelopment projects. The City participated in a joint effort with other municipalities and agencies on the Central Coast to develop hydromodification criteria for long-term watershed protection. The results of that joint effort included the preparation of the *Stormwater Management Guidance Manual for Low Impact Development & Post-Construction Requirements* (known as the *EZ Manual*). Two versions of the EZ Manual are available. The condensed manual identifies LID practices for individual single-family homes. The main EZ Manual is used for all other projects.

Morro Bay National Estuary Program Comprehensive Conservation and Management Plan

The Comprehensive Conservation and Management Plan (CCMP) defines the priority issues facing the health of the Morro Bay Estuary and Watershed and presents action plans to effectively address those issues. The CCMP is the guiding document for the NEP. The NEP has four watershed goals:

- Water quality protection and enhancement
- Ecosystem restoration and conservation
- Public education, outreach, and stewardship
- Fostering collaboration

These issues were identified through grassroots public participation, scientific study, and more than a decade of conservation and restoration experience. The priority issues include: accelerated sedimentation, bacterial contamination, elevated nutrient levels, and toxic pollutants, scarce freshwater resources, preserving biodiversity, and environmentally balanced uses. The CCMP has a five-year implementation period. The CCMP includes 61 action plans that the NEP and its partners used to address the threats to the estuary. All the action plans have been initiated. Some have been fully completed, and a few were found to be ineffective and have been discontinued. Since the first CCMP in 2001, new issues, notably the effects of climate change, have been incorporated into action plans.

4.8.2. Impact Analysis

a. Methodology

This section describes the potential environmental impacts of implementation of the General Plan and LCP Update associated with hydrology and water quality. The impact analysis is based on an assessment of baseline conditions for the city, including climate, topography, watersheds and

surface waters, groundwater, and floodplains, as described above under Section 4.8.1, *Setting*. This analysis identifies potential impacts based on the predicted interaction between the affected environment and construction, operation, and maintenance activities related to the predicted development that would occur under the General Plan and LCP Update.

b. Significance Thresholds

The following thresholds of significance are based on Appendix G to the *CEQA Guidelines*. For purposes of this EIR, implementation of the General Plan and LCP Update may have a significant adverse impact if it would do any of the following:

1. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality;
2. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;
3. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious pavements, in a manner which would:
 - a. Result in substantial erosion or siltation on- or off-site
 - b. Substantially increase the rate or amount of surface runoff in a manner in which would result in flooding on- or off-site
 - c. 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
 - d. Impede or redirect flows
4. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation; and/or
5. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

c. Project Impacts and Mitigation Measures

Threshold 1: Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?
Threshold 5: Would the project conflict with or obstruct implementation of a water quality control plan?

Impact HWQ-1 DEVELOPMENT FACILITATED BY THE GENERAL PLAN AND LCP UPDATE COULD RESULT IN AN INCREASE IN POLLUTANTS IN STORMWATER AND WASTEWATER, AND ALTER DRAINAGE PATTERNS. COMPLIANCE WITH NPDES PERMIT REQUIREMENTS, MORRO BAY MUNICIPAL CODE REQUIREMENTS, AND GENERAL PLAN AND LCP UPDATE GOALS AND POLICIES WOULD PREVENT SUBSTANTIAL EROSION AND SILTATION, AND DISCHARGES OF POLLUTANTS, INCLUDING POLLUTION ASSOCIATED WITH DRAINAGE, EROSION, AND STORMWATER, AND MINIMIZE ADVERSE EFFECTS ON WATER QUALITY. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Construction

Construction activities facilitated by the General Plan and LCP Update could include road improvements and realignments, installation and realignment of utilities, demolition of existing structures for replacement, new development, and the potential replacement and/or improvement of drainage facilities. Construction activity could result in the alteration of existing drainage patterns and soil erosion due to earth-moving activities such as stockpiling, excavation and trenching for foundations and utilities, dredging, paving, soil compaction and moving, cut and fill activities, and grading. Disturbed soils would be susceptible to erosion from wind and rain, resulting in sediment transport via stormwater runoff from the construction sites. The types of pollutants contained in runoff from construction sites would be typical of urban and suburban areas, and may include sediments and contaminants such as oils, fuels, paints, and solvents. Additionally, other pollutants, such as nutrients, trace metals, and hydrocarbons, can attach to sediment and be transported to downstream drainages and ultimately into collecting waterways, contributing to degradation of water quality.

Potential water quality impacts would be specific to individual construction locations. Local topography, the amount of soil disturbance, the duration that disturbed soil would be exposed, the amount of rainfall and wind that would occur during construction, and the proximity of the nearest water body all affect the potential for water quality degradation during construction.

Individual construction activities that disturb one or more acres would be subject to the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, Order No. 2012-0006-DWQ (Construction General Permit). Permit conditions require development of a stormwater pollution prevention plan (SWPPP), which describes the site, erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of construction sediment and erosion control measures, maintenance responsibilities, and non-storm water management controls. Inspection of construction sites before and after storms is also required to identify storm water discharge from the construction activity and to identify and implement erosion controls, where necessary. Compliance with the Construction General Permit is reinforced through the Morro Bay Municipal Code (Title 14, Chapter 14.48), the City's Stormwater Management Program, and adherence to the Central Coast RWQCB Basin Plan. The water quality objectives of the Basin Plan are incorporated

into individual NPDES permits authorized by the Central Coast RWQCB. Therefore, the project would not conflict with or obstruct implementation of a water quality control plan. Pursuant to the Morro Bay Municipal Code, all persons undertaking construction activities are required to implement appropriate BMPs as measures for post-construction stormwater. Development or redevelopment projects that may require implementation of BMPs are required to submit a maintenance plan or manufacturers maintenance guide for those devices as part of project submittal. Projects that result in the creation, addition, or replacement of two thousand five hundred feet of impervious surface are required to comply with the City's stormwater control section of engineering standards.

In 2014, the City developed a stormwater management guidance document that outlines the procedure for the City's fulfillment of the NPDES Phase II Small MS4 General Permit Order No. 2013-0001-DWQ. As part of the Permit the City is required to incorporate construction site storm water runoff control elements into the Stormwater Management Program. This includes the development and implementation of a construction outreach and education strategy that includes enforceable ordinance requirements for erosion and sediment control, soil stabilization, dewatering, source controls, pollution prevention measures and prohibited discharges.

In addition, the City engineer or designee has the authority to inspect erosion and sediment control measures and facilities associated with projects requiring a City permit. The City engineer or designee is authorized to issue a notice of violation and/or stop work order for violations of the City's grading, erosion control, and stormwater discharge requirements. Likewise, the Central Coast RWQCB or its designee may conduct periodic or routine monitoring of construction BMPs and erosion control measures implemented pursuant to the SWPPP required under the Construction General Permit at project sites.

Compliance with the regulations and policies discussed above would reduce the risk of water degradation within the city from soil erosion and other pollutants related to construction activities. Because violations of water quality standards would be minimized, impacts to water quality from construction activities facilitated by the General Plan and LCP Update would be less than significant.

Operation

Stormwater

Development facilitated by the General Plan and LCP Update would result in long-term alterations to drainage patterns in the planning area, such as changes in ground surface permeability due to new paving, and changes in topography due to grading and excavation. If uncontrolled, operation of future development facilitated by the General Plan and LCP Update could result in the addition of sediment and silt, and contaminants such as oil, grease, metals, and landscaping chemicals (pesticides, herbicides, fertilizers, etc.) into the City's stormwater drainage system, and ultimately untreated discharge into the Pacific Ocean and Morro Bay. Such a discharge could be a potential violation of MS4 General Permit, depending on the pollutant and quantity discharged.

As described in Section 4.8.1(e), *Regulatory Setting*, the City operates its storm drain system under the NPDES General Permit for Storm Water Discharges from small MS4s, Order No. 2013-0001-DWQ (MS4 General Permit). The purpose of this permit is to implement and enforce BMPs to reduce the discharge of pollutants from municipal separate storm sewer systems, such as the City's storm drain system. To ensure compliance with the permit requirements and conditions of the MS4 General Permit, Morro Bay Municipal Code Section 14.48.010 outlines regulations regarding illicit discharge and stormwater management control in the City's building regulations. Morro Bay Municipal Code Section 14.48.080 states that no person shall discharge or cause to be discharged into the storm

drain system any materials that cause or contribute to violation of applicable water quality standards, other than stormwater, to the maximum extent practicable. Morro Bay Municipal Code Sections 14.48.140 and 14.480.150 require BMPs during project construction or as measures for post-construction stormwater control, including maintenance to ensure proper operation. Morro Bay Municipal Code Section 13.12.120 lists prohibited discharges into the public sewer system.

Post-construction requirements for stormwater management were adopted by the Central Coast RWQCB in 2014. These requirements would be applicable to development projects that create 2,500 square feet or more of impervious surface. Post-construction requirements include low impact design measures, treating runoff before discharge from the project site, and prevention of off-site discharge up to the 95th percentile rainfall event, and controlling off-site discharge so that peak flows do not exceed pre-existing flows for the 2-year and 10-year event. The post-construction requirements also require routine maintenance of permanent BMPs intended to protect water quality and prevent discharges of pollutants to the municipal stormwater system. Compliance with these requirements would also minimize erosion and siltation that could adversely affect water quality in the planning area.

Wastewater Discharge

In addition to stormwater runoff, polluted wastewater could be discharged by development facilitated by the General Plan and LCP Update. In general, new development and redevelopment projects would be required to discharge wastewater to existing sanitary sewer systems. The Morro Bay Public Works Department co-operates the City's sewer system and WWTP through a Joint Powers Authority (JPA) with the CSD. Wastewater is conveyed through a main line to the WWTP located on the Atascadero Road in Morro Bay. The CSD currently serves a population of approximately 13,300 people and has an average daily flow of 1.089 million gallons per day (Morro Bay 2018b). The WWTP is outdated and no longer has adequate capacity, which results in primary-treated sewage being discharged into the ocean at an estimated million gallon per day (Appendix B). The City has approved a CDP for the WWTP replacement which is currently under construction. Required compliance with applicable CWA requirements would ensure that wastewater discharged to the sewer system and CSD are properly and effectively treated to meet or exceed discharge requirements of the NPDES permit.

The replacement of the WWTP is part of a larger set of ongoing projects identified in the City's Sewer System Management Plan (SSMP). Additional improvement projects identified in the SSMP include ongoing storm drain improvements and ongoing maintenance and repair of sewer pipelines and lift pumps (Appendix B). Current planning efforts for developing a new WRF to replace the existing WWTP are also discussed under Impact U-2 in Section 4.14, *Utilities*.

Sea Level Rise

As discussed in Section 4.6, *Greenhouse Gas Emissions*, climate change has the potential to induce substantial sea level rise in the coming century. The rising sea level increases the likelihood and risk of flooding. Sea levels are rising faster now than in the previous two millennia, and the rise is expected to accelerate, even with robust GHG emission control measures. In addition to compliance with mandatory CWA requirements (NPDES Construction General Permit and MS4 General Permit), Morro Bay Municipal Code requirements, and the Central Coast RWQCB's post-construction requirements for stormwater management, implementation of the following General Plan and LCP Update goals and policies would minimize erosion and siltation, prevent substantial discharges of contaminated stormwater to the municipal storm drain system or surface waters, reduce the

potential for violations of water quality standards or waste discharge requirements, and minimize potential flooding impacts from sea level rise:

Goal C-7 Morro Bay water is safe, available, and used in an environmentally responsible manner.

Policy C-7.5 New Development and Reuse Projects. Manage new development and reuse projects and existing land uses to mitigate impacts and/or facilitate improvements to the City's water systems.

Policy C-7.13 Drainage Technologies. Require that new development projects employ innovative and efficient drainage technologies that comply with federal and state water quality requirements and reduce runoff and water quality impacts to downstream environments.

Policy C-7.14 Pollutant Runoff. Reduce pollutants in runoff from agriculture and new development by requiring the use of the most effective best management practices currently available. All runoff shall be filtered and treated to remove expected pollutants prior to being directed to infiltration areas and/or stormwater systems. Where runoff cannot be adequately accommodated on-site through on-site systems, any excess runoff shall be conveyed inland in a nonerosive manner. Also encourage green infrastructure on designated "Green Streets" where stormwater and runoff would be managed, captured and cleansed in public rights-of-way. Main Street should be studied for potential as a Green Street.

Policy C-7.15 Water Quality. To reduce the potential for degradation or impairment of water quality, the City shall continue to investigate and implement new measures to reduce potential pollutants in stormwater and irrigation runoff and require the following:

- To the maximum extent feasible, development shall include specific measures to help reduce potential pollutants and water quality impairment, including controlling the disposal of chemicals and hazardous materials, controlling the use of pesticides and herbicides, maintaining existing stormwater capture programs, applying low-impact development designs, and requiring on-site retention and/or reuse of runoff. The City shall utilize ecologically responsible pest control methods and integrated pest management to the extent feasible on public property and encourage this practice on private property.
- Drainage plans and erosion, sediment, and pollution control measures shall be required as conditions of approval of every application for new development that has the potential to impair water quality.
- Construction phase stormwater pollutant controls shall be required for development with the potential for water quality impairment, including erosion controls, sediment traps and filtering of off-site stormwater flows, capture of site-generated pollutant sources, street sweeping of dirt tracked off-site, litter control, post-construction monitoring, and other best management practices. Construction-phase water quality impacts shall be avoided by minimizing the disturbed area, phasing grading activities, implementing soil stabilization and pollution prevention measures, and

preventing unnecessary soil compaction. Development with the potential for water quality impairment shall, at a minimum, be designed to meet National Pollutant Discharge Elimination System stormwater runoff requirements.

- Additionally, development shall be planned, sited, and designed in a manner that maintains or enhances on-site infiltration, reduces runoff, minimizes the transport of pollutants in runoff generated from the development, and recharges groundwater. Development shall ensure that runoff is appropriately collected, filtered, and treated by best management practices (BMPs) to minimize pollutant loading to the maximum degree feasible.

Policy C-7.16 **Developments of Water Quality Concern.** Developments of water quality concern, including gas stations/car washes, industrial development, and others that have a greater potential for adverse impacts to water quality and hydrology due to the extent of impervious surface area, type of land use, wastewater streams, and/or proximity to coastal waters, shall require additional and context-specific best management practices to protect and enhance water quality.

Policy C-7.17 **Impervious Surfaces.** Development shall minimize new impervious surfaces, especially impervious areas directly connected to water and marine resources, and, where feasible, increase the area of pervious surfaces in redevelopment to reduce runoff.

Policy C-7.18 **Wastewater Marine Impacts.** Wastewater disposal systems which minimize or eliminate marine resource pollution, and which provide for reclamation of wastewater for reuse, shall be required. New development, including redeveloped structures, shall connect to the public wastewater treatment system.

Goal PS-3 **Morro Bay is prepared for and responsive to the effects of sea level rise and other coastal hazards in both the short and longer term future.**

Policy PS-3.8: **New Shoreline Protective Devices.** New shoreline protective device development (including replacement, augmentation, addition, and expansion associated with an existing device) shall only be allowed where required to protect existing structures (i.e., structures legally constructed prior to January 1, 1977, that have not been redeveloped since then) and coastal-dependent development in danger from erosion (i.e., when the development would be unsafe to use or occupy within two or three years). Such devices shall only be utilized if no other feasible, less environmentally damaging alternative, including removal or relocation away from such hazards, beach nourishment, nonstructural drainage and native landscape improvements, or other similar nonstructural options can be used to address erosion hazards. Such nonstructural options shall be used and prioritized wherever possible to protect coastal resources, including coastal habitats, public recreational uses, and public access to the coast.

Where such nonstructural options are not feasible in whole or in part, soft structural alternatives (sand bags, vegetation, etc.) shall be used and prioritized

wherever possible before more significant shoreline protective devices are considered. Shoreline protective devices shall not be constructed to protect non-coastal-dependent development, development built on or after January 1, 1977 (including redeveloped structures), or where other measures/alternatives, including relocation, can adequately mitigate erosion hazards. All construction associated with shoreline protective devices and repair or maintenance or augmentation of existing protection devices shall be designed to eliminate or mitigate adverse impacts to coastal resources. The City shall only be involved financially with public shoreline protective devices.

Policy PS-3.10 Shoreline Management Plan. The City shall prepare a Shoreline Management Plan for approval by the Coastal Commission as an amendment to the Local Coastal Program. The plan shall function as a tool to help implement coastal protections, maximize public access, and protect coastal resources along the City's shoreline, including building upon the City's Adaptation Strategy Report. The plan shall be prepared in coordination with relevant local, regional, and/or state agencies for the purpose of protecting coastal resources, as well as ensuring the resilience of coastal public infrastructure. The plan shall conduct the following:

- **Adaptation Triggers.** Refining adaptation triggers for actions to address sea level rise impacts for different areas and assets in Morro Bay, including monitoring beaches for sea level rise impacts such as erosion and changes in beach widths in order to identify trigger points for various adaptation strategies.
- **Site Reuse.** Considering appropriate uses for sites previously occupied by relocated assets, including parks, open space/natural areas, and other predominantly passive land uses.
- **Transfer of Development Rights (TDR).** Considering a TDR program to restrict development in areas that are vulnerable to sea level rise and allow the transfer of development rights to parcels with less vulnerability to hazards.
- **Sea Level Rise Hazard Overlay Zone.** Establishing a Sea Level Rise Hazard Overlay Zone (in the potential sea level rise hazard areas established in Figure PS-8) to address safety from flood and sea level rise related hazards, and recommend remedial actions. Establishing a program to inform owners of real estate in the Sea Level Rise Hazard Overlay Zone about coastal hazards or property vulnerabilities, including information about known current and potential future vulnerabilities to sea level rise, and disclosing permit conditions related to coastal hazards to prospective buyers prior to closing escrow.

The Shoreline Management Plan may be amended every five to ten years, as appropriate, by the City Council, and adopted by the Coastal Commission through the Local Coastal Program amendment process.

For all other areas outside of the Harbor, Marina, area immediately adjacent to the shoreline, and Working Waterfront Area, development shall be sited and designed in a manner consistent with the following policies.

- Policy PS-3.14 Floor Elevations in Flood-Prone Areas.** Require development in flood-prone areas in the city to include finished floor elevations two feet above the 100-year flood elevation.
- Policy PS-3.15 Storm Drain Capacity.** Maintain and increase local storm drain capacity to meet 100-year or greater flood protection requirements to protect residents and businesses from flood risks.
- Policy PS-3.16 Ponding.** Identify and manage areas that experience ponding during heavy rain events to mitigate future impacts of flooding.
- Policy PS-3.17 Resilient Buildings.** Require new and significantly renovated buildings and all public buildings to be designed and constructed to withstand severe storms, flooding, and other impacts that are expected to result from a changing climate.

Compliance with NPDES permits requirements, Morro Bay Municipal Code requirements, and General Plan and LCP Update goals and policies would minimize erosion and siltation, reduce the risk of discharge of pollutants to avoid violations of water quality standards or waste discharge requirements, and minimize potential impacts of sea level rise. Implementation of these General Plan and LCP Update goals and policies would also ensure that the runoff from development envisioned in the General Plan and LCP update would not exceed the capacity of the City's existing and future storm drain system and minimize potential flooding impacts. Therefore, impacts would be less than significant.

Mitigation Measures

No mitigation would be required to address this impact. As individual development projects are proposed, focused, project-level environmental review may be required, which could result in the implementation of project-specific measures.

Threshold 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?
Threshold 5: Would the project conflict with or obstruct implementation of a sustainable groundwater management plan?

Impact HWQ-2 DEVELOPMENT FACILITATED BY THE GENERAL PLAN AND LCP UPDATE WOULD INCREMENTALLY INCREASE THE AMOUNT OF IMPERVIOUS SURFACE IN THE CITY, WHICH COULD REDUCE THE POTENTIAL FOR GROUNDWATER RECHARGE FROM INFILTRATION. COMPLIANCE WITH THE MORRO BAY MUNICIPAL CODE AND THE CENTRAL COAST RWQCB'S POST-CONSTRUCTION REQUIREMENTS FOR STORMWATER MANAGEMENT WOULD ENSURE THAT NEW IMPERVIOUS SURFACES WOULD NOT SUBSTANTIALLY INTERFERE WITH GROUNDWATER RECHARGE. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Development facilitated by the General Plan and LCP Update would incrementally increase the amount of impervious surface within the City of Morro Bay, which could reduce the potential for groundwater recharge from infiltration. Compliance with the Morro Bay Municipal Code, as well as the Central Coast RWQCB post-construction requirements for stormwater management would maximize the on-site infiltration capacity for new development and redevelopment projects. This would reduce the quantity of stormwater runoff that enters the storm drainage system and discharges to the Pacific Ocean and Morro Bay, as opposed to infiltrating through the ground surface. Therefore, the incremental increase of impervious surface would not substantially interfere

with groundwater recharge or redirect runoff such that it results in on- or off-site flooding. This impact would be less than significant.

The City has access to and water rights permits for two local groundwater basins: Morro and Chorro Basins. As discussed in Section 4.14, *Utilities*, the City has pumping rights to 1,723.5 acre-feet per year (AFY) from both basins. For the existing conditions of the City's groundwater supply, and the expected effects of groundwater demand from development facilitated by the General Plan and LCP Update, refer to Section 4.14, *Utilities*. Implementation of the General Plan and LCP Update would increase use of groundwater. However, the City evaluates their water supply in the OneWater Plan, and has determined that there is adequate water supply to serve buildout of the General Plan and LCP Update. Therefore, the project wouldn't decrease groundwater supply significantly, and would not conflict with a sustainable groundwater management plan.

Mitigation Measures

No mitigation measures are required.

<p>Threshold 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 pavements, in a manner which would:</p> <ul style="list-style-type: none">a. Result in substantial erosion or siltation on- or off-site;b. Substantially increase the rate or amount of surface runoff in a manner in which would result in flooding on- or off-site;c. 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; ord. Impede or redirect flows. <p>Threshold 4: Would the project risk release of pollutants due to project inundation in a flood hazard zone?</p>

Impact HWQ-3 DEVELOPMENT FACILITATED BY THE GENERAL PLAN AND LCP UPDATE COULD BE SUBJECT TO FLOOD HAZARDS AND COULD IMPEDE OR REDIRECT FLOOD FLOWS TO ADJACENT AREAS. COMPLIANCE WITH APPLICABLE PROVISIONS OF THE MORRO BAY MUNICIPAL CODE WOULD REQUIRE NEW DEVELOPMENT TO BE DESIGNED AND CONSTRUCTED SUCH THAT THE RISK AND DAMAGE OF FLOODING IS NOT EXACERBATED BY IMPLEMENTATION OF THE GENERAL PLAN AND LCP UPDATE. IMPACTS RELATED TO FLOODING AND FLOOD HAZARDS WOULD BE LESS THAN SIGNIFICANT.

As shown in Figure 4.8-2, portions of the planning area would be subject to a 100-year flood zone, including areas west of SR 1 and south of SR 41, and the southern portion of the planning area. Development in these areas could be subject to flood hazards and/or could impede or redirect flood flows to adjacent areas.

Compliance with applicable provisions of the Morro Bay Municipal Code would minimize the risk and exposure to flood hazards. Morro Bay Municipal Code Section 14.72.050 includes requirements and provisions for reducing losses from flooding, including construction standards to minimize flood risks associated with new development. Specific requirements and provisions for construction in flood-prone areas include:

- Restrict or prohibit uses which are dangerous to health, safety, and property due to water and erosion hazards, or which result in damaging increases in erosion or flood heights or velocities;
- Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- Control the alteration of natural floodplains, stream channels and natural protective barriers which help accommodate or channel floodwaters;
- 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 floodwaters or which may increase flood hazards in other areas.

Morro Bay Municipal Code Section 14.72.040 requires that a development permit be obtained before construction or development begins in a Flood Hazard Area as designated by the City. The development permit must show plans that outline the flood characteristics and flood hazard reduction on the site, including elevation of the area in question, existing structures on site, utilities, grading, proposed fill, and location of the regulatory information. The application for a development permit is reviewed by the designated Floodplain Administrator, who determines whether the “site is reasonably safe from flooding” and whether development would adversely affect the carrying capacity of areas where base flood elevations have been determined.

Required compliance with applicable sections of the Morro Bay Municipal Code would ensure new structures would not impede or redirect flood flows within a 100-year flood hazard area, such that a flood hazard would be increased elsewhere. In addition, the following goals and policies in the Public Safety Element of the General Plan and LCP Update would minimize flood risk:

Goal PS-2 Development is protected from natural disasters and hazards to the greatest extent possible.

Policy PS-2.2 New Development in High-Risk Areas. Require new development to be located outside of areas subject to natural hazards from tsunami, geologic, flood, and wildfire conditions to the maximum feasible extent. If development must occur in such high-risk areas, including if development cannot be feasibly sited in a manner that avoids such areas entirely, ensure such development is sited, designed, and conditioned to minimize risks to life and property while mitigating the development’s impacts to coastal resources, particularly to public recreational beach access. Development shall also ensure stability and structural integrity; shall not create nor contribute significantly to erosion, geologic instability, or destruction of the site; shall not substantially alter natural landforms; and shall not include shoreline protective devices.

Goal PS-3 Morro Bay is prepared for and responsive to the effects of sea level rise and other coastal hazards in both the short and longer term future.

Policy PS-3.15 Storm Drain Capacity. Maintain and increase local storm drain capacity to meet 100-year or greater flood protection requirements to protect residents and businesses from flood risks.

Implementation of these goals and policies and compliance with applicable laws and regulations, including flood hazard mitigation construction guidelines outlined in the Morro Bay Municipal Code, such that risk of loss, injury or death involving flooding in the planning area is not exacerbated by the General Plan and LCP Update. Therefore, impacts related to flooding and flood hazards would be less than significant.

Mitigation Measures

No mitigation measures are required.

Threshold 4: Would the project risk release of pollutants due to project inundation in a tsunami or seiche zone?

Impact HWQ-4 DEVELOPMENT FACILITATED BY THE GENERAL PLAN AND LCP UPDATE MAY OCCUR IN AREAS EXPOSED WITH POTENTIAL FOR INUNDATION BY SEICHE, TSUNAMI, AND/OR MUDFLOW. COMPLIANCE WITH APPLICABLE MUNICIPAL CODE REQUIREMENTS WOULD ENSURE DEVELOPMENT WITHIN AREAS SUBJECT TO TSUNAMI, SEICHE, AND MUDFLOW WOULD BE SITED, DESIGNED AND CONSTRUCTED SO AS TO NOT EXACERBATE RISKS TO LIFE AND PROPERTY. THE GENERAL PLAN AND LCP UPDATE WOULD NOT INCREASE EXPOSURE OF PEOPLE OR STRUCTURES TO SIGNIFICANT RISK OR LOSS, INJURY, OR DEATH INVOLVING INUNDATION BY SEICHE, TSUNAMI, OR MUDFLOW. THESE IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The majority of the City of Morro Bay is located within the coastal zone and adjacent to the Pacific Ocean. As shown in Figure 4.8-3, the western and southern portions of the planning area are subject to inundation by tsunami. Land uses in the tsunami inundation zone include coastal residential, public facilities, and mixed use areas along the Embarcadero. Tsunamis create a risk of coastal flooding, which is included on FEMA flood plain maps. Tsunamis are expected to continue to occur, although the risk of a serious tsunami remains low (Appendix B). As many of the areas outlined in the General Plan and LCP Update for future land use changes already have existing land uses that are susceptible to tsunami inundation, implementation of the General Plan and LCP Update would not substantially increase the number of people or structures exposed to significant risk or loss, injury or death involving inundation by tsunami.

According to the San Luis Obispo County Local Hazard Mitigation Plan, seiches may occur in any reservoir located in the County, and in Morro and San Luis Bays. However, these water-bodies are not large enough to generate seiches large enough to result in substantial damage or significant risk or loss, injury, or death (San Luis Obispo County 2014). Therefore, potential impacts associated with tsunamis and seiches in Morro Bay would be less than significant.

Development under the General Plan and LCP Update would result in additional residential and non-residential development in the city. Additional residents and employees could be potentially exposed to the effects of mudflow as a result of heavy rainfall. Structures built on steep slopes could be exposed to risk of mudflow. Morro Bay Municipal Code Section 14.720.010 would require proposed grading, excavation, new construction and substantial improvements associated with these developments to be adequately designed and protected against mudslide and flood damage. Compliance with applicable Morro Bay Municipal Code requirements, as well existing laws and regulations including the California Building Code would reduce the potential for loss, injury, or death from mudflow by requiring that foundations and structures are built to withstand geotechnical hazards such as landslide and mudflow.

In addition to compliance with mandatory California Building Code requirements, implementation of the following General Plan and LCP Update goal and associated policies would help to ensure proper

siting and construction of new development in areas subject to seiche, tsunami, or mudflow, and would minimize the risk of loss, injury, or death from such hazards:

Goal PS-2 Development is protected from natural disasters and hazards to the greatest extent possible.

- Policy PS-2.2 New Development in High-Risk Areas.** Require new development to be located outside of areas subject to natural hazards from tsunami, geologic, flood, and wildfire conditions to the maximum feasible extent. If development must occur in such high-risk areas, including if development cannot be feasibly sited in a manner that avoids such areas entirely, ensure that such development is sited, designed, and conditioned to minimize risks to life and property while mitigating the development's impacts to coastal resources, particularly to public recreational beach access. Development shall also ensure stability and structural integrity; shall not create nor contribute significantly to erosion, geologic instability, or destruction of the site; shall not substantially alter natural landforms; and shall not include shoreline protective devices.
- Policy PS-2.8 Structural Stability.** Require new development to ensure structural stability while not creating or contributing to erosion or geologic instability or destruction of the site or surrounding area.
- Policy PS-2.9 New Development in High-Risk Areas.** Require that new development in areas subject to liquefaction and/or landslide hazards is located in a manner that will minimize risks to life and property.
- Policy PS-2.10 Building Retrofits.** Encourage building retrofits that improve resiliency to geologic and seismic hazards.
- Policy PS-2.11 New Development Proposals.** Require new development proposals in seismic hazard areas to consider risks caused by seismic activity and to include project features that minimize these risks.
- Policy PS-2.12 Grading and Cut-and-Fill Operations.** Require new development to minimize grading and cut-and-fill operations.
- Policy PS-2.13 Additional Standards for Development Subject to Geologic and Seismic Hazards.** In addition to other hazard requirements that may apply, development in areas that are potentially subject to geologic hazards, (including Alquist-Priolo earthquake hazard zones and areas subject to landslides, liquefaction, steep slopes averaging greater than 30 percent, and unstable slopes regardless of steepness) shall comply with the seismic safety standards of the Alquist-Priolo Act (California Public Resources Code Sections 2621. et seq.) and all applicable seismic provisions and criteria in the most recent version of State and County codes; shall incorporate siting and design techniques to mitigate any such geologic hazards; and shall not create a hazard or diminish the stability of the area.

Implementation of these goals and policies would ensure that new development is properly designed in accordance with California Building Code requirements and is constructed such that exposure to loss, injury, or death from seiche, tsunami, or mudflow is not exacerbated as a result of the General Plan and LCP Update. Implementation of these goals and policies, in addition to

compliance with applicable laws and regulations, would ensure that impacts associated with seiches, tsunamis, or mudflows would remain less than significant.

Mitigation Measures

No mitigation measures are required.

d. Cumulative Impacts

The analysis in this section examines impacts of the General Plan and LCP Update on hydrology and water quality throughout the cumulative impact analysis area and is cumulative in nature. Some types of hydrologic impacts are localized and not cumulative in nature. For example, affects to flood zones and exposure of people to a significant risk of loss, injury, or death involving flooding (including flooding as a result of the failure of a levee or dam), seiche, tsunami, or mudflow are typically independent and the determination as to whether they are adverse is specific to the project and location where they are created.

Some types of impacts to hydrology and water quality that may be additive in nature, and thus cumulative, include violation of water quality standards, interference with groundwater recharge, increased erosion, increased non-point source pollution, and increased runoff. Cumulative development would increase erosion and sedimentation resulting from grading and construction, as well as changes in drainage patterns which could degrade surface and ground water quality. Cumulative development would also increase the amount of impervious surfaces, potentially reducing groundwater recharge. In addition, new development would increase the generation of urban pollutants that may adversely affect water quality in the long term.

Development of individual projects in the Morro Bay Watershed (the cumulative impact area) would be required to comply with applicable water quality regulations, as discussed in Section 4.8.1(e), *Regulatory Setting*, and Impact HWQ-1 above. Compliance with these existing requirements would reduce impacts associated with pollutants discharged during construction and operation of project and adverse changes to water quality throughout the cumulative impact area. Therefore, cumulative impacts related to water quality would be less than significant.

As discussed in Impact HWQ-2, development of individual projects throughout the cumulative impact area would increase impervious surfaces and reduce groundwater recharge in the planning area, but compliance with applicable policies related to impervious surfaces would reduce impacts throughout the cumulative impact area. Similarly, as discussed in Impact HWQ-3 and Impact HWQ-4, compliance with applicable laws and regulations would minimize the potential for flooding from alteration to the drainage patterns, flood hazards, tsunamis, seiches, and mudflows. Therefore, cumulative impacts related to groundwater recharge, changing drainage patterns, and flooding would be less than significant.

4.9 Land Use and Planning

This section summarizes Morro Bay's land use characteristics, including the overall land use pattern as well as a more detailed analysis by major land use type, and analyzes existing plans and focus areas with development potential in order to determine the potential environmental effects of the proposed General Plan and LCP Update related to Land Use and Planning. This section also analyzes the General Plan and LCP Update's consistency with applicable local, regional, and State land use policies. Consistency with the San Luis Obispo County Air Pollution Control District (SLOAPCD) 2001 Clean Air Plan (CAP) for the San Luis Obispo County region is discussed in Section 4.2, *Air Quality*. Land use compatibility conflicts associated with growth facilitated by the General Plan and LCP Update are discussed in other sections of this EIR, including Sections 4.1, *Aesthetics*, 4.2, *Air Quality*, 4.7, *Hazards and Hazardous Materials*, and 4.10, *Noise*.

4.9.1. Setting

a. Existing Land Use Patterns

Various buildings and land uses in the General Plan and LCP Update planning area existed before the adoption of the current General Plan Land Use Element. Therefore, some existing "on-the-ground" land uses do not match the uses identified in the existing General Plan. Existing on-the-ground land use data in the planning area is maintained by the San Luis Obispo Council of Governments (SLOCOG). SLOCOG land use data is collected and analyzed based on the designations in the San Luis Obispo County General Plan, which are categorized differently, but in a similar manner, to the existing Morro Bay General Plan land use designations. Existing on-the-ground land uses in the city limits using the SLOCOG designations are provided in Table 4.9-1.

Table 4.9-1 Morro Bay Existing On-The-Ground Land Use Distribution

Land Use Designation	Sum of Acres	Percent of Area
Single-Family Residential	605.5	14.0
Multiple-Family Residential	39.5	0.9
Downtown	31.3	0.7
Commercial Retail/Office	63.3	1.5
Commercial Service/Industrial	74.6	1.7
School	75.9	1.8
Major Public Facility	100.0	2.3
Public Facility/Public Land	26.5	0.6
Cultural Facility/Religious Facility/Event Center	19.4	0.5
Visitor-Serving	19.8	0.5
Community Park/Regional Park/Golf Course/Other Reception	388.1	9.0
Open Space Area/Conservation Area/Riparian Area	397.6	9.2
State Park/Beach	2,139.1	49.6
Undeveloped	54.0	1.3
Agriculture (Other)	216.8	5.0
Agriculture (Grazing/Ranchland)	54.1	1.3
Road/Other	11.1	0.3
Total	4,316.7	100.0

Source: Community Baseline Assessment for the General Plan and LCP Update (Appendix B)

As shown in Table 4.9-1, approximately half of the land in the city limits is either a part of Morro Bay State Park or the beach, including Morro Rock Beach, the sandspit, Coleman Park Beach, Morro Strand State Beach, and an unnamed beach area, with additional parks and open space comprising another 18 percent of the city. Single-family and multifamily homes make up another 14 percent and less than one percent of the city, respectively. Combined agricultural uses represent approximately six percent of the land area in the city. Just over one percent of the land in the city is currently undeveloped and does not fall within any of the existing on-the-ground land use designations provided in Table 4.9-1. Figure 2-3 in Section 2, *Project Description*, shows the existing on-the-ground land uses in Morro Bay.

The General Plan and LCP Update planning area includes approximately 100 acres outside of the city limits but within Morro Bay’s Sphere of Influence (SOI), consisting of part of the estuary and a small area on the northern beachfront. The City’s SOI encompasses the city and the area outside of the city under County jurisdiction but indicates the city’s probable future boundary and service area. Most of Morro Bay’s SOI is part of the Morro Bay Estuary located just outside of the marina, which allows the City to more effectively permit dredging and other Estuary maintenance activities. The SOI also includes a small amount of land at the beachfront at the northern end of the city, west of State Route (SR) 1.

b. Existing Plans and Studies

Local

Local Coastal Program

In accordance with the California Coastal Act of 1976 (CCA), Morro Bay adopted its existing local coastal program (LCP) in 1984. As shown on Figure 2-3 in Section 2, *Project Description*, the majority of the city is located in the coastal zone, which defines and prioritizes coastal-dependent uses.

1988 City of Morro Bay General Plan

The Morro Bay General Plan was adopted by the City Council in 1988. The City is currently preparing an update to the General Plan, and this EIR is intended to review the comprehensive update of the City's General Plan and LCP, *Plan Morro Bay*. As such, the EIR identifies revised and refined goals, policies, and implementation programs as appropriate, which are designed to avoid or mitigate environmental impacts of the General Plan and LCP Update.

Proposed General Plan and LCP Update

The proposed General Plan and LCP Update would update and supersede the 1988 General Plan. It contains a description of 19 different land use designations proposed for the City of Morro Bay. The description of each land use designation includes allowed maximum density or intensity of development; and specific guidance on the intended physical character of future development, including building placement on a lot, lot coverage, building frontage, streetscape character, and parking location and access. Table 2-3 in Section 2, *Project Description*, describes the 19 proposed land use designations.

A principal intention of the General Plan and LCP Update is to guide land use decisions within the planning area through the year 2040 while helping the community enhance and maintain its identity as a seaside community that values its charming, artistic town character, working waterfront, and healthy environment and lifestyle. The General Plan and LCP Update contains the following goals related to land use planning:

PROPOSED GENERAL PLAN AND LCP UPDATE LAND USE ELEMENT GOALS

- Goal LU-1** The community form of Morro Bay reflects its vision and values, promoting a strong economy and high quality of life.
- Goal LU-2** Land use patterns improve community health and resiliency.
- Goal LU-3** Morro Bay grows in a manner that maintains community identity and well-being.
- Goal LU-4** Coastal-dependent uses are prioritized within appropriate locations in the coastal zone.
- Goal LU-5** Coastal priority uses are viable, protected, and contribute to the economy and character of Morro Bay.
- Goal LU-6** Visitors to Morro Bay have access to a variety of lower-cost lodging options to meet their needs.
- Goal LU-7** All residents and visitors have unimpeded and convenient access to the coast.
- Goal LU-8** Morro Bay's downtown and waterfront areas are active and welcoming locations for shopping, recreation, and coastal services.

c. Regulatory Setting

State

General Plan Law (California Government Code Section 65300)

California Government Code Section 65300 regulates the substantive and topical requirements of general plans. State law requires each city and county to adopt a general plan “for the physical development of the county or city, and any land outside its boundaries which bears relation to its planning.” The California Supreme Court has called the general plan the “constitution for future development.” The general plan expresses the community’s development goals and embodies public policy relative to the distribution of future land uses, both public and private.

California Government Code Section 65301

Section 65301 of the California Government Code requires a general plan to address the geographic territory of the local jurisdiction and any other territory outside its boundaries that bears relation to the planning of the jurisdiction. The jurisdiction may exercise their own judgment in determining what areas outside of its boundaries to include in the planning area. The State of California General Plan Guidelines denotes that the planning area for a city should include (at minimum) all land within the city limits and all land within the city’s SOI.

California Government Code Section 65860

In charter cities with a population of more than two million, counties, and general law cities, zoning provisions must be consistent with the general plan. Charter cities with a population of under two million are exempt from the zoning consistency requirement unless their charters provide otherwise. The City of Morro Bay is a general law city and is, therefore, required to have zoning consistency with its general plan.

California Coastal Act

The California Coastal Commission currently regulates coastal development in the State. Local municipalities such as the City of Morro Bay may elect to prepare their own LCPs and, once the LCP is certified, development control reverts to the local government. The California Coastal Commission also has the authority to approve the LCP and has the right to appeal development projects within the Coastal Zone Appeals Jurisdiction. Amendments to the City’s land use plan (LUP) must also be approved by the California Coastal Commission.

A LCP consists of City land use plans and land use controls that implement the provisions of the CCA. The CCA (Public Resources Code Section 30000 et seq.) is intended to “protect, maintain, and where feasible, enhance and restore the overall quality of the coastal zone environment and its natural and artificial resources.” All development in the coastal zone requires approval of a coastal development permit, which are issued by the California Coastal Commission, in compliance with the LCP.

The City of Morro Bay adopted its LCP in 1984. The LCP consists of the City’s LUP, local implementation plan (LIP), Zoning Code, land use and zoning maps, and implementing actions. As a package, these documents implement the CCA at the local level in Morro Bay. The adopted and certified LCP forms the legal standard of review for issuance of Coastal Development Permits (CDP) within the city’s coastal zone and is legally binding on the City. The LCP may be amended to stay up to date with state laws and to continue to reflect the vision of the community. The LUP applies to all

areas of the city in the coastal zone. Any future development resulting from the General Plan and LCP Update would be subject to the requirements of the CCA, Morro Bay LCP, and the Zoning Code.

Cortese Knox Hertzberg Local Government Reorganization Act of 2000

The Cortese Knox Hertzberg Local Government Reorganization Act (CKH Act) established procedures for local agency changes of organization, including city incorporation, annexation to a city or special district, and consolidation of cities or special districts (Section 56000, et seq.). Local Agency Formation Commissions (LAFCo) have numerous powers under the CKH Act, but the most important are the power to act on local agency boundary changes and to adopt SOIs for local agencies. The law also states that in order to update a SOI, LAFCos are required to first conduct a review of the municipal services provided by the local agency. The CKH Act also requires LAFCos to update SOIs for every city and special district every five years. The original deadline was January 2006, five years following the CKH Act becoming State law. That deadline was extended two years to January 2008. Every SOI update must be accompanied by an update of the municipal services review (MSR). San Luis Obispo LAFCo completed a MSR for Morro Bay in August 2017. San Luis Obispo LAFCo has a goal to update SOIs every five years or as necessary. The next MSR for Morro Bay will occur whenever an amendment is considered.

Regional

San Luis Obispo Council of Governments 2014 Regional Transportation Plan/ Sustainable Communities Strategy

The San Luis Obispo Council of Governments (SLOCOG) is required by State and federal law to prepare, update, and adopt a Regional Transportation Plan (RTP) every four years. Senate Bill (SB) 375, California's Sustainable Communities and Climate Protection Act, was enacted in 2008, requiring all RTPs to include a Sustainable Communities Strategy (SCS) that reduces greenhouse gas emissions from passenger vehicles and light-duty trucks. The most recent update to the RTP was adopted by SLOCOG in 2019. The 2019 RTP serves as the blueprint for the region's transportation system over the next 25 years. The 2019 RTP identifies active transportation projects, non-highway system projects, highway system projects, and a park and ride project in Morro Bay.

The 2019 RTP includes the following goals:

- Preserve the transportation system.
- Improve intermodal mobility and accessibility for all people.
- Support a vibrant economy.
- Improve public safety and security.
- Foster livable, healthy communities and promote social equity.
- Practice environmental stewardship.
- Practice financial stewardship.

Local

Zoning Code

The City of Morro Bay Zoning Code (Title 17 of the Morro Bay Municipal Code) is the primary tool used by the City to carry out the goals, objectives, and policies of the Morro Bay General Plan by classifying and regulating the uses of land and structures within the city, consistent with the General

Plan. Zoning is the instrument that implements the land use designations of a general plan. In addition to establishing permitted uses, zoning may also establish development standards relating to issues such as intensity, setbacks, height, and parking. Projects submitted to the City for review and approval are generally evaluated for consistency with the zoning districts.

The City's Subdivision Ordinance, Title 16 of the Morro Bay Municipal Code, provides standards for the processing of subdivision requests, including new tract maps, parcel maps, and lot line adjustments. The Zoning Code describes various types of zoning districts and land use classifications, land use regulations, development standards, and environmental performance standards. The Zoning Code applies to all land uses and development within the City of Morro Bay. The purpose of the Zoning Code is "to implement the general plan and local coastal plan and to promote the growth of the city in an orderly manner; and to promote the public health, safety, peace, comfort and general welfare of the city by establishing regulations pertaining to uses of land and uses, location, height, bulk, size and types of buildings and open spaces around buildings in certain districts; providing for the administration and enforcement of such regulations and prescribing penalties for violations thereof" (Section 17.04.020).

As shown in Table 4.9-2, the city is divided into 21 primary zoning districts, with several special treatment overlays, combining districts, and specific plans, which implement the Morro Bay General Plan. Existing on-the-ground land uses in the city are shown in Table 4.9-1.

Table 4.9-2 Zoning Districts that Apply to Property within the City of Morro Bay

District Abbreviation	Name of District
Primary Districts	
AG	Agriculture
R-A	Suburban Residential
R-1	Single-family Residential
R-2	Duplex Residential
R-3	Multiple-family Residential
R-4	Multifamily Residential-hotel-professional
CRR	Coastal Resource Residential
C-1	Central Business
C-2	General Commercial
MCR	Mixed Commercial/residential
C-VS	Visitor-serving Commercial
G-O	General Office
M-1	Light Industrial
M-2	Coastal-dependent Industrial
OA	Open Area
WF	Waterfront
CF	Commercial/recreational Fishing
H	Harbor and Navigable Ways
MMR	Mariculture and Marine Research
SCH	School
GC	Golf Course
Special Treatment Overlay, Combining Districts, and Specific Plans	
PD	Planned Development Overlay
ESH	Environmental Sensitive Habitat Overlay
S	Special Treatment Overlay
	Combining Mixed Use Overlay
I	Interim Use Overlay
SP-BS	Beach Street Area Specific Plan
SP-NM	North Main Street Specific Plan

Note: For a graphic depiction, refer to City of Morro Bay Zoning Map: <https://www.morrobay.ca.us/DocumentCenter/View/996/Zoning-Map>

Source: Title 17 of the Morro Bay Municipal Code, City of Morro Bay

4.9.2. Impact Analysis

a. Methodology and Significance Thresholds

The analysis in this section focuses on the compatibility of land uses identified in the proposed General Plan and LCP Update with existing and planned land uses in the planning area, as well as consistency with any applicable land use plans, policies, or regulations. The following thresholds of significance are based on Appendix G of the *CEQA Guidelines*. For purposes of this EIR, implementation of the proposed General Plan and LCP Update may have a significant adverse impact if it would do any of the following:

1. Physically divide an established community; and/or
2. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

b. Project Impacts and Mitigation Measures

Threshold 1: Would the project physically divide an established community?

Impact LUP-1 IMPLEMENTATION OF THE PROPOSED GENERAL PLAN AND LCP UPDATE WOULD PROVIDE FOR ORDERLY DEVELOPMENT IN MORRO BAY AND WOULD NOT PHYSICALLY DIVIDE AN ESTABLISHED COMMUNITY. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Based on the buildout capacity of the planning area under the General Plan and LCP Update, an estimated 1,348 new residents, 881 new dwelling units, and approximately 8.3 million square feet of non-residential development could be added to Morro Bay. The overall residential growth is roughly equivalent to an annual growth rate of 0.6 percent through the year 2040.

Approximately one percent of the land in Morro Bay is currently physically undeveloped and is designated as Undeveloped. As a result, new growth will likely involve increased development density in developed areas, redevelopment of existing developed parcels, or annexation of new land into the city. Specifically, the General Plan and LCP Update calls for redevelopment of the former Morro Bay Power Plant and existing wastewater treatment plant properties in the North Embarcadero area and identifies downtown Morro Bay and the North Morro Bay neighborhood as prime areas for intensifying infill development and redevelopment. The projected growth and redevelopment of these areas would not physically divide the City of Morro Bay.

The Community Vision section of the General Plan and LCP Update establishes a Vision and Values statement for the city to provide a comprehensive vision for Morro Bay in the future and identify the community's key priorities. The community values include a Mobility and Access Value, which supports the Community Vision for safe and accessible streets, trails, and multimodal transportation options that conveniently connect people and places throughout town and to surrounding destinations. The General Plan and LCP Update Land Use Element includes the following goals and policies that would facilitate connectivity throughout the city and to the coast:

Goal LU-1 The community form of Morro Bay reflects its vision and values, promoting a strong economy and high quality of life.

Policy LU-1.1 Land Use Pattern. Maintain the current pattern of Morro Bay's land use to preserve the distinct character areas and community form, while enhancing and transforming areas with the greatest potential for change to improve economic

activity and align them with the community vision. (See Figure LU-4 Land Use Map.) New development shall be located within, contiguous with, or in close proximity to existing developed areas with adequate public services and where it will not have significant effects, either individually or cumulatively, on coastal resources.

Policy LU-1.3 Access to Daily Needs. Create sustainable development patterns characterized by mixed uses, walkable neighborhoods, and multimodal connections that allow residents to meet their daily needs for food, goods and services, employment, and other resources.

Policy LU-1.5 Senior Living. Encourage the development of housing designed for universal access and senior housing that is accessible to public transit, health and community facilities, and services.

Goal LU-2 Land use patterns improve community health and resiliency.

Policy LU-2.3 Social Resiliency. Maintain and create new urban public spaces that promote pedestrian activity and social engagement through building design, public art, landscaping elements, and amenities.

Goal LU-3 Morro Bay grows in a manner that maintains community identity and well-being.

Policy LU-3.1 Growth Limits. Continue to limit the amount of development, including future population growth accommodated by *Plan Morro Bay*, to a level supported by adequate and long-term sustainable available land, water supply, and other infrastructure and service capacity.

Policy LU-3.6: Infill Development. Promote infill development on vacant or underutilized properties in the city as the preferred strategy for most new development in Morro Bay.

Policy LU-3.7: Limited Outward Expansion. Allow for some limited outward expansion beyond the city's existing limits to achieve large-scale conservation of parcels and a small amount of rural-scale residential use and visitor-serving amenities to serve conservation lands. Standards applied to the future sphere of influence (SOI) area include keeping development off of ridgelines and preserve views of the city's backdrop of undeveloped open land. (See also Policies C-9.1 through C-9.5 and Implementation Actions C-30 and C-31.)

Goal LU-4 Coastal-dependent uses are prioritized within appropriate locations in the coastal zone.

Policy LU-4.1 Waterfront Uses. Maintain and encourage the development of visitor-serving and coastal-dependent land uses along the waterfront, and give such uses priority over other types of development that are either not dependent on a waterfront location or related to public use and enjoyment of the coast.

Goal LU-5 Coastal priority uses are viable, protected, and contribute to the economy and character of Morro Bay.

Policy LU-5.1 Use Conflicts. Reduce potential conflicts between commercial fishing and coastal recreational uses.

Goal LU-7 All residents and visitors have unimpeded and convenient public access to and along the coast.

Policy LU-7.1 Lateral Access. All existing publicly used lateral accessways and areas shall be protected, preserved, and enhanced to the maximum possible extent, and new lateral accessways/areas shall be encouraged and provided, where appropriate. All lateral connections along the coast, with particular emphasis on the Embarcadero, shall be required to be improved and enhanced. All such connections shall be universally accessible. For new development (defined by the Coastal Act) adjacent to the bayfront or ocean, open and unobstructed public access shall be provided from the nearest public roadway to the shoreline and along the coast as required herein.

- a. Easements. For new developments on properties adjacent to the mean high-tide line, easements or offers of dedication for open and unobstructed public accessways along the shoreline between the mean high-tide line and the first line of vegetation shall be required, except as provided herein.
- b. Lateral Public Access. Open and unobstructed lateral public access along the waterfront revetment (or shoreline, pursuant to subsection (a.) of this section if no revetment exists) shall be provided in all new development or additions on properties adjacent to the bayfront consistent with the provisions herein, and with public safety needs and the need to protect public rights, rights of private property held by leaseholders, and natural resource areas from overuse. Provision for continuous lateral access, pursuant to this section, along the bayfront portion of a parcel shall be required for any development or improvement which results in:
 - c. Change in use. A change in land use designation, a change in intensity of use, or a change of use.
 - d. Additional floor area or improvements. An increase of 10 percent or more of internal floor area of an existing structure or an additional improvement of 10 percent or less where an improvement to the structure has previously been undertaken.
 - e. Increase in height. Any increase in height by more than 10 percent of an existing structure.
 - f. Significant nonattached structures. Any significant nonattached structure such as garages, fences, shoreline protective works, or docks.
 - g. Lateral access along the waterfront revetment may be achieved in the following manner:
 - i. Walkways. In the form of open or enclosed unobstructed walkways, a minimum of 10 feet wide across the bayward side of the proposed development.
 - ii. Decking and/or boardwalks. Open and unobstructed exterior decking and/or boardwalks extending bayward a minimum of 12 feet (minimum of 10 feet of walkway).
 - iii. Breezeways and/or walkways. Designated open and unobstructed breezeways and/or walkways within the structure, provided such breezeways are located as close as possible to the bay and designed to

provide the most direct, convenient connection between adjacent existing or potential lateral accessways. Exterior access is preferred over interior access.

- iv. Connection to adjacent properties shall be planned for and implemented on a system wide basis.
- h. Exceptions. The lateral access requirements specified above may be waived in the following situations:
 - i. When the applicant can demonstrate, based on an engineering analysis, that all or a portion of such access is physically infeasible and there are no design alternatives capable of overcoming topographical or site constraints that jeopardize public safety and fragile coastal resources.
 - ii. If continuous lateral access across the bayward portion of the parcel is found infeasible due to topographical or site constraints as defined in subsection (d)(i) of this section, the contribution of an in-lieu fee, equivalent to the cost of construction of an accessway along the bayward edge of the structure proposed, shall be paid to the City. Fees shall be used to coordinate the bayfront lateral and vertical access program, and shall be used to link lateral access where feasible and to improve vertical access provisions.
 - iii. For coastal-dependent development where provisions of continuous lateral access would conflict with the day-to-day operations of the use, such lateral access may be temporarily restricted during that activity. No permanent barriers—i.e. fences, gates or barricades—shall be allowed. Areas may be restricted with moveable chains and signage for no more than 30 minutes prior to that activity and 30 minutes after that activity.
 - iv. Reduction in building square footage shall not be a consideration.
 - v. Removal or modification of existing structure shall not be considered as a basis for feasibility.
- i. Prescriptive Rights. Development shall not interfere with the public's right of access to the sea where required through use or legislative authorization. Such access shall be protected through permit conditions or permitted development including easements, dedications, or continued accessway maintenance by a private or public association. Existing identified trails or other access points shall not be required to remain open, provided that they are consolidated or relocated to allow public access on the same site and provide the same or comparable access benefits as existed before closure and meet all other applicable access requirements as provided in this section.
- j. Public Use and Posting.
 - i. Public Accessways. All public accessways shall be properly signed and conform to Coastal Conservancy/Coastal Commission access standards and guidelines.
 - ii. Dedicated Accessways. Dedicated accessways shall not be required to be opened to public use until a public agency or private association

approved by the City Council agrees to accept responsibility for maintenance and liability of the accessway.

Policy LU-7.2: Lateral Access Requirements. Lateral public access along the waterfront revetment shall be provided in all new developments and rehabilitation or addition projects, consistent with public safety needs and the need to protect public rights, rights of private property held by leaseholders, and natural resource areas from overuse.

Policy LU-7.3: Unobstructed Lateral Access. Furniture, windscreens, gates, fences, or other items shall not be placed in the area of pedestrian flow of a lateral accessway. Existing items of this sort shall be removed during future lease renewals or applications for improvements.

Policy LU-7.4: Vertical Access. Preserve and enhance coastal vertical access points in Morro Bay. The following are requirements at vertical access points:

- a. **Minimum Links.** Where feasible, a minimum of one every 300 feet and/or every street stub shall link the vertical accessways with lateral access provisions along the bayward sides of structures.
- b. **Parking.** Parking shall be provided in conjunction with new or improved vertical accessways whenever feasible and consistent with the site constraints to ensure use of the accessway. The number of parking spaces shall be determined by the director, who shall consider the carrying capacity of the public recreation area to which access is provided, environmental constraints, and safety considerations. These requirements apply to areas of the city outside of the Embarcadero.
- c. The vertical access requirements specified above may be waived in the following situations:
 - i. The provision of new accessways are inconsistent with public safety, military security needs, or the protection of fragile resources.
 - ii. Adequate access exists nearby.
 - iii. Agriculture would be adversely affected. Improve lateral connections along the coast, with particular emphasis on the Embarcadero, and ensure such connections are universally accessible.

Policy LU-7.5: Coastal Access Amenities. Provide clear signage (including appropriate interpretive signs) and amenities (such as benches, picnic tables, trash and recycling service, bike racks, etc.) at all access points. (See also Policies CD-1.7 and CD-1.8)

Policy LU-7.6: North Morro Bay Planning Area. As a condition to the approval of any development permit on the Chevron property, the City shall require clear dedication of a lateral access easement along the sand and shoreline area.

Policy LU-7.7: Public Access Management Plan. Development with the potential to impact public access, whether during construction or after, shall develop a Public Access Management Plan designed to identify and limit impacts to public access. Plans shall identify peak use times and measures to avoid public access disruptions during those times, minimize road and trail closures, identify alternative access routes, and provide for public safety.

Policy LU-7.8: Sea Level Rise Impacts on Lateral Access. The following monitoring and actions shall be taken to address issues related to sea level rise in lateral access areas:

- a. The bayside lateral access of at least eight lease sites between the 400 block and 1100 block of Embarcadero (lease site addresses are 451, 501, 699, 725, 801, 897, 1001, and 1185 Embarcadero) are expected to be affected by sea level rise by 2050. The City shall evaluate whether any of the existing bayside lateral access in the 2050 inundation zone can be defended in that part of the Embarcadero. During lease renegotiations, raising of the bayside lateral access or installing floating access may be required in this area if the existing bayside access cannot be defended.
- b. All lease sites affected through 2050 will need to be monitored for additional sea level rise impacts to lateral accessways through 2100 due to lease site vulnerability. Significant attention should be paid to lease sites at 699 Embarcadero and 725 Embarcadero.
- c. Due to sea level rise impacts through 2100, 495 and 1205 Embarcadero will require floating or raised bayside lateral access.
- d. Due to anticipated sea level rise impacts by 2050, bayside lateral access from 451 Embarcadero to 501 Embarcadero will need to be replaced with floating accessways or raised for accessibility.
- e. Due to anticipated sea level rise impacts by 2050, bayside access from 601 Embarcadero to 699 Embarcadero will need to be raised for continuous access.
- f. Due to anticipated sea level rise impacts by 2050, most bayside access in the 800 block of Embarcadero will need to be raised or floating for accessibility.
- g. Due to anticipated sea level rise impacts by 2050, bayside access from 1185 Embarcadero to 1205 Embarcadero will require floating or raised access to accommodate sea level rise.
- h. All lease sites affected by sea level rise through 2050 will need to be monitored for continual water inundation through 2100 due to the vulnerability of those sites.
- i. Due to anticipated sea level rise impacts by 2100, bayside lateral access at Giovanni's at 1001 Front Street will need to be raised.
- j. When feasible, lease sites should be encouraged to implement floating bayside lateral accessways to improve design resiliency to sea level rise. Monitoring the need for improvements to the boat launch ramp will be done as part of this action.

Policy LU-8.10 Multimodal Access. Emphasize access for public transit and active transportation in downtown and along the waterfront.

Policy LU-8.11 Multimodal Connections. Improve pedestrian connections between the downtown and waterfront areas, and increase the pedestrian appeal of downtown.

Policy LU-8.12 Vacant Lot Uses. Identify suitable uses for vacant and underutilized parcels such as community events, temporary markets, and community gardens, consistent with neighborhood and community objectives.

These goals and policies would facilitate connectivity and mobility by providing for a balanced land use pattern and access throughout the planning area. This connectivity would be provided through equitable access for residents and employees to daily needs, strategic land use planning for new development and redevelopment, reduction in conflict between land uses, and preservation and provision of lateral and vertical access points and multimodal access.

The General Plan and LCP Update includes strategies, goals, and policies that would provide for orderly development and would not physically divide an established community. Therefore, this impact would be less than significant.

Mitigation Measure

This impact would be less than significant, and no mitigation is required.

Threshold 2: Would the project cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Impact LUP-2 WITH A COMPREHENSIVE UPDATE TO THE CITY'S ZONING ORDINANCE AND ZONING MAP IN CONJUNCTION WITH THE GENERAL PLAN AND LCP UPDATE, IMPLEMENTATION OF THE GENERAL PLAN AND LCP UPDATE WOULD BE CONSISTENT WITH APPLICABLE REGIONAL LAND USE PLANS, POLICIES, AND REGULATIONS, SUCH AS THE SLOCOG 2019 RTP AND CITY ZONING DISTRICTS AND STANDARDS. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Several regionally- and locally-adopted land use plans, policies, and regulations apply to development under the General Plan and LCP Update. These include the SLOCOG 2019 RTP and the SLOAPCD 2001 CAP for San Luis Obispo County. Consistency of the General Plan and LCP Update with the 2001 CAP is discussed in Section 4.2, *Air Quality*.

The SLOCOG 2019 RTP is a long-range land use and transportation plan for the San Luis Obispo region. The 2019 RTP includes seven goals, with respective policy objectives to meet these goals, which are expected to result in significant benefits to the region, not only with respect to transportation and mobility, but also economic activity, safety, and social equity. Table 4.9-3 includes the 2019 RTP goals and policy objectives related to land use and describes consistency of the proposed land use designations and patterns in the General Plan and LCP Update with these goals and policy objectives.

Table 4.9-3 General Plan and LCP Update Land Use Consistency with the SLOCOG 2019 RTP

SLOCOG 2019 RTP Goals and Policy Objectives	General Plan and LCP Update Consistency
Goal 2 Mobility	
<p>Objective 2.2: Improve opportunities for businesses and citizens to easily access goods, jobs, services, and housing.</p>	<p>Consistent. The Land Use, Economic Development and Environmental Justice Elements of the General Plan and LCP Update include goals and policies that support equitable access for residents and employees to the coast, visitor amenities and services, housing, employment, retail, services, education, and recreation.</p>
<p>Objective 2.5: Support cooperative planning activities that lead to an integrated intermodal transportation system.</p>	<p>Goal LU-1 is to ensure that the community form of Morro Bay reflects its vision and values, promoting a strong economy and high quality of life. The following policies support accessibility in the community:</p> <ul style="list-style-type: none"> ▪ Policy LU-1.3 – Access to Daily Needs ▪ Policy LU-1.5 – Senior Living <p>Goal LU-6 is to ensure that visitors to Morro Bay have access to a variety of lower-cost lodging options to meet their needs and Goal LU-7 is to provide all residents and visitors with unimpeded and convenient public access to and along the coast. All of the policies under Goals LU-6 and LU-7 support access in the community.</p> <p>Goal ED-1 is aimed at achieving a strong, resilient economy. Under Goal ED-1, the following policies would promote accessibility to services and jobs:</p> <ul style="list-style-type: none"> ▪ Policy ED-1.6 – Streamline the Development Process ▪ Policy ED-1.10 – Prioritize Access <p>Goal ED-4 is to provide employment that provides a range of head-of-household jobs that pay living wages and support living in Morro Bay. All of the policies under this goal would improve accessibility to jobs in the city.</p> <p>Goal EJ-1 is to ensure that Morro Bay residents enjoy a high quality of life that contributes to their mental, physical and social well-being. Specifically, Policy EJ-1.3 – Services for All requires that accessibility of facilities and services that meet the cultural, linguistic, gender, and sexual orientation needs of client populations. Additionally, Goals EJ-1 and EJ-2 and all of the policies under these goals are generally intended to provide equitable access to goods and spaces in the planning area.</p>

SLOCOG 2019 RTP Goals and Policy Objectives

General Plan and LCP Update Consistency

Goal 5 Healthy Communities

Objective 5.1: Reflect community values while integrating land use and transportation planning to connect communities through a variety of transportation choices that promote healthy lifestyles.

Objective 5.2: Integrate public health and social equity in transportation planning and decision-making.

Objective 5.3: Support efforts to increase the supply and variety of housing, jobs, and basic services in locations that reduce trips, travel distances, and congestion on U.S. Route 101.

Objective 5.4: Make investments and develop programs that support local land use decisions that implement the SCS and other strategies to reduce GHG emissions and make our communities more healthy, livable, sustainable, and mobile.

Consistent. The General Plan and LCP Update has been developed through an extensive public outreach and involvement process and following careful analysis by an advisory committee, commissions, City staff, elected officials, and the community. This approach is intended to provide a plan that encompasses community values and captures the community vision for the planning area.

In addition, the Environmental Justice Element of the General Plan and LCP Update states that a major focus of the City is to ensure the greatest livability possible for people of every age, race, ability, and socioeconomic group. Accordingly, the Environmental Justice Element addresses the social aspects of community design by including goals and policies that anticipate how land use and transportation planning decisions will affect the overall well-being of residents and visitors and will allow needs to be met easily and affordably.

Goal LU-1 is to ensure that the community form of Morro Bay reflects its vision and values, promoting a strong economy and high quality of life. The following policies support accessibility in the community:

- **Policy LU-1.3 – Access to Daily Needs**
- **Policy LU-1.5 – Senior Living**

Goal LU-2 is to ensure that land use patterns improve community health and resiliency.

Policy LU-2.1 – Fresh Food requires support and facilitation of access to fresh food throughout all parts of Morro Bay.

Policy LU-2.2 – Local Food requires expansion of marketing and distribution methods that connect local agricultural to consumers.

Goal LU-6 is to ensure that visitors to Morro Bay have access to a variety of lower-cost lodging options to meet their needs and **Goal LU-7** is to provide all residents and visitors with unimpeded and convenient public access to and along the coast. All of the policies under **Goals LU-6 and LU-7** support access in the community.

Goal ED-4 is to provide employment that provides a range of head-of-household jobs that pay living wages and support living in Morro Bay. All of the policies under this goal would improve accessibility to jobs in the city.

Goal EJ-1 is to ensure that Morro Bay residents enjoy a high quality of life that contributes to their mental, physical and social well-being. Specifically, **Policy EJ-1.3 – Services for All** requires that accessibility of facilities and services that meet the cultural, linguistic, gender, and sexual orientation needs of client populations. Additionally, **Goals EJ-1 and EJ-2** and all of the policies under these goals are generally intended to provide equitable access to goods and spaces in the planning area.

SLOCOG 2019 RTP Goals and Policy Objectives

General Plan and LCP Update Consistency

Goal 6 Environment

Objective 6.1: Integrate environmental considerations in all stages of planning and implementation.

Objective 6.2: Preserve aesthetic resources and promote environmental enhancements.

Objective 6.3: Reduce GHG emissions from vehicles and improve air quality in the region

Objective 6.4: Conserve and protect natural, sensitive, and agricultural resources.

Consistent. The Land Use, Community Design, Conservation, and Open Space Elements of the General Plan and LCP Update include goals and policies that support environmental protection in the planning area. The Land Use element provides the framework for the future layout of the community and includes policies that would promote development in a manner that protects environmental resources in the planning area. The Community Design Element provides goals and policies to address the components of Morro Bay’s style that should be preserved as the city changes over time, including aesthetic resources in the city. Conservation Element goals and policies relate to the conservation of natural resources using open space areas within the planning area. The Open Space Element addresses the protection of natural habitat and wildlife by designating open space areas throughout the community.

Policy LU-1.2 – Realistic Development Capacity requires the protection of sensitive habitats, natural landforms, scenic resources, and other coastal resources to be a priority in all City actions and decisions, and requires that all development standards (including with respect to height, setback, density, lot coverage, etc.) be interpreted as maximums (or minimums) that must be reduced (or increased) to protect and enhance such resources and meet LCP objectives to the maximum extent feasible.

Goal CD-1 of the Community Design Element is to ensure that the individual identity of each of Morro Bay’s character areas is embraced and represented by new and renovated development. The following policies support **Goal CD-1** and protection and enhancement of the environment:

- **Policy CD-1.2 – Compatible New Development**
- **Policy CD-1.3 – Design Guidelines**
- **Policy CD-1.4 – Design Standards**
- **Policy CD-1.8 – Minimize Aesthetic Impacts**

Goal C-1 of the Conservation Element is to ensure that sensitive habitats are protected from potential negative impacts of land use and development. All 16 of the policies under **Goal C-1** support the protection of sensitive habitats. **Goal C-7** of the Conservation Element is to ensure that Morro Bay water is safe, available, and used in an environmentally responsible manner. The following policies under **Goal C-7** support the protection of sensitive habitats and aesthetic resources.

- **Policy C-7.14 – Pollutant Runoff**
- **Policy C-7.15 – Water Quality**
- **Policy C-7.16 – Developments of Water Quality Concern**
- **Policy C-7.17 – Impervious Surfaces**
- **Policy C-7.18 – Wastewater Marine Impacts**
- **Policy C-7.20 – Outfalls**

Goal C-9 of the Conservation Element is to ensure that the aesthetic and visual natural resources in Morro Bay are protected to preserve the community’s identity. All ten of the policies under **Goal C-9** support the preservation of aesthetic resources.

Goal CIR-1, Policy CIR-1.12 – Climate Change Impacts on Transportation requires ongoing evaluation of the transportation infrastructure system and its ability to withstand future effects of climate change. **Policy CIR-1.12** also required identification of future points to begin incorporating resilient strategies and materials into design, using the most up-to-date

SLOCOG 2019 RTP Goals and Policy Objectives

General Plan and LCP Update Consistency

guidance from the Federal Highway Administration. General Plan and LCP Update **Goal C-4** and all of the policies under **Goal C-4** would also ensure that GHG emissions in Morro Bay are reduced and consistent with State goals. These goals and policies in the General Plan and LCP Update would assist in the reduction of GHG emissions and attainment of GHG reduction targets for the reason.

Goal OS-4 through Goal OS-7 and all of the policies under these goals support the conservation and protection of natural and sensitive resources in the planning area.

Source: SLOCOG 2019

As summarized in Table 4.9-3, the proposed land uses and land use patterns in the General Plan and LCP Update are consistent with the related goals and policies in the SLOCOG 2019 RTP. The determination of General Plan and LCP Update consistency is within the discretion of the City Council. In making this determination, the applicable law requires the decision makers to view the General Plan and LCP Update as a whole and does not permit the elevation of certain specific General Plan and LCP Update policies over others. The General Plan and LCP Update is consistent with the SLOCOG 2019 RTP.

The Morro Bay Municipal Code is one of the primary means of implementing the General Plan. Adoption of the General Plan and LCP Update would require a comprehensive review of the Zoning Ordinance and Zoning Map to ensure that it is consistent with the General Plan and LCP Update. This review and update is currently being conducted by the City. Specifically, revisions to the Zoning Map will be consistent with the General Plan and LCP Update, incorporating revisions to the land use categories and other recommended design and development standards. The land use designations in the Land Use Element of the General Plan and LCP Update have been updated from the City's 1988 General Plan to better match the existing, on-the-ground land uses and established land use pattern in the planning area as well as meet the vision and future needs of the community. These designations include allowable uses and building density, but also address building placement on individual lots, parking location and access, building frontage, and streetscape design. As described in the General Plan and LCP Update, this land use update is consistent with the community's desire to ensure equitable access to the coast, visitor amenities and services, and housing, employment, retail and services, education, and recreation for residents and employees, and allows the City to establish zoning districts that similarly communicate these desires.

For each land use designation, the uses allowed and the standards for development intensity (dwelling units per acre for residential development, and floor area ratio [FAR] for non-residential development) are specified. While land use designations are broad, the zoning districts set forth specific allowances and prohibitions of uses (including conditional uses), dimensional requirements, such as building setbacks, parking standards, and building heights. While land use designations and zoning districts must be compatible, they need not be exactly identical. Zoning districts must be within the range of allowed intensity and uses found in the General Plan and LCP Update.

Required updates to the Zoning Ordinance and Zoning Map in the Morro Bay Municipal Code to ensure consistency with the General Plan and LCP Update, which are currently being prepared by the City, will ensure compatibility between the land use designations and zoning districts and standards within the planning area. In addition, San Luis Obispo LAFCo has a goal to update SOIs every five years, or as necessary. Future amendments to the Morro Bay SOI being contemplated as

part of the General Plan and LCP Update would be implemented in coordination with LAFCo and the County of San Luis Obispo and would be required to be consistent with applicable LAFCo policy. Therefore, impacts related to policy consistency would be less than significant. As noted previously, the above discussion is intended to guide policy interpretation, but is not intended to replace or supplant City decision-makers. The final determination of consistency will be made by City decision-makers when they act on the proposed project.

Mitigation Measures

Mitigation measures identified throughout this EIR would serve to reduce identified environmental impacts and further improve consistency of the project with applicable regional land use plans, policies, and regulations. However, no specific mitigation for this impact is required.

c. Cumulative Impacts

Planned and projected growth in the San Luis Obispo County region, including in the communities neighboring the City of Morro Bay, could have significant cumulative land use impacts related to either the physical division of communities or conflicts with land use goals, plans, policies, or regulations adopted for the purpose of avoiding or mitigating environmental effects. The community of Cayucos is located to the north of the city, and the community of Los Osos is located to the south of the city, with a buffer of undeveloped land between both communities and the city. Therefore, the General Plan and LCP Update would not contribute to a significant cumulative impact related to the physical division of any established community.

The communities of Cayucos and Los Osos are included in the County's Estero Area Plan which directs new growth in these unincorporated areas and are included in the 2019 RTP. The Estero Area Plan includes goals, policies and programs adopted for the purpose of avoiding or mitigating environmental effects. The communities surrounding the city are also subject to the County's zoning standards. Additionally, the goals, policies, programs and regulations in the 2019 RTP apply to surrounding communities in the same manner as they apply to Morro Bay, thereby avoiding potential for cumulative considerable conflict between the land use and planning for the city and these communities. Therefore, the cumulative impacts resulting from the implementation of the proposed General Plan and LCP Update related to conflict with plans, policies and regulations would be less than significant.

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4.10 Noise

This section analyzes noise impacts from buildout of the General Plan and LCP Update. Impacts related to noise from construction, building operations, traffic, and flight operations are addressed. The transportation data used to support the analysis in this section is based on the Morro Bay Circulation Element Update Final Technical Report, completed by Central Coast Transportation Consulting (2018). This report is provided as Appendix E to this report and contains traffic counts and a detailed description of the traffic forecasting prepared for the analysis.

4.10.1 Setting

a. Overview of Noise and Vibration Measurement

Noise

Noise is defined as unwanted sound that disturbs human activity. Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound power levels to be consistent with human hearing response, which is most sensitive to frequencies around 4,000 Hertz (similar to the highest note on a piano) and less sensitive to frequencies below 100 Hertz (similar to a transformer hum).

Sound pressure level is measured on a logarithmic scale with the 0 dB level based on the lowest detectable sound pressure level that people can perceive (an audible sound that is not zero sound pressure level). Based on the logarithmic scale, a doubling of sound energy is equivalent to an increase of 3 dB, and a sound that is 10 dB less than the ambient sound level has no effect on ambient noise. Because of the nature of the human ear, a sound must be about 10 dB greater than the reference sound to be judged as twice as loud. In general, a 3 dBA change in community noise levels is noticeable, while 1-2 dBA changes generally are not perceived. Quiet suburban areas typically have noise levels in the range of 40-50 dBA, while those along arterial streets are in the 50-60+ dBA range. Normal conversational levels are in the 60-65 dBA range, and ambient noise levels greater than 65 dBA can interrupt conversations.

Noise levels typically attenuate (drop off) at a rate of 6 dB per doubling of distance from point sources such as industrial machinery. Noise from lightly traveled roads typically attenuates at a rate of about 4.5 dB per doubling of distance. Noise from heavily traveled roads typically attenuates at about 3 dB per doubling of distance.

In addition to the instantaneous measurement of sound levels, the duration of sound is important since sounds that occur over a long period of time are more likely to cause annoyance, direct physical damage, or environmental stress. One of the most frequently used noise metrics that considers both duration and sound power level is the equivalent noise level (Leq). The Leq is defined as the single steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time (essentially, the average noise level). Typically, Leq is summed over a one-hour period.

The time period in which noise occurs is also important since nighttime noise tends to disturb people more than daytime noise. Two commonly used noise metrics – the Day-Night average level (Ldn) and the Community Noise Equivalent Level (CNEL) - recognize this fact by weighting hourly Leqs over a 24-hour period. The Ldn is a 24-hour average noise level that adds 10 dB to actual nighttime (10:00 p.m. to 7:00 a.m.) noise levels to account for the greater sensitivity to noise during

that time period. The CNEL is identical to the Ldn, except it also adds a 5 dB penalty for noise occurring during the evening (7:00 p.m. to 10:00 p.m.). Noise levels described by Ldn and CNEL typically do not differ by more than 1 dBA. In practice, CNEL and Ldn are often used interchangeably.

Vibration

Vibration is sound radiated through the ground. The rumbling sound caused by the vibration of room surfaces is called groundborne noise. Groundborne vibration is almost exclusively a concern inside buildings and is rarely perceived as a problem outdoors. Groundborne vibration related to human annoyance is generally related to root mean square (RMS) velocity levels expressed in vibration decibels (VdB). However, construction-related groundborne vibration in relation to its potential for building damage can also be measured in inches per second (in/sec) peak particle velocity (PPV) (Federal Transit Administration 2006). Based on the Federal Transit Administration's (FTA) *Transit Noise and Vibration Impact Assessment* and the Caltrans' *1992 Transportation-Related Earthborne Vibration, Technical Advisory*, vibration levels decrease by 6 VdB with every doubling of distance.

The background vibration velocity level in residential and educational areas is usually around 50 VdB. (FTA 2006). The threshold of perception for humans is approximately 65 VdB. A vibration velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. Most perceptible indoor vibration is caused by sources within buildings, such as operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the groundborne vibration from traffic is rarely perceptible. The range of interest is from approximately 50 VdB, which is the typical background vibration velocity level, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings.

b. Sensitive Receptors

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. Noise-sensitive land uses generally should not be subjected to noise levels that would be considered intrusive in character. The City defines noise-sensitive land uses as residences, schools, hospitals and nursing homes, churches, meeting halls, auditoriums, music halls, theaters, libraries, transient lodging, playgrounds and parks, offices, and mixed-use development. Noise-sensitive land uses in the city include residences, Morro Bay Library, Del Mar Elementary School, Morro Bay High School, Bayside Care Center, Morro Bay State Park, and several churches. Noise-sensitive land uses in the city that are currently exposed to elevated noise levels include residences located along State Route (SR) 1 and major arterial routes in the city, and Morro Bay High School.

c. Existing Noise Conditions and Sources

In general, the city is a relatively quiet environment. Roadway traffic from SR 1, SR 41, Morro Bay Boulevard, Main Street, Embarcadero, and South Bay Boulevard is the greatest source of noise in the city. Other sources of noise include pedestrians, commercial activities (e.g., buildings with HVAC units and automotive repair shop operations), school functions (e.g., high school sporting events), and sounds associated with the coastal setting (e.g., ocean waves, beachgoers, and animal activity).

To determine existing ambient noise levels in the city, 15-minute sound level measures were collected on April 6, 2016, using an ANSI Type II integrating sound level meter near major roadways

and typical land uses in the city. These sound level measurements provide existing ambient sound levels throughout the city as shown in Figure 4.10-1 and detailed in Table 4.10-1.

As shown in Table 4.10-1, ambient sound levels at major roadways and land uses in Morro Bay ranged from approximately 51 to 72 dBA Leq. Measurement locations 8 and 9, near SR 1 and South Bay Boulevard, respectively, had the highest ambient sound levels due to high levels of roadway traffic during the afternoon peak period, during which these measurements were recorded. The lowest ambient sound levels were recorded in established commercial and residential areas, ranging from 51 to 55 dBA Leq.

Ambient average daily noise levels along area roadways were estimated based on average daily traffic volumes. Estimated noise levels at 50 feet from major roadways in Morro Bay range from approximately 63 to 77 dBA Ldn. Noise levels are highest along SR 1 due to high volumes of traffic compared to other roadways in the city. Lower noise levels were modeled along roadway segments that run along the bay and commercial areas.

Noise contours are lines of equal noise level, shown on a map extending out from a noise source (or sources). Figure 4.10-2a through Figure 4.10-2d show existing noise contours along major roadways. The results shown in these figures represent an estimate of average daily noise levels (Ldn) as modeled from the centerline of the given roadway segment. These contours are for planning purposes and do not account for the site-specific conditions such as topography, soundwalls, and intervening structures that may affect local noise levels.

d. Regulatory Setting

Federal

There are no federal noise requirements or regulations that apply directly to the implementation of the General Plan and LCP Update. However, there are federal regulations that influence the audible landscape, especially for projects where federal funding is involved. For example, the Federal Highway Administration (FHWA) requires abatement of highway traffic noise for highway projects through rules in the Code of Federal Regulations (23 CFR Part 772), the FTA, and Federal Railroad Administration (FRA). Each agency recommends thorough noise and vibration assessments through comprehensive guidelines for any highway, mass transit, or high-speed railroad projects that would pass by residential areas.

State

Title 24 of the California Code of Regulations codifies Sound Transmission Control requirements establishing uniform minimum noise insulation performance standards for new hotels, motels, dormitories, apartment houses, and dwellings other than single-family dwellings. Specifically, Section 1207.4 in Title 24 states that interior noise levels attributable to exterior noise sources shall not exceed 45 dBA CNEL in any habitable room of a new building.

While there are no State standards for vibration, Caltrans establishes vibration risk for structures. For continuous, frequent, and intermittent vibration, Caltrans considers the architectural damage risk level to be somewhere between 0.08 and 0.5 in/sec PPV depending on the type of building that is affected.

Figure 4.10-1 Ambient Sound Level Measurement Locations

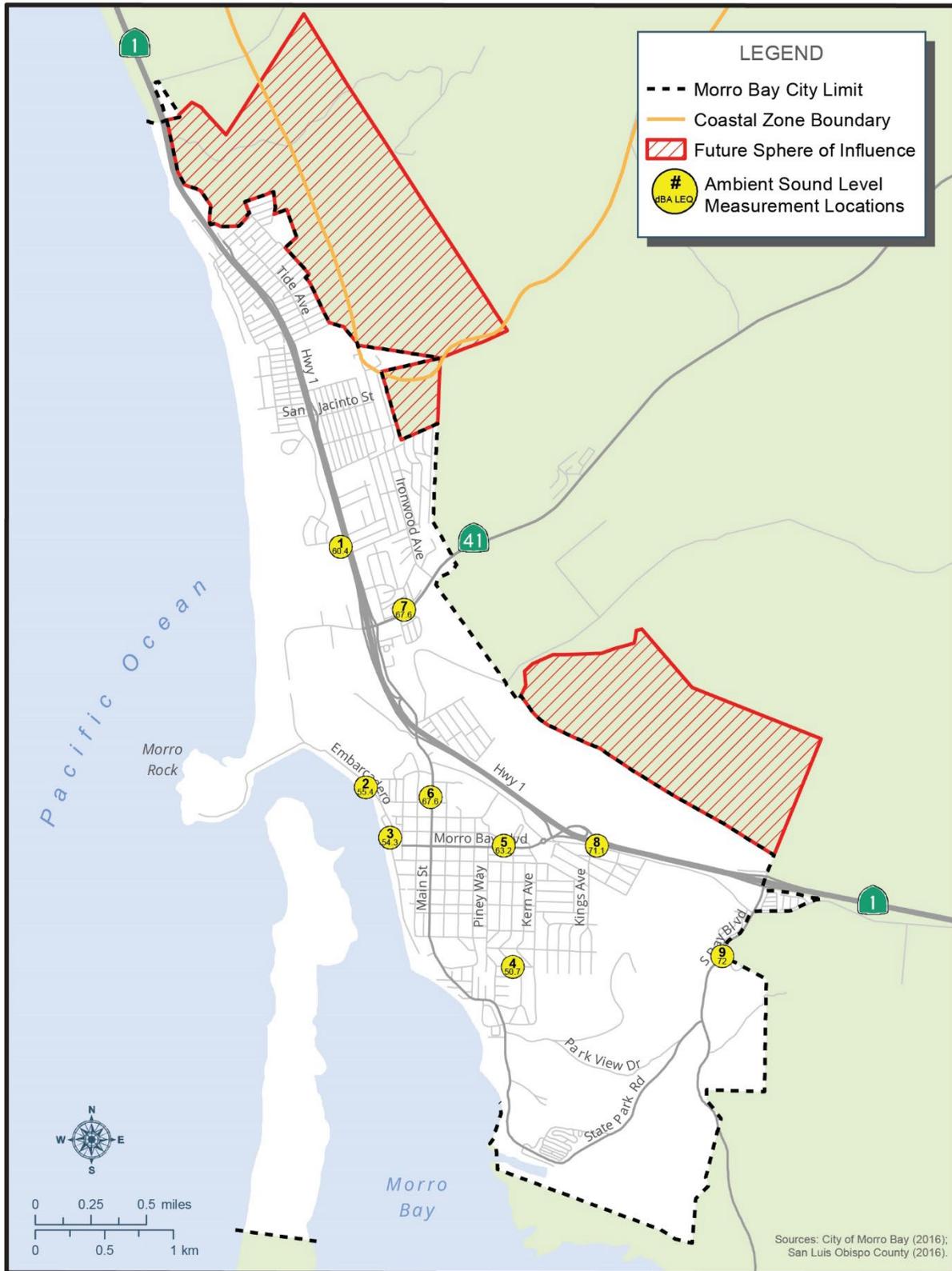


Table 4.10-1 Ambient Sound Level measurements in the City

Measurement Number	Location and Time ¹	Noise Source	Distance from Primary Noise Source (feet)	Leq[15] (dba) ²
1	SR 1, west side of highway, approx. 80 ft north of Morro Bay High School, 12:45 pm	Primary – roadway traffic Secondary – aircraft flyover, bicycle and pedestrian path activity	150	60.4
2	Morro Bay Harbor, south end of parking lot across from boat docking area, 1:20 pm	Primary- harbor and commercial operations Secondary – Embarcadero roadway, parking lot noise	100	55.4
3	Embarcadero commercial area, 140 feet south of Harbor Street intersection, 1:46 pm	Primary – pedestrian and commercial activity Secondary – Embarcadero roadway	50	54.3
4	Corner of Luisita Street and Bernardo Avenue, 2:17 pm	Primary – residential commercial activity, Luisita Street traffic	15	50.7
5	Morro Bay Boulevard, at Morro Bay Park, 2:45 pm	Primary – roadway traffic Secondary – fire engine sirens, pedestrian activity	30	63.2
6	Main Street, 130 feet north of Beach Street intersection, 3:09 pm	Primary – roadway traffic Secondary – Beach Street traffic	35	67.6
7	SR 41, 145 feet west of Hill Street intersection, 3:34 pm	Primary – roadway traffic	40	67.6
8	SR 1, along Quintana Road 110 feet east of Kings Avenue, 3:59 pm	Primary – roadway traffic Secondary – Quintana Road traffic	75	71.1
9	South Bay Boulevard, 0.25 mile south of Quintana Road intersection, 4:22 pm	Primary – roadway traffic	20	72.0

¹ Field visit on April 6, 2016, using ANSI Type II integrating sound level meter.

² The single steady A-weighted level over a 15-minute period.

Source: Community Baseline Assessment for the General Plan and LCP Update (Appendix B)

Figure 4.10-2a Existing Noise Contours

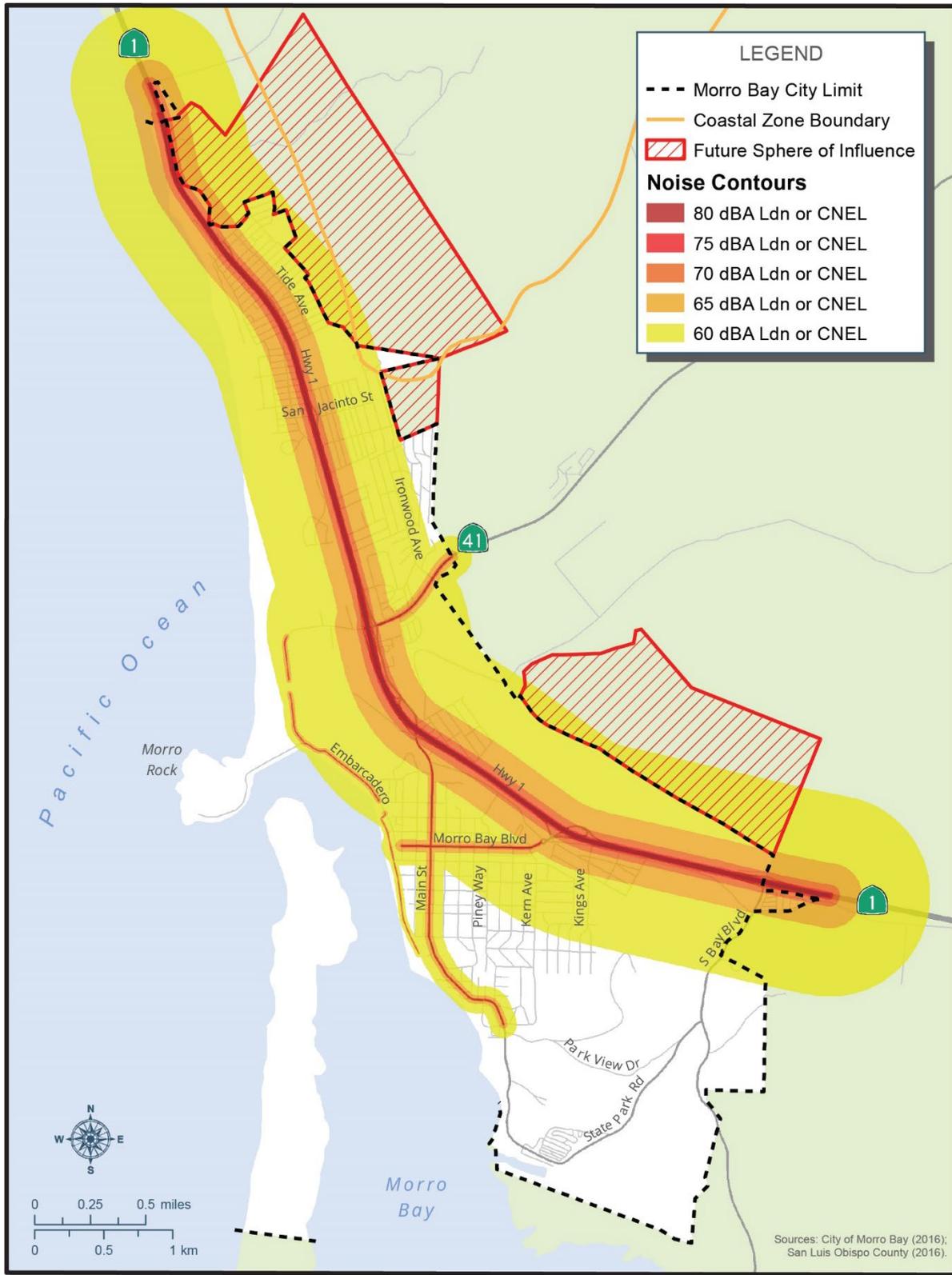


Figure 4.10-2b Existing Noise Contours

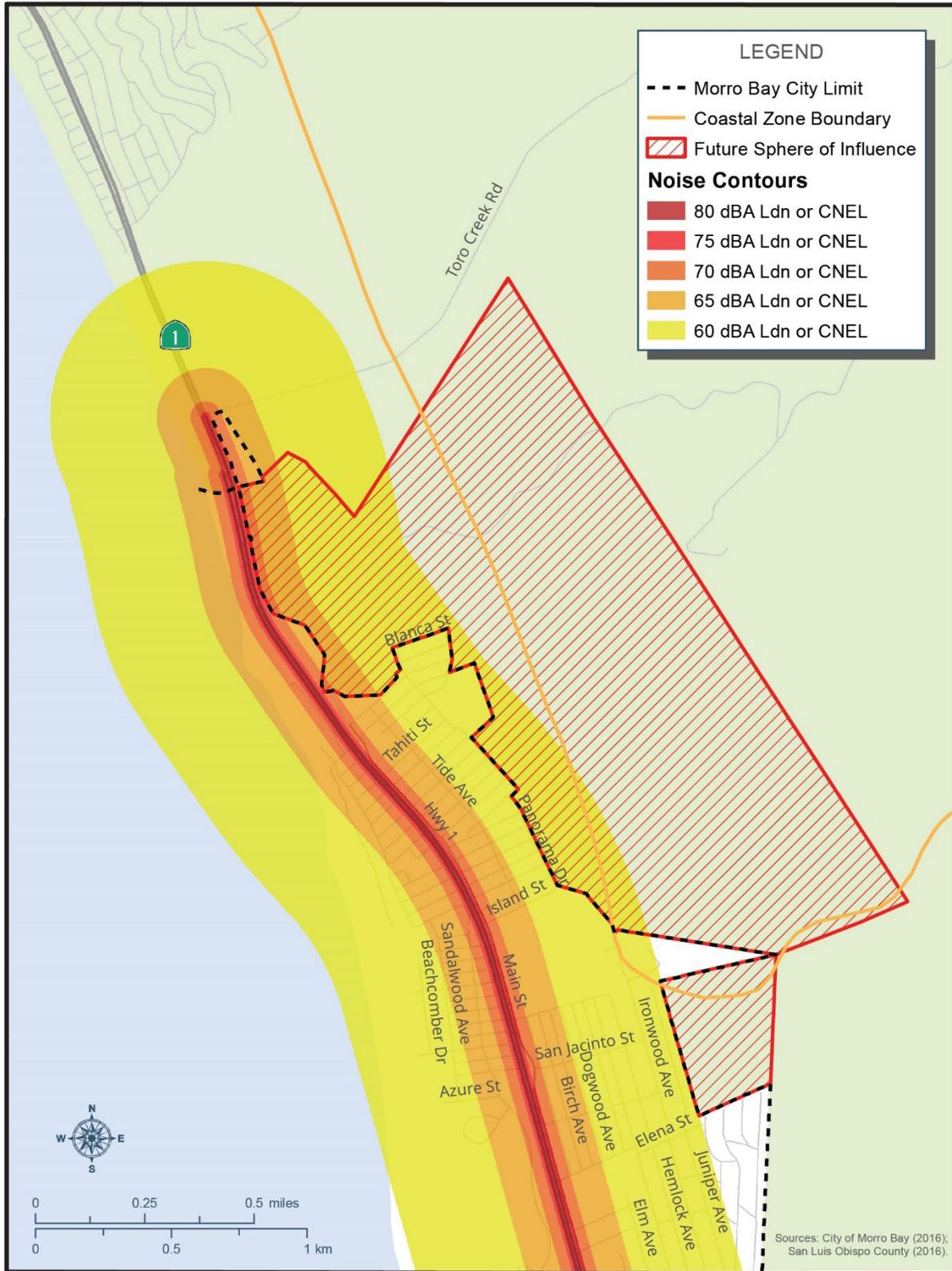


Figure 4.10-2c Existing Noise Contours

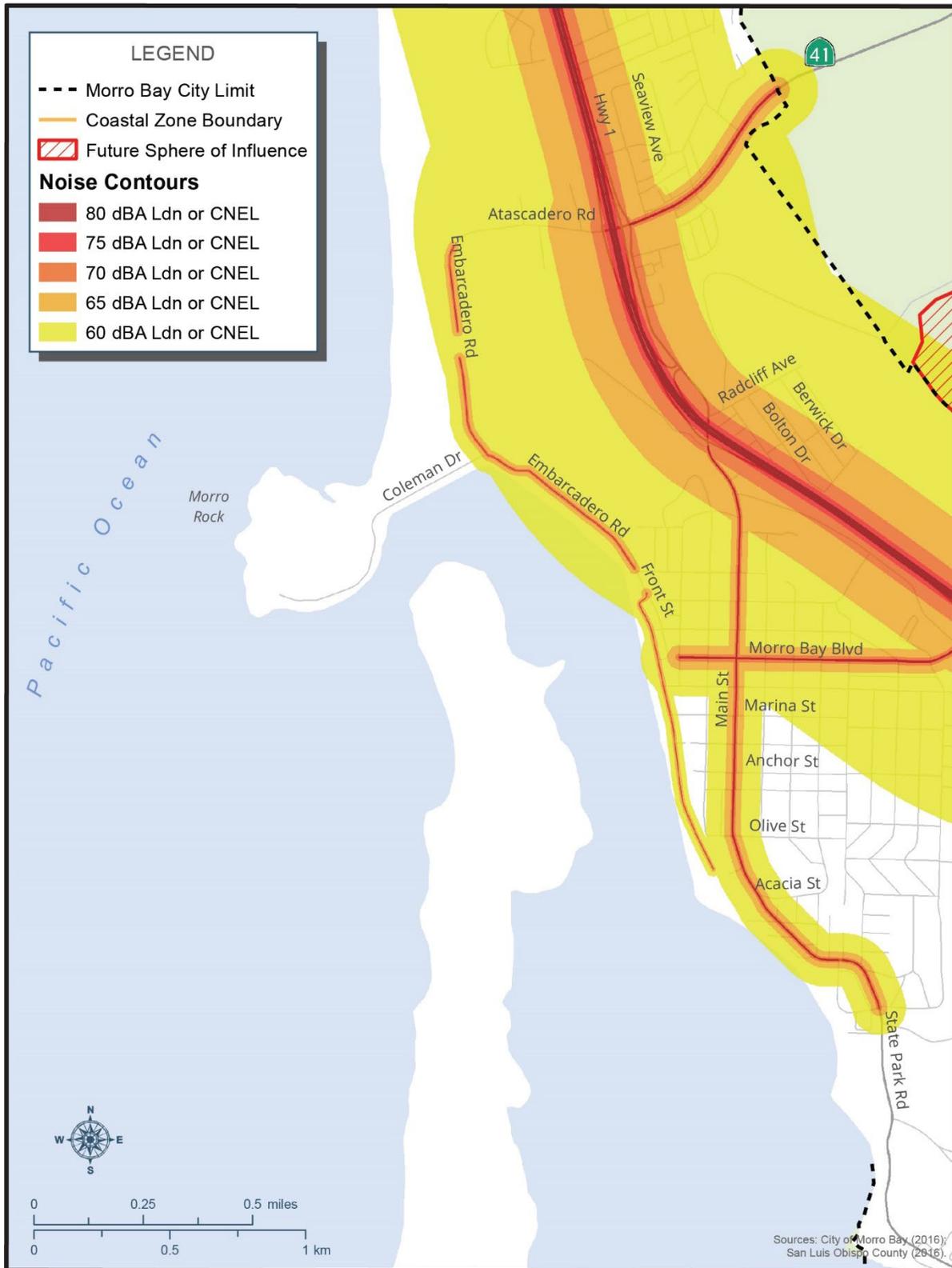
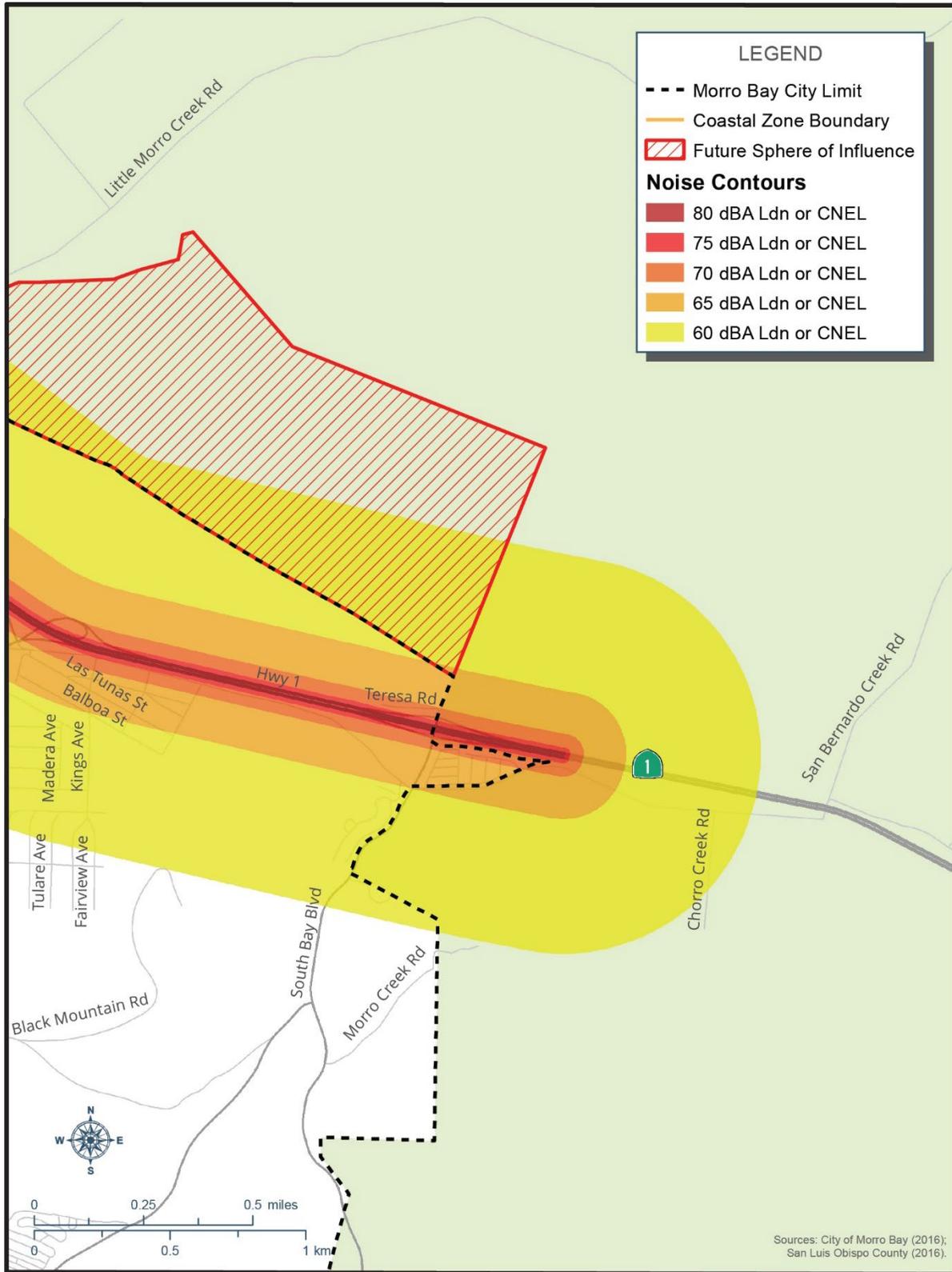


Figure 4.10-2d Existing Noise Contours



Local

City of Morro Bay General Plan Noise Element

The City of Morro Bay General Plan Noise Element (1993) contains goals, policies, and implementation measures describing the compatibility of sensitive land uses with noise. The purpose of these goals, policies, and implementation measures is to reduce the various potential effects of noise on people. Table 4.10-2 summarizes the ranges of noise exposure which are considered to be acceptable, conditionally acceptable, or unacceptable for various noise-sensitive land uses in the city. These ranges are derived from the California Governor’s Office of Planning and Research General Plan Guidelines.

Table 4.10-2 Community Exterior Noise Exposure Levels

Land Use Category	Community Noise Exposure (CNEL or Ldn dBA)		
	Acceptable ¹	Conditionally Acceptable ²	Unacceptable ³
Residential, Theaters Auditoriums, Music Halls	<60	60-70	>70
Transient Lodging – Motels, Hotels	<60	60-75	>75
Schools, Libraries, Museums, Hospitals, Nursing Homes, Meeting Halls, Churches	<60	60-75	>75
Playgrounds and Parks	<70	70-75	>75
Offices	<60	60-75	>75

¹ Specified land use is satisfactory. No noise mitigation measures are required.

² Use should be permitted only after careful study and inclusion of protective measures, as needed, to satisfy the policies of the Noise Element.

³ Development is usually not permitted.

Source: City of Morro Bay 1993

Table 4.10-3 summarizes the maximum transportation noise exposure levels for noise-sensitive land uses. The maximum allowable noise exposure from transportation noise sources in outdoor activity areas for most sensitive land uses is 60 dBA CNEL or Ldn. The maximum allowable interior noise exposure from transportation noise sources is 45 dBA Ldn.

Table 4.10-3 Maximum Allowable Noise Exposure – Transportation Noise Sources

Land Use	Outdoor Activity Areas ¹	Interior Spaces	
	CNEL or Ldn dBA	CNEL or Ldn dBA	Leq dBA ²
Residential	60 ^c	45	–
Transient Lodging	60 ^c	45	–
Hospitals, Nursing Homes	60 ^c	45	–
Theaters, Auditoriums, Music Halls	–	–	35
Churches, Meeting Halls, Office Buildings	60 ³	–	45
Schools, Libraries, Museums	–	–	45
Playgrounds, Neighborhood Parks	70	–	–

¹ Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use.

² As determined for a typical worst-case hour during periods of use.

³ Where it is not possible to reduce noise in outdoor activity areas to 60 dBA Ldn or less using a practical application of the best available noise reduction measures, an exterior noise level of up to 65 dBA Ldn may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with the values in this table.

Note: New development would result in a significant noise impact if the project would result in an exceedance of noise standards above, or if the existing noise environment exceeds an increase of 3 dBA Ldn.

Source: City of Morro Bay 1993

Table 4.10-4 summarizes the maximum noise exposure levels for noise-sensitive land uses due to stationary noise sources. New development of noise-sensitive land uses may be permitted only where location and design allow the development to meet the daytime and nighttime standards listed in the Table 4.10-4. The maximum allowable exterior noise exposure from stationary noise sources during daytime hours is 70 dBA Lmax. Lmax is the maximum instantaneous noise level experienced during a given period of time. The maximum allowable exterior noise exposure from stationary sources during nighttime hours is 65 dBA Lmax.

Table 4.10-4 Maximum Allowable Exterior Noise Exposure – Stationary Noise Sources¹

	Daytime (7:00 a.m. to 10:00 p.m.)	Nighttime (10:00 p.m. to 7:00 a.m.)
	Hourly Leq, dBA ^b	50
Maximum Level (Lmax), dBA ²	70	65
Maximum Level, Impulse Noise (Lmax), dBA ³	65	60

¹ As determined at the property line of the receiving land use. When determining the effectiveness of noise mitigation measures, the standards may be applied on the receptor side of noise barrier or other property line noise mitigation measures.

² Sound level measurements shall be made with slow meter response.

³ Sound level measurements shall be made with fast meter response.

Note: New development would result in a significant noise impact if the project would result in an exceedance of the noise standards above, or if the existing noise environment exceeds an increase of 3 dBA Ldn.

Source: City of Morro Bay 1993

Outdoor activity areas include patios, decks, balconies, outdoor eating areas, swimming pool areas, yards of dwelling units, and other areas that have been designated for outdoor activities and recreation. Although outdoor recreation areas, such as playgrounds and parks, are considered noise-sensitive, the recommended exterior noise limit for this land use is 70 dBA Ldn from transportation noise sources, as shown in Table 4.10-3. In mixed-use development, residential noise standards are applied to the residential portion of such projects. The City will consider implementing mitigation measures where existing noise levels produce significant noise impacts to noise-sensitive land uses or where new development may result in cumulative increases of noise upon noise-sensitive land uses.

Morro Bay Municipal Code

Section 17.52.030 of the Morro Bay Municipal Code establishes noise requirements for the city. In general, the code prohibits any business operation with sustained or intermittent noise levels exceeding 70 dBA CNEL within 100 feet of residential uses, hospitals, and other noise-sensitive uses unless noise levels are mitigated in compliance with the Morro Bay Municipal Code. Additionally, all commercial and industrial deliveries and loud commercial activities within 100 feet of a residential use shall be limited to the hours between 7:00 a.m. and 10:00 p.m. The City is also required to review new public and private development proposals to determine conformance with the policies of the Noise Element, the City shall require an acoustical analysis early in the review process so that noise mitigation may be included in the project design. For development not subject to environmental review, the requirements for an acoustical analysis shall be implemented prior to issuance of a building permit.

In addition, Section 9.28.030 of the Morro Bay Municipal Code regulates noise from construction and building repair activities. This section prohibits “erection (including excavating), demolition, alteration or repair of any building or general land grading and contour activity using equipment in such a manner as to be plainly audible at a distance of fifty feet from the building” between 7:00 p.m. and 7:00 a.m. on weekdays, and between 7:00 p.m. and 8:00 a.m. on weekends.

4.10.2 Methodology and Significance Thresholds

a. Methodology and Significance Thresholds

In accordance with Appendix G of the *CEQA Guidelines*, a significant noise impact would occur if new development facilitated by the General Plan and LCP Update would result in:

- 1 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;
- 2 Generation of excessive groundborne vibration or groundborne noise levels;
- 3 For a project located within the vicinity of a private airstrip or 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 expose people residing or working in the project area to excessive noise levels.

Construction Noise

This section estimates construction noise from development facilitated by the proposed General Plan and LCP Update based on reference noise levels reported by the FTA’s *Noise and Vibration Impact Assessment* (2006) for various pieces of construction equipment. This analysis conservatively

assumes that construction equipment typically operates as close as 50 feet from the nearest receptors when construction activity occurs adjacent to noise-sensitive land uses. Construction noise level estimates do not account for the presence of intervening structures or topography, which could reduce noise levels at receptor locations. New development facilitated by the General Plan and LCP Update would have a significant impact if temporary construction noise during permitted daytime hours could expose noise-sensitive receptors to noise levels that exceed applicable standards.

Groundborne Vibration

This analysis applies the following vibration thresholds established by the FTA for disturbance of people:

- 65 VdB for buildings where low ambient vibration is essential for interior operations (such as hospitals and recording studios);
- 72 VdB for residences and buildings where people normally sleep, including hotels; and
- 75 VdB for institutional land uses with primary daytime use (such as churches and schools).

These thresholds apply to “frequent events,” which the FTA defines as vibration events occurring more than 70 times per day. The thresholds for frequent events are considered appropriate because of the scale and duration of construction activity that could occur under the General Plan and LCP Update. In addition, this analysis applies the FTA thresholds shown in Table 4.10-5 for potential structural damage to buildings from construction vibration.

Table 4.10-5 Vibration-related Building Damage Thresholds

Building Category	PPV (in/sec)	Approximately L_v
I. Reinforced-concrete, steel or timber (no plaster)	0.50	102
II. Engineered concrete and masonry (no plaster)	0.30	98
III. Non-engineered timber and masonry buildings	0.20	94
IV. Buildings extremely susceptible to vibration damage	0.12	90

PPV = peak particle velocity

in/sec = inches per second

L_v = root mean square velocity in decibels (VdB) re 1 micro-inch/second

Source: FTA 2006

On-site Operational Noise

On-site activities at new development facilitated by the General Plan and LCP Update would have a significant impact if such activities would expose neighboring noise-sensitive land uses to noise levels exceeding applicable City’s noise standards. The City’s existing noise standards are shown in Table 4.10-2, Table 4.10-3, and Table 4.10-4, and are reiterated in the General Plan and LCP Update.

Increase in Traffic Noise

This analysis involves noise contour modeling to estimate noise levels associated with existing and future (year 2040) traffic on area roadways. Projected traffic volumes in the year 2040, assuming full buildout of the General Plan and LCP Update, are used to predict future noise contours (refer to the Circulation Element Update Final Technical Report included in Appendix E). To assess the increase in

noise-sensitive receptors' exposure to traffic noise during buildout facilitated by the General Plan and LCP Update existing and future noise contours are compared. Proposed General Plan and LCP Update policies are then evaluated to determine their ability in protecting noise-sensitive receptors from excessive increases in ambient noise.

Exposure of New Noise-sensitive Land Uses to Noise

This section analyzes noise exposure to new noise-sensitive land uses for informational purposes only because the Second District Court of Appeal found in 2011 that, as an impact of the environment on the project, it is not required for CEQA compliance (*Ballona Wetlands Land Trust et al. v. City of Los Angeles*). Projected noise contours for the year 2040 were evaluated to estimate future exposure to ambient traffic noise. Estimated noise levels are compared to the City's existing exterior noise compatibility standards, shown in Table 4.10-2, Table 4.10-3, and Table 4.10-4 and reiterated in the General Plan and LCP Update, and to the State's Title 24 interior noise standard of 45 dBA CNEL.

b. Project Impacts and Mitigation Measures

Threshold 1: Would the project 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?

Impact N-1 CONSTRUCTION OF INDIVIDUAL PROJECTS FACILITATED BY THE GENERAL PLAN AND LCP UPDATE WOULD TEMPORARILY PRODUCE HIGH NOISE LEVELS, POTENTIALLY AFFECTING NEARBY NOISE-SENSITIVE LAND USES. COMPLIANCE WITH EXISTING STANDARDS AND GENERAL PLAN AND LCP UPDATE GOALS AND POLICIES WOULD ENSURE CONSTRUCTION ACTIVITY ASSOCIATED WITH REDEVELOPMENT OR NEW DEVELOPMENT WOULD LIMIT NOISE DISTURBANCE AT NOISE-SENSITIVE RECEPTORS IN THE CITY. THEREFORE, THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Noise from individual construction projects carried out under the General Plan and LCP Update would temporarily increase ambient noise levels on and adjacent to individual construction sites, including noise from construction traffic. Since there are no specific plans or time scales for individual development projects that would be carried out under the General Plan and LCP Update, it is not possible to determine exact noise levels, locations, or time periods for construction of such projects. However, sites adjacent to areas where higher density future development or redevelopment is anticipated to occur would be exposed to the highest levels of construction noise for the longest duration. New development would result from conversion of uses in response to market demand, as well as increased density in the downtown area. This development would facilitate considerable construction activity over the life of the General Plan and LCP Update.

Construction activities, including traffic, demolition, and reconstruction, would generate noise. Table 4.10-6 illustrates typical noise levels associated with various, common types of construction equipment at a minimum distance of 50 feet, which is representative of the exposure of adjacent noise-sensitive receptors to construction noise. Noise from stationary sources of equipment typically drops off at a rate of approximately 6 dBA per doubling of distance. Therefore, noise levels would be about 6 dBA lower at 100 feet from the noise source and 12 dBA lower at a distance of 200 feet from the noise source, in comparison to the minimum distance of 50 feet. This analysis assumes that pile drivers, which are sometimes used in construction of multi-story buildings with pile foundations, would not be required for new construction or redevelopment in Morro Bay.

Table 4.10-6 Typical Noise Levels for Construction Equipment

Equipment	Estimated Noise Levels at Nearest Sensitive Receptors (dBA Leq)		
	50 feet	100 feet	200 feet
Air Compressor	81	75	69
Backhoe	80	74	68
Concrete Mixer	85	79	73
Dozer	85	79	73
Grader	85	79	73
Jackhammer	88	82	76
Paver	89	83	77
Saw	76	70	64
Scraper	89	83	77
Truck	88	82	76

Source: FTA 2006

As shown in Table 4.10-6, noise levels from individual pieces of construction equipment could reach up to 89 dBA Leq at adjacent land uses located approximately 50 feet away from an active construction site. Construction noise near active construction sites in the planning area would exceed ambient noise levels and may temporarily disturb people at neighboring properties.

Section 9.28.030 of the Morro Bay Municipal Code restricts the timing of construction activities authorized by a City permit to the hours of 7:00 a.m. to 7:00 p.m. Monday through Friday and 8:00 a.m. to 7:00 p.m. on weekends and holidays. Implementation of and adherence to the following policies in the General Plan and LCP Update Noise Element would ensure application of noise reduction strategies and timing restrictions on construction activity, as necessary to protect noise-sensitive receptors.

Goal NOI-3 Noise from construction activities associated with maintenance vehicles, special events, and other nuisances is minimized in residential areas and near noise-sensitive land uses.

- Policy NOI-3.1 Source Reduction.** Reduce construction, maintenance, and nuisance noise at the source as the first and preferred strategy to reduce noise conflicts.
- Policy NOI-3.3 Construction Shielding.** Encourage shielding for construction activities to reduce noise levels and protect adjacent noise-sensitive land uses.
- Policy NOI-3.4 Construction Hours.** Limit allowable hours for construction activities and maintenance operations located adjacent to noise-sensitive land uses.

The temporary nature of construction noise and the City’s restrictions on the timing and manner of construction activities described in the Morro Bay Municipal Code would reduce noise impacts at nearby noise-sensitive receptors. General Plan and LCP Update Noise Element Goal NOI-3, and Policies NOI-3.1, 3.3, and 3.4 would further reduce potential impacts to noise-sensitive receptors

from temporary construction noise. Therefore, the impact of construction noise from development facilitated by the General Plan and LCP Update would be potentially significant.

Mitigation Measures

No mitigation would be required.

Threshold 2: Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Impact N-2 CONSTRUCTION OF INDIVIDUAL PROJECTS FACILITATED BY THE GENERAL PLAN AND LCP UPDATE COULD TEMPORARILY GENERATE GROUNDBORNE VIBRATION, POTENTIALLY AFFECTING ADJACENT SENSITIVE LAND USES. ALTHOUGH THE MORRO BAY MUNICIPAL CODE’S TIMING RESTRICTIONS ON CONSTRUCTION ACTIVITY WOULD LIMIT VIBRATION DISTURBANCE, HIGH VIBRATION LEVELS DURING WORKING CONSTRUCTION HOURS COULD POTENTIALLY DISTURB PEOPLE OR DAMAGE FRAGILE BUILDINGS. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION.

Construction of individual projects facilitated by the General Plan and LCP Update could intermittently generate strong vibration on and adjacent to construction sites. Typical construction equipment that produces vibration includes vibratory rollers for paving, caisson drills, bulldozers, loaded trucks, and jackhammers. This analysis assumes that construction activity would not involve the use of vibration-generating pile drivers, as discussed in Impact N-1. There are no anticipated major sources of operational groundborne vibration in the city through the General Plan and LCP Update horizon; therefore, this analysis focuses on potential vibration impacts during construction activity.

Table 4.10-7 shows estimated vibration levels from the use of typical construction equipment, based on reference levels provided by the FTA at a distance of 25 feet from the source.

Table 4.10-7 Vibration Levels for Typical Construction Equipment

Equipment	Estimated VdB at Nearest Sensitive Receptors			
	25 Feet	50 Feet	100 Feet	200 Feet
Caisson Drilling	87	80	74	67
Jackhammer	79	72	66	59
Large Bulldozer	87	80	74	67
Loaded Trucks	86	79	73	66
Small Bulldozer	58	51	45	38
Vibratory Roller	94	87	81	74

Source: FTA 2006

Based on the vibration levels shown in Table 4.10-7, vibration-sensitive receptors could experience the strongest vibration during the use of vibratory rollers, caisson drills, and large bulldozers at neighboring construction sites. Vibration levels from vibratory rollers could approach 94 VdB at a distance of 25 feet from the source and 87 VdB at 50 feet.

Compliance with Section 9.28.030 of the Morro Bay Municipal Code would restrict the timing of construction activities authorized by a City permit to the hours of 7:00 a.m. to 7:00 p.m. Monday

through Friday and 8:00 a.m. to 7:00 p.m. on weekends and holidays. This requirement for new development would protect residents from exposure to vibration during normal sleeping hours. Therefore, vibration would not exceed the FTA's thresholds of 72 VdB for residences and buildings where people normally sleep. However, vibration levels during daytime construction activity could potentially exceed the FTA threshold of 75 VdB for institutional land uses like schools, churches, or offices with primary daytime use. The use of vibratory rollers also could generate vibration levels that equal or exceed the FTA's thresholds of 90 VdB for buildings extremely susceptible to vibration damage and 94 VdB for non-engineered timber and masonry buildings. Therefore, impacts related to vibration would be potentially significant.

Mitigation Measures

Mitigation Measures N-2 would be required to reduce construction-related vibration to the extent feasible.

N-2 Construction Vibration Control Measures and Notification

The following new policies shall be added to the Noise Element under Goal NOI-3:

Policy NOI-3.5 Vibration Control. Control construction vibration by avoiding the use of vibratory rollers near vibration-sensitive receptors and scheduling construction activities with the highest potential to produce vibration to hours with the least potential to affect sensitive land uses.

Policy NOI-3.6 Construction Vibration Notification. Developers shall notify neighbors of scheduled construction activities that would generate vibration.

Significance After Mitigation

The avoidance of vibratory rollers in close proximity to vibration-sensitive receptors would prevent potential structural damage from vibration. In addition, the appropriate scheduling of construction activities and notification of neighbors would minimize disturbance of people from vibration-generating equipment. Compliance with the vibration control and notification measures in Mitigation Measure N-2 would reduce temporary vibration impacts to a less than significant level.

<p>Threshold 1: Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project expose persons to or generate noise levels in excess of standards established in the local general plan, or noise ordinance, or applicable standards of other agencies?</p>

Impact N-3 DEVELOPMENT FACILITATED BY THE GENERAL PLAN AND LCP UPDATE COULD INCREMENTALLY INCREASE TRAFFIC AND ASSOCIATED NOISE LEVELS ALONG ROADWAYS IN MORRO BAY, EXPOSING NOISE-SENSITIVE LAND USES LOCATED NEAR ROADWAYS TO INCREMENTALLY GREATER NOISE LEVELS. HOWEVER, IMPLEMENTATION OF POLICIES IN THE GENERAL PLAN AND LCP UPDATE WOULD ENSURE THAT TRAFFIC NOISE WOULD HAVE A LESS THAN SIGNIFICANT IMPACT.

Full buildout of the General Plan and LCP Update, over a period of 20 plus years, is anticipated to add up to 881 new dwelling units and approximately 8.3 million square feet of non-residential space (refer to Table 2-5 in Section 2, *Project Description*). The General Plan and LCP Update would re-designate existing land uses to facilitate development on the remaining vacant parcels in the downtown area as well as redevelopment of existing built-out parcels in the North Embarcadero area. This pattern of development would allow for additional housing, mixed uses, and visitor-

servicing commercial in these areas. Redevelopment and new development would result in increased vehicle trips on roadways in the planning area. By generating new vehicle trips, new development would incrementally increase the exposure of land uses along roadways in Morro Bay to traffic noise.

The increase in roadway activity would result in greater ambient noise throughout the planning area. Figure 4.10-3a through Figure 4.10-3d show the estimated noise contours from traffic activity in the year 2040, assuming full buildout of the General Plan and LCP Update. The highest estimated ambient noise levels would be greater than 75 dBA Ldn or CNEL along SR 1 from SR 41 to the southern end of the planning area and along Main Street from Beach Street to the Morro Bay State Park. These noise levels are a conservative estimate of future noise levels because they do not account for site-specific conditions that may reduce exposure to ambient noise, such as intervening structures and topography between noise sources and receptors. Increases in ambient noise would have the greatest effect on noise-sensitive uses, such as residences and schools.

The General Plan and LCP Update Noise Element includes the following policies intended to reduce exposure to traffic noise.

Goal NOI-2 Minimize transportation-related noise.

- Policy NOI-2.1 Transportation Noise Standards.** Mitigate noise created by any existing or new transportation noise source so that it does not exceed the exterior or interior sound levels specified in this element. Routes for use by heavy trucks will be located away from noise-sensitive land uses when feasible.
- Policy NOI-2.2 Compatible Roadway Design.** Consider noise impacts in the design of road systems and give special consideration to noise-sensitive uses. To the greatest extent possible, the design of roads should minimize roadway noise to levels acceptable in surrounding areas.
- Policy NOI-2.3 Project Design Techniques.** Prioritize use of site planning and project design techniques to mitigate excessive noise. The use of noise barriers shall be considered a means of achieving the noise standards only after all other practical design-related noise mitigation measures have been integrated into the project.
- Policy NOI-2.4 Noise-Reducing Technologies.** Employ noise-reducing technologies such as quiet pavement surfaces to reduce the effects of roadway noise on noise-sensitive land uses.
- Policy NOI-2.5 Alternative Transportation.** Promote alternative transportation that minimizes noise impacts.

Figure 4.10-3a Future Noise Contours

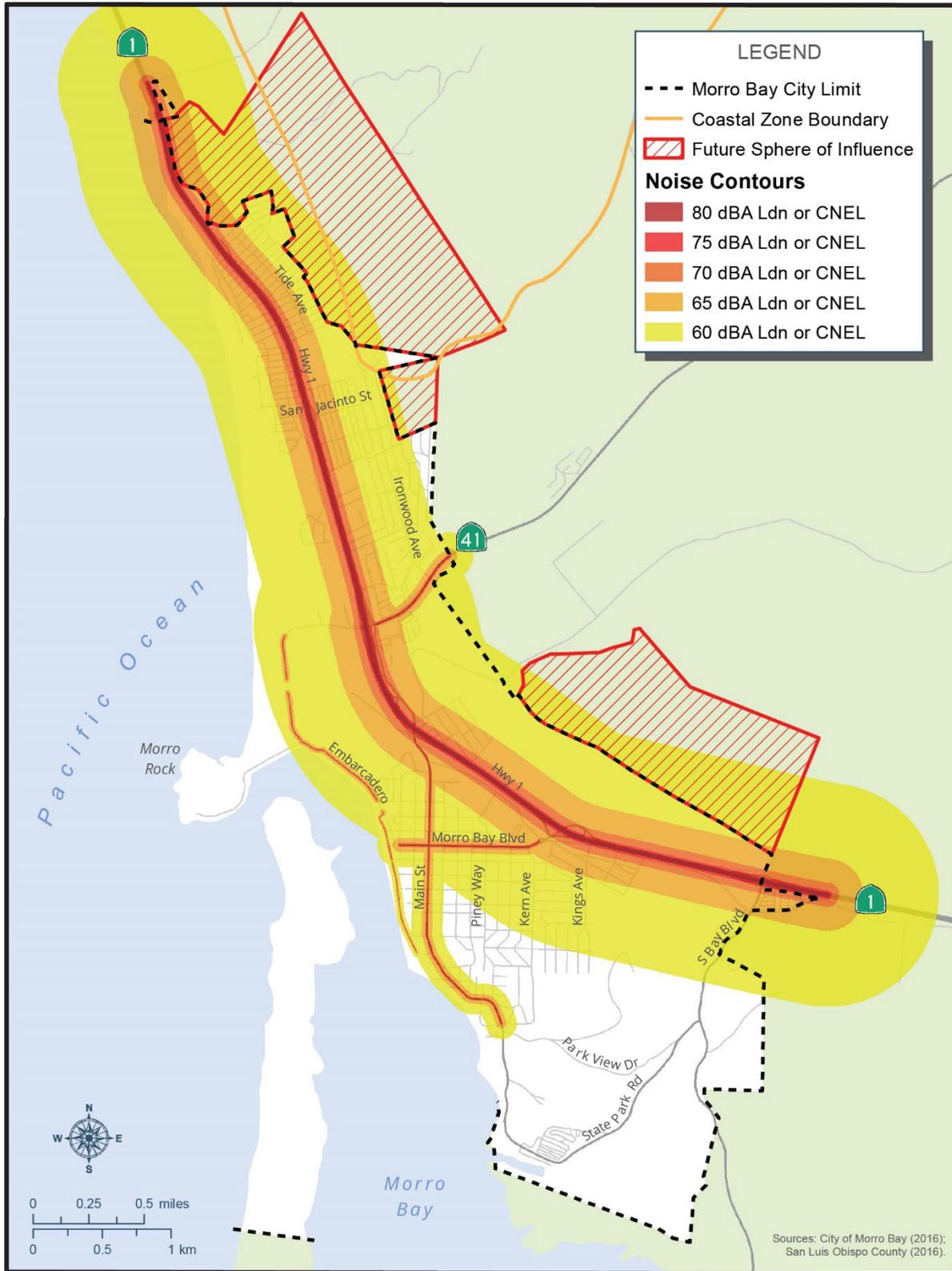


Figure 4.10-3b Future Noise Contours

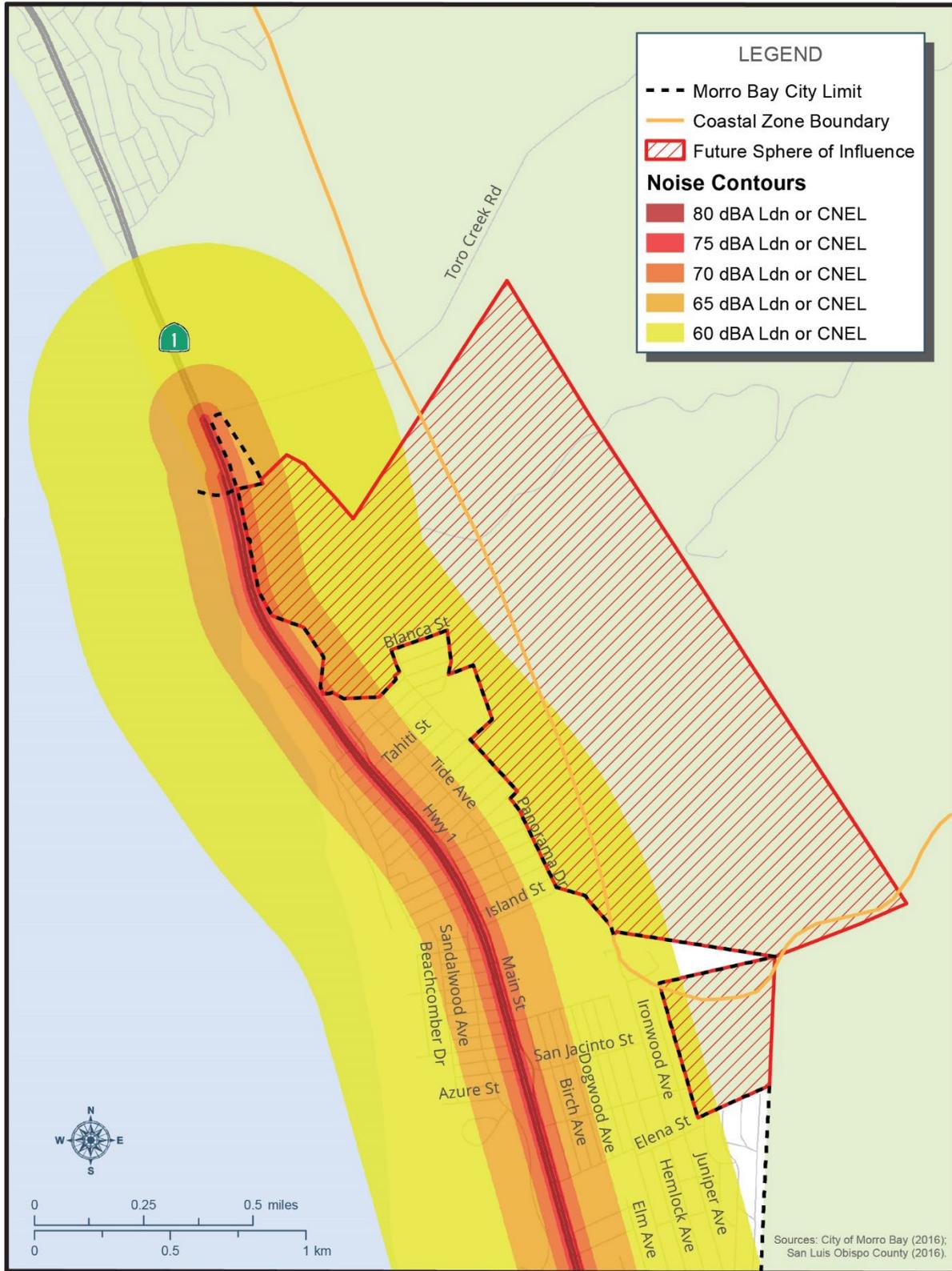


Figure 4.10-3c Future Noise Contours

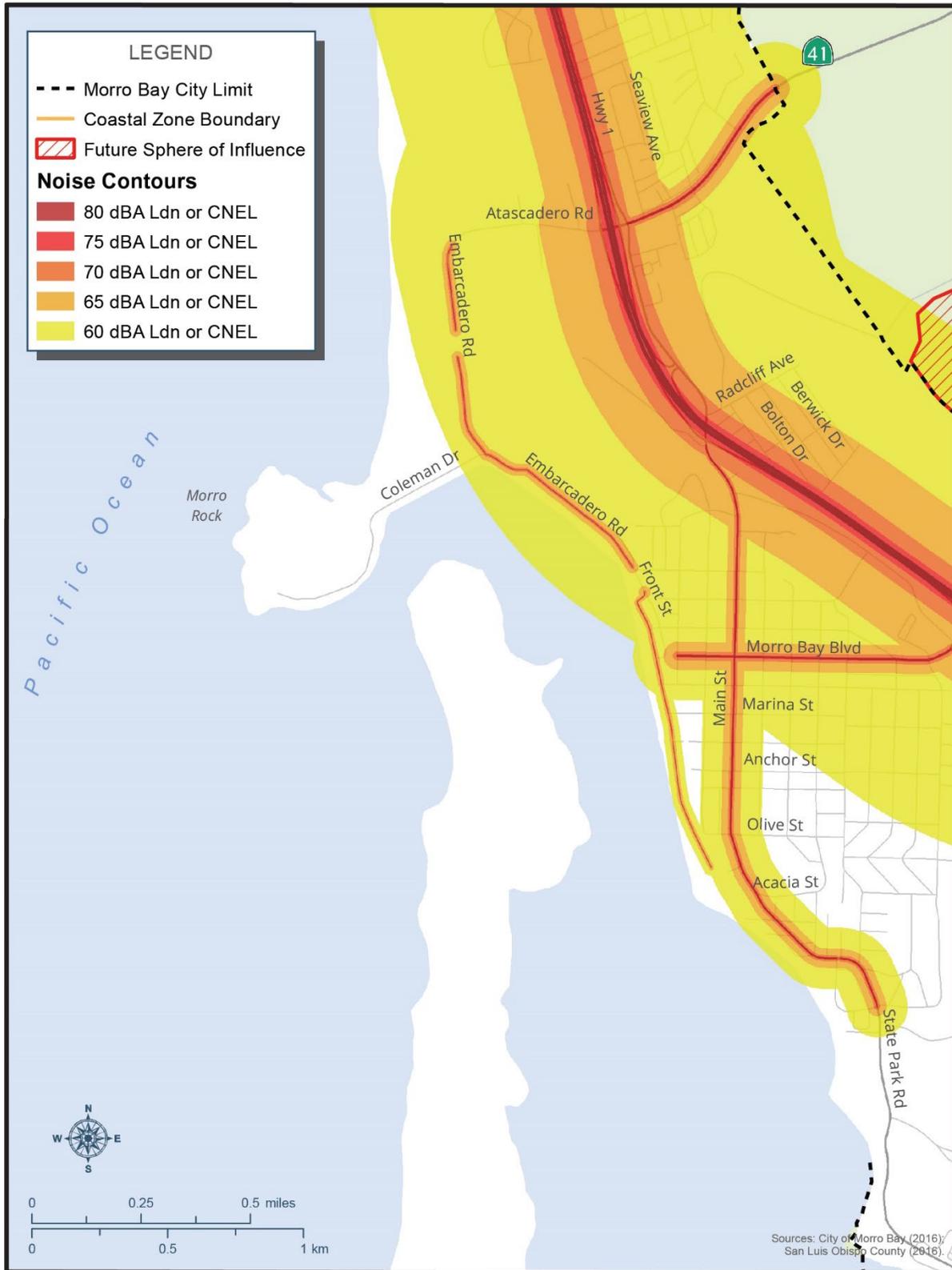
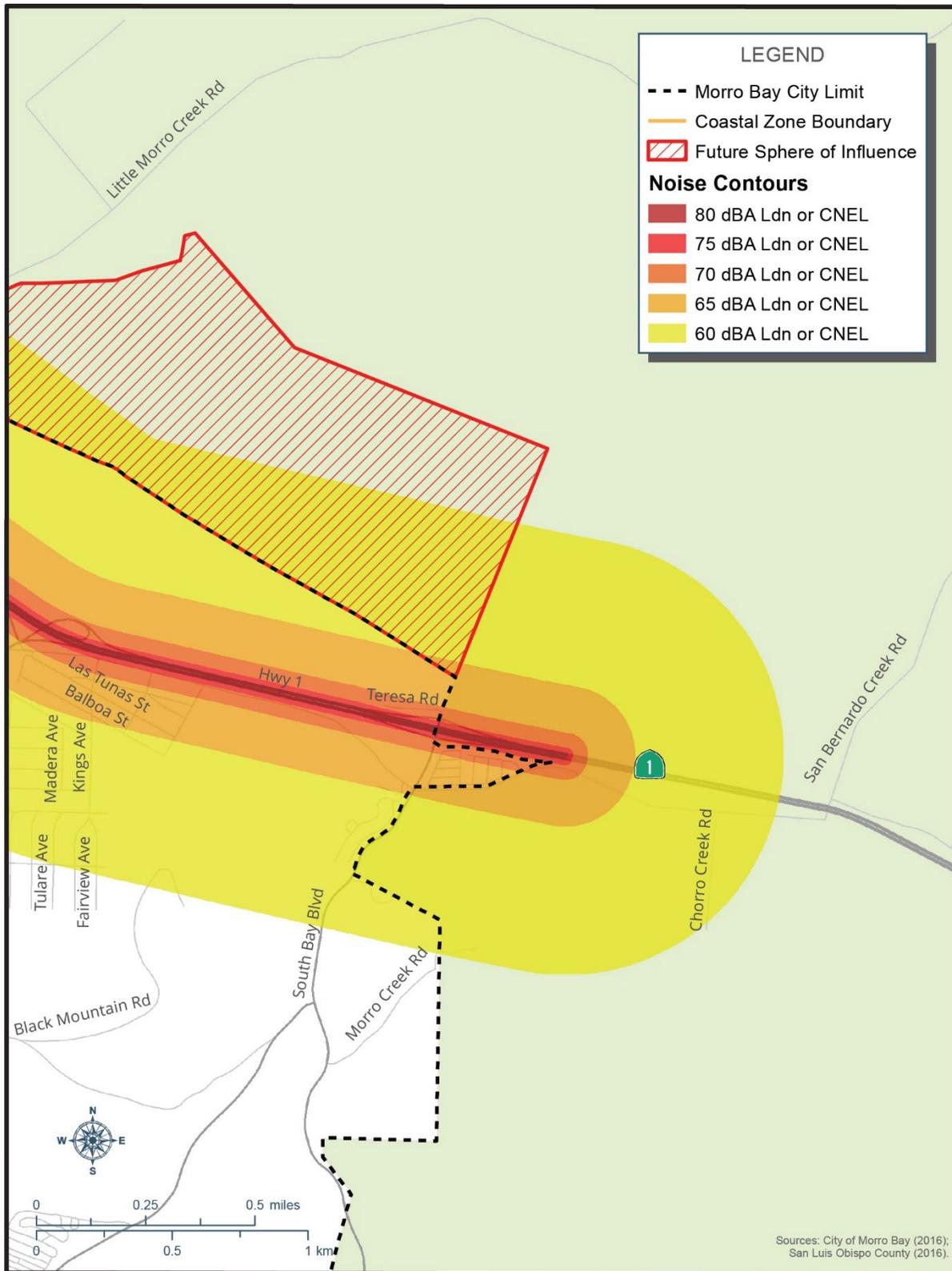


Figure 4.10-3d Future Noise Contours



As shown in Figure 4.10-3a through Figure 4.10-3d, noise-sensitive land uses in the General Plan and LCP Update planning area would be exposed to incremental increases in traffic noise along major roadways. However, implementation of Policies NOI-2.1 through NOI-2.4 would promote the use of design features and techniques intended to minimize roadway noise affecting sensitive receptors and in order to maintain compliance with the City's interior and exterior noise standards. In addition, implementation of the Policy NOI-2.5 would encourage the use of alternative transportation in order to minimize increases in traffic that would result in increased noise in the planning area.

In summary, implementation of the policies for transportation-related noise would reduce noise and avoid generation of excessive noise from the local highways and city streets, which would minimize the exposure of sensitive receptors to traffic noise. This impact would be less than significant.

Mitigation Measures

No mitigation would be required.

Threshold 1: Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project expose persons to or generate noise levels in excess of standards established in the local general plan, or noise ordinance, or applicable standards of other agencies?

Impact N-4 NEW DEVELOPMENT FACILITATED BY THE GENERAL PLAN AND LCP UPDATE WOULD INTRODUCE NEW OPERATIONAL NOISE SOURCES ASSOCIATED WITH RESIDENTIAL, COMMERCIAL, INDUSTRIAL, AND MIXED-USE LAND USES. THE CONTINUED REGULATION OF ON-SITE NOISE, CONSISTENT WITH THE MORRO BAY MUNICIPAL CODE, WOULD MINIMIZE DISTURBANCE TO ADJOINING USES. THEREFORE, OPERATIONAL NOISE FROM THE PROJECT WOULD HAVE A LESS THAN SIGNIFICANT IMPACT.

New development facilitated by the General Plan and LCP Update would add up to an estimated 881 new dwelling units and approximately 8.3 million square feet of non-residential space in the planning area (refer to Table 2-5 in Section 2, *Project Description*). This new development would introduce on-site activities that generate operational noise. Typical noise sources at new residential and mixed-use development would include rooftop ventilation and heating systems, and delivery and hauling systems. New residential and mixed-use development near commercial and industrial areas could expose new residents to noise associated with loading activity and industrial equipment. Noise generated by on-site activities at new development would be subject to the City's maximum allowable noise levels at receiving land uses, as shown in Table 4.10-4, and reiterated in the General Plan and LCP Update.

In addition to the goals and policies listed under Impact N-1, the following goals and policies in the General Plan and LCP Update Noise Element would ensure continued application of local standards for on-site noise.

Goal NOI-1 A healthy and safe noise environment for Morro Bay residents, businesses, and visitors.

Policy NOI-1.1 Noise Compatibility. Ensure new development is compatible with existing and future noise environments by continuing to use potential noise exposure as a criterion in land use planning.

Policy NOI-1.2 Noise-Sensitive Land Uses. Maintain acceptable stationary noise levels at existing noise-sensitive land uses.

Policy NOI-1.3 Noise-Reducing Project Features. Incorporate design and construction features into residential and mixed-use projects that shield noise-sensitive land uses from excessive noise.

Policy NOI-1.4 Acoustical Studies. Require an acoustical study for proposed projects in areas where existing or projected noise levels exceed or would exceed the maximum allowable levels established in this element. Adopt procedures to ensure project compliance with mitigation measures and enforcement of noise standards.

Goal NOI-3 Noise from construction activities associated with maintenance vehicles, special events, and other nuisances is minimized in residential areas and near noise-sensitive land uses.

Policy NOI-3.2 Special Events. Require that special events at restaurants, bars, parking facilities, and other commercial uses or beach events where large numbers of people may be present adjacent to sensitive noise receptors comply with the noise standards in this element.

Implementation of the above policies and goals in the General Plan and LCP Update would provide for compliance with noise standards in the planning area, enforcement of the City's stationary noise standards, and limits on special events or beach events next to noise-sensitive land uses. The continued regulation of on-site noise, consistent with the Municipal Code, would minimize disturbance to adjoining noise-sensitive land uses. Therefore, on-site operational noise at new development facilitated by the General Plan and LCP Update would have a less than significant impact.

Mitigation Measures

No mitigation would be required.

Threshold 3: For a project located within the vicinity of a private airstrip or 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 expose people residing or working in the project area to excessive noise levels?

Impact N-5 THE GENERAL PLAN AND LCP UPDATE PLANNING AREA IS LOCATED 17 MILES FROM THE NEAREST AIRPORT. THEREFORE, THERE WOULD BE NO IMPACTS ASSOCIATED WITH AIRPORT NOISE IN THE PLANNING AREA.

As discussed in Section 4.7, *Hazards and Hazardous Materials*, the nearest airport to the General Plan and LCP Update planning area is the San Luis Obispo County Regional Airport located which is 17 miles away from the city. The planning area is located outside of the existing and projected future noise contours associated with the airport. Therefore, new development facilitated by the General Plan and LCP Update, particularly noise-sensitive uses, would not be exposed to aircraft noise associated with nearest airport to the planning area. There would be no impacts related to aircraft noise.

Mitigation Measures

No mitigation would be required.

c. Cumulative Impacts

The analysis in this section examines impacts of the General Plan and LCP Update on noise throughout the cumulative impact analysis area, which consists of San Luis Obispo County. Noise impacts are based on factors related to site-specific and project-specific characteristics and conditions, such as distance to noise sources and barriers between land uses and noise sources. Therefore, site-specific cumulative impacts related to exposure of existing and planned future receptors to construction and stationary noise sources would be similar to General Plan and LCP Update impacts discussed above and less than significant with the incorporation of mitigation.

The potential cumulative increase in traffic noise associated with buildout of the General Plan and LCP Update is evaluated in Impact N-3, above. Figure 4.10-3a through Figure 4.10-3d show the estimated noise contours from traffic activity in the year 2040, assuming full buildout of the General Plan and LCP Update. As discussed in Impact N-3, implementation of General Plan and LCP Update policies for transportation-related noise would reduce noise and avoid generation of excessive noise from the local highways and city streets, which would minimize the exposure of sensitive receptors to traffic noise. Therefore, the overall contribution of the General Plan and LCP Update to cumulative traffic noise would not be cumulatively considerable.

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4.11 Population and Housing

This section evaluates the potential population growth and potential displacement of housing impacts associated with implementation of the General Plan and LCP Update. Population, housing, and employment data are available on a city, county, regional, and state level. This EIR uses data collected and provided at the city level in comparison to county and state trends.

4.11.1 Setting

a. Population

Table 4.11-1 shows population growth in the city, county, and state since census year 2010.

Table 4.11-1 Population Growth in the City, County, and State

Year	Morro Bay	San Luis Obispo County	California
2010	10,234	269,637	37,253,956
Existing (2016)	10,714	278,141	39,179,627
Percent Change	4.7%	3.2%	5.2%

Source: DOF 2018

As shown in Table 4.11-1, the city’s population increased by 4.7 percent between 2010 and 2016 (California Department of Finance [DOF] 2018). The city population grew at a higher rate than the county, but at a lower rate than the state between 2010 and 2016. The city’s 2016 population represents 3.9 percent of the county’s 2016 population.

b. Housing

A household is defined as a group of people who occupy a housing unit (U.S. Census Bureau 2017). A household differs from a dwelling unit because the number of dwelling units includes both occupied and vacant dwelling units. Typically, not all of the population in a given area lives in households. A portion of the population lives in group quarters, such as board and care facilities, while others are homeless.

Housing Units

Table 4.11-2 shows the growth in number of housing units in the city and the state between 2010 and 2016.

Table 4.11-2 Housing Inventory

	Morro Bay		San Luis Obispo County		California	
	2010	2016	2010	2016	2010	2016
Total Housing Units	6,320	6,414	117,315	120,308	13,670,304	13,982,846
Occupied	4,844	4,988	102,016	106,165	12,568,167	12,992,093
Vacancy Rate	23.4%	22.2%	13.0%	11.8%	8.1%	7.1%
Growth from 2010 to 2016	1.5%		2.6%		2.3%	

Source: DOF 2018

As shown in Table 4.11-2, between 2010 and 2016, 94 units were added to the city’s housing inventory resulting in overall growth of 1.5 percent during this period. Between 2010 and 2016, the county and state housing inventory grew at higher rates of 2.6 percent and 2.3 percent, respectively.

In 2016, approximately 72 percent of the housing units in the city were single-family detached homes, approximately six percent were attached single-family homes, approximately 15 percent were multi-family units (buildings of at least two units), and approximately eight percent were mobile homes. In general, the city has a larger share of renter-occupied housing than the state as a whole. In addition, a large number of seasonal residents are reflected in the number of seasonal use housing units because Morro Bay is a tourist destination. About 20 percent of the total housing inventory in the city consists of units held for seasonal use, compared to only three percent of the statewide housing inventory (Appendix B).

Household Size

Small households (one to two persons per household [pph]) traditionally reside in units with one to two bedrooms; family households (three to four pph) normally reside in units with three to four bedrooms; and large households (five or more pph) typically reside in units with four or more bedrooms. However, the number of units in relation to the household size may also reflect preference and economics. Many small households obtain larger units, and some larger households live in small units for economic reasons. Table 4.11-3 compares the size of households in the city, county, and state in 2010 and 2016.

Table 4.11-3 Household Size in the City, County, and State

Year	Morro Bay		San Luis Obispo County		California	
	2010	2016	2010	2016	2010	2016
Household Size (pph)	2.08	2.12	2.48	2.52	2.90	2.95
Growth from 2010 to 2016		1.9%		1.6%		1.7%

Source: DOF 2018

As shown in Table 4.11-3, the average household size in Morro Bay increased from 2.08 pph in 2010 to 2.12 pph in 2016 (an increase of 1.9 percent). Over the same period, household size in the county increased from 2.48 to 2.52 pph (an increase of 1.6 percent) and household size in the state increased from 2.90 to 2.95 pph (an increase of 1.7 percent). Between 2010 and 2016, the city maintained a lower average household size in comparison to the county and state average household sizes.

c. Regulatory Setting

State

State Housing Element Statutes

State housing element statutes (Government Code Sections 65580-65589.9) mandate that local governments adequately plan to meet the existing and projected housing needs of all economic segments of the community. The law recognizes that in order for the private market to adequately address housing needs and demand, local governments must adopt land use plans and regulatory systems that provide opportunities for, and do not unduly constrain, housing development. As a result, State housing policy rests largely upon the effective implementation of local general plans and in particular, housing elements. Additionally, Government Code §65588 dictates that housing elements must be updated at least once every eight years.

Regional

Regional Housing Needs Assessment

California's Housing Element law requires that each county and city develop local housing programs to meet their "fair share" of existing and future housing growth needs for all income groups, as determined by the DOF. SLOCOG is tasked with distributing the total State-projected housing need for the San Luis Obispo Region among SLOCOG's seven cities and the county's unincorporated communities by four income categories (extremely low and very low, low, moderate, and above moderate). This fair share allocation is referred to as the Regional Housing Needs Assessment (RHNA) process. This RHNA allocation represents the minimum number of housing units by income level each community is required to plan for through a combination of: 1) zoning "adequate sites" at suitable densities that foster affordability; and 2) housing programs to support retention, rehabilitation, and production of lower income units with a reasonable degree of entitlement certainty. Morro Bay's allocation from the SLOCOG *Regional Housing Needs Plan* (RHNP), covering 2019 through 2028 and distributed among the five income categories, is shown in Table 4.11-4.

Table 4.11-4 Regional Housing Needs Assessment 2014-2019

Income Group	RHNA Allocation (units)	% of Total
Extremely Low	48	12.3%
Very Low	49	12.5%
Low	60	15.4%
Moderate	70	17.9%
Above Moderate	164	41.9%
Total	391	100.0%

Source: SLOCOG 2019a

San Luis Obispo Council of Governments

As discussed in Section 4.9, *Land Use and Planning*, the City of Morro Bay is located within the SLOCOG planning area. SLOCOG functions as the Metropolitan Planning Organization (MPO) for San Luis Obispo County and the towns and cities therein and is responsible for preparing and implementing the region’s RHNA and the 2019 Regional Transportation Plan (RTP). The 2019 RTP is a long-term blueprint of the region’s transportation system, requires updates ever four years, and plans for a 25-year timeframe. The plan identifies and analyzes transportation needs of the metropolitan region and creates a framework for project priorities. SLOCOG projections for the planning area consider regional, state, and national economic trends and planning policies.

Local

City of Morro Bay Housing Element

The Housing Element is one of the seven State-mandated elements of the General Plan (Government Code Sections 65300 through 65303.4). The Housing Element serves as a tool to identify and provide for the housing needs of the community. It identifies recent demographic and employment trends that may affect existing and future housing demand and supply. California law requires the Housing Element to establish policies and programs that will support the provision of an adequate housing supply for citizens of all income levels. The Housing Element is the only element that requires review by the State. The element addresses the City’s ability to meet the regional housing needs as determined by the State of California.

Morro Bay adopted its current (6th cycle) Housing Element in August 2020, covering the period 2020-2028. The 6th cycle Housing Element was certified by the California Department of Housing and Community Development (HCD) in September 2020. The Housing Element serves as a tool to identify and provide for the housing needs of the community and identifies recent demographic and employment trends that may affect existing and future housing demand and supply. The Housing Element addresses the City’s ability to meet the regional housing needs as determined by the State of California.

Housing Element Goal H-1 through Goal H-5, and Goal H- 7 through Goal H-8, and associated policies, are intended to preserve affordable units and prevent displacement in Morro Bay as follows:

Goal 1 Housing Supply. Provide a continuing supply of affordable housing to meet the needs of existing and future Morro Bay residents in all income categories.

Policy H-3 Funding. To the extent feasible, solicit housing assistance funds from the state and federal governments in conjunction with nonprofit and for-profit developers to be used in the construction of new and rehabilitation of existing secondary units and very low- and low-income housing units.

Policy H-4 Methods. Continue to explore alternative methods for increasing its affordable housing stock with the goals of providing adequate extremely low-, very low-, and low-income, senior, ADA accessible, and workforce housing.

Policy H-5 Housing Costs. Ensure that the City’s adopted policies, regulations, and procedures do not add unnecessarily to the cost of housing, while still attaining other important City objectives.

Policy H-6 General Affordability. Continue to require a percentage of new housing units built in the city be affordable to very low-, low-, and moderate-income households.

Policy H-7 Housing Trust Fund. Develop a Housing Trust Fund to be used for the development of affordable housing projects.

Policy H-8 Mixed Housing Types. Encourage the mixing of affordable housing throughout the community rather than concentrating affordable units in a few locations.

Policy H-10 Secondary Units. Allow for the development of secondary housing units as an affordable housing option throughout the city.

Goal 2 Conservation and Rehabilitation. Conserve and rehabilitate the city’s current stock of affordable housing.

Policy H-11 Section 8 Subsidies. Continue to maintain Section 8 rent subsidies.

Policy H-12 Special Needs Groups. Provide financial assistance for rehabilitation of homes for elderly, disabled, and disadvantaged persons.

Goal 3 Protect and conserve existing affordable housing stock in Morro Bay. Preserve all affordable housing units in the city.

Policy H-15 At-Risk Units. Cooperation with other governmental, for-profit, and non-profit entities to ensure no lower-income residents are adversely impacted by the conversion of existing affordable housing projects to market-rate rents.

Policy H- 16 Conversion to Condominiums. Continue to protect existing lower-income apartment units from loss through conversion to condominiums.

Policy H-17 Demolished Units. Require the replacement of very low-, low-, and moderate-income housing that is demolished with similar affordable housing.

Goal 4 Special Needs. Meet the housing needs of special groups of Morro Bay Residents, including seniors, disabled persons, and single persons.

Policy H-18 Senior Housing. Provide more senior housing opportunities throughout the city.

- Policy H-19** **Special Housing Needs.** Promote the development of special housing needs, such as transitional housing, housing for seniors, housing for persons with physical, developmental, or mental disabilities, farmworker housing, and housing for extremely low-income persons.
- Policy H-20** **Family Housing.** Support family housing that addresses resident needs for child care, youth services, recreation opportunities, and access to transit.
- Goal 5** **The Homeless.** Reduce the incidence of homeless persons in the community, work with other cities, the County, and various nonprofits to continue to operate a convenient homeless shelter for the region.
- Policy H-21** **Regional Homeless Shelter.** Participate in the operations and maintenance of the regional homeless shelter facility. The City will continue to provide information about housing opportunities and services for homeless persons through the Police Department as well as at City Hall.
- Goal 7** **Equal Opportunity.** Ensure equal access to sound, affordable housing for all persons regardless of race, creed, age, or sex.
- Policy H-24** **Fair Employment and Housing.** Promote the enforcement of the policies of the California Department of Fair Employment and Housing. The City declares that all persons regardless of race, creed, age, or sex, will have equal access to sound and affordable housing.
- Goal 8** **Public Participation.** Ensure participation of all economic segments of the community in the development of housing policy for Morro Bay.
- Policy H-25** **Public Participation.** Encourage the participation of all citizens of Morro Bay in the development of policies for the city.

As discussed in Section 2, *Project Description*, the 5th cycle Housing Element is up-to-date and in compliance and does not require updates or additional review as part of the General Plan and LCP Update. However, the 6th cycle Housing Element may be appended to the Blueprint portion of the General Plan and LCP Update in the future.

Measure F

Measure F is a voter-approved growth management ordinance that limits the city to 12,200 residents. Measure F limits the amount of water for commercial and industrial building permits to no more than 130 percent of the residential allocation. Therefore, to exceed the current growth limit, Morro Bay would be required to secure additional water resources and a majority of voters must elect to remove the limit.

4.11.2 Impact Analysis

a. Methodology

Population and housing trends in the city were evaluated by reviewing the most current data available from the U.S. Census Bureau, DOF, the current Morro Bay General Plan, and SLOCOG RHNP. Impacts related to population are generally social or economic in nature. Under CEQA, a social or economic change generally is not considered a significant effect on the environment unless the changes are directly linked to a physical change.

b. Significance Thresholds

The following thresholds are based on Appendix G to the *CEQA Guidelines*. For purposes of this EIR, impacts related to population and housing are considered significant if implementation of the General Plan and LCP Update would:

1. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).
2. Displace a substantial number of existing people or housing, necessitating the construction of replacement housing elsewhere.

For purposes of this analysis, “substantial” population growth is defined as growth exceeding SLOCOG population forecasts for the City of Morro Bay. “Substantial” displacement would occur if allowed land uses would displace more residences than would be accommodated through growth accommodated by the project.

c. Project Impacts and Mitigation Measures

Threshold 1: Would the project induce unplanned substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Impact PH-1 THE GENERAL PLAN AND LCP UPDATE WOULD NOT RESULT IN GROWTH IN THE PLANNING AREA THAT IS SUBSTANTIALLY GREATER THAN PROJECTED IN THE SLOCOG REGIONAL GROWTH FORECAST. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

The General Plan and LCP Update would designate land uses and define the type of development that can occur throughout the city through the planning horizon year of 2040. Table 4.11-5 presents the 2016 and projected 2040 population and housing estimates for the city based on the San Luis Obispo Council of Governments (SLOCOG) *2050 Regional Growth Forecast for San Luis Obispo County* and the proposed General Plan and LCP Update.

Table 4.11-5 Morro Bay Population and Housing Projections

City of Morro Bay	Existing (2016) ^a	General Plan and LCP Update 2040 Projections ^b	Change 2016 to 2040	Percent Change	SLOCOG Regional Growth Forecast 2040 Projections ^c	Change 2016 to 2040	Percent Change
Population (# of residents)	10,714	12,062	1,348	12.6%	12,092	1,378	12.9%
Housing (# of units; total/occupied)	6,414/ 4,988	7,295	881	13.7%/ 17.7%	5,660 ¹	678 ²	13.6%

Notes:

1. SLOCOG 2040 Housing Unit Projections based on occupied units.
2. Change in occupied units from 2016 to 2040.

Sources:

- a. DOF 2018
- b. Draft *Plan Morro Bay* (General Plan and LCP Update)
- c. SLOCOG 2016

As shown in Table 4.11-5, the General Plan and LCP Update projections anticipate that the city will grow by approximately 1,348 new residents and 881 new housing units while SLOCOG projects that the city will grow by approximately 1,378 new residents and 678 occupied housing units. Both the City and SLOCOG population projections are equivalent to an average annual population growth rate of approximately 0.5 percent through the year 2040. The General Plan and LCP Update projections anticipate overall growth in housing units by approximately 13.5 percent by 2040 and SLOCOG projections similarly anticipate overall growth in occupied housing units by approximately 13.6 percent by 2040. Overall, the anticipated population growth in the city through 2040 under the General Plan and LCP Update is similar to but less than the SLOCOG population growth projections for the city.

In addition, the land use plan and policies in the General Plan and LCP Update focus on working within the existing framework of the city, with limited vacant land, to creating a balance of uses that improves housing options and affordability in the city, while providing for sufficient services that support anticipated population growth. Opportunities to accommodate population growth through General Plan and LCP Update implementation include accommodating greater density in areas such as downtown and future redevelopment of the Morro Bay Power Plant and existing wastewater treatment plant areas, as well as in parts of downtown and the adjacent SR 1 corridor, North Main Street, and SR 41 areas.

The following goal and policies in the General Plan and LCP Update Land Use Element would ensure that growth in the city is managed and occurs in a manner consistent with community values and resources available.

Goal LU-3 Morro Bay grows in a manner that maintains community identity and well-being.

Policy LU-3.1 Growth Limits. Continue to limit the amount of development, including future population growth accommodated by Plan Morro Bay to a level supported by adequate and long-term sustainable available land, water supply, and other infrastructure and service capacity.

Policy LU-3.3 Future Growth. Accommodate future growth of housing and jobs in Morro Bay that is consistent with vision, values, policies, and actions of this plan through both infill and potential limited expansion of the sphere of influence.

Policy LU-3.7 Limited Outward Expansion. Allow for some limited outward expansion beyond the city's existing limits to achieve large-scale conservation of parcels and a small amount of rural-scale residential use and visitor-serving amenities to serve conservation lands. Standards applied to the future sphere of influence (SOI) area include keeping development off of ridgelines and preserve views of the city's backdrop of undeveloped open land. (See also Policies C-9.1 through C-9.5 and Implementation Actions C-30 and C-31.)

Implementation of these General Plan and LCP Update policies would minimize potential adverse effects associated with substantial population growth facilitated by the General Plan and LCP Update by accommodating growth in underutilized areas of the city and limiting growth to a level supported by available resources.

The General Plan and LCP Update does not directly specify a maximum population for Morro Bay. However, any growth (including any potential expansion of the SOI) in Morro Bay must be consistent with Measure F, limiting the city population to 12,200 residents. To exceed this number, Morro Bay would be required to secure additional water resources and a majority of voters would have to elect to remove the limit. Several actions have been developed to implement the General Plan and LCP Update, including Action LU-6, which proposes to reopen public discussions about the Measure F 12,200-person limit and undertake a process to either affirm, amend, or repeal Measure F when the city's population reaches 11,700. Therefore, the policies in the General Plan and LCP Update as well as the constraints of Measure F would prevent substantial population growth in the city such that it would result in adverse effects on the environment. This impact would be less than significant.

Mitigation Measures

Mitigation measures are not required.

Threshold 2: Would the project displace a substantial number of existing people or housing, necessitating the construction of replacement housing elsewhere?

Impact PH-2 IMPLEMENTATION OF THE GENERAL PLAN AND LCP UPDATE WOULD NOT DISPLACE SUBSTANTIAL NUMBERS OF EXISTING HOUSING OR PEOPLE, NECESSITATING THE CONSTRUCTION OF REPLACEMENT HOUSING ELSEWHERE. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

As shown in Table 4.11-5, the General Plan and LCP Update would enable development in Morro Bay through the year 2040 that could add up to 881 residential units to the city beyond the existing 2016 housing stock. The maximum possible number of residential units is determined by the maximum densities allowed for each land use designation and the amount of land area within that designation. However, the maximum number of units is unlikely to be reached because every residential parcel in Morro Bay would need to be developed to its maximum potential to reach the maximum number of units. Most of the planning area in Morro Bay is built out and existing buildings are generally in good condition. Therefore, consistent with General Plan and LCP Update Land Use Element Policy LU-3.5 to "Promote infill development on vacant or underutilized properties in the city as the preferred strategy for most new development in Morro Bay," development and

redevelopment under the General Plan and LCP Update would primarily occur on the Morro Bay Power Plant and City wastewater treatment plant sites, as well as in parts of downtown and the adjacent SR 1 corridor, North Main Street, and SR 41 areas. Focusing development in these areas would maximize the use of underutilized parcels and minimize displacement of existing housing and people that could otherwise result in development pressure on the periphery of the city. Additionally, directing new growth in these areas would utilize existing transportation and utility infrastructure.

In addition to Goal LU-3 and Policies LU-3.1, LU-3.3, and LU-3.7 listed under Impact PH-1, the following goals and policies of the Land Use Element of the General Plan and LCP Update would minimize the potential impacts associated with displacement of people and/or housing in the city:

Goal LU-1 The community form of Morro Bay reflects its vision and values, promoting a strong economy and high quality of life.

- Policy LU-1.1 Land Use Pattern.** Maintain the current pattern of Morro Bay’s land use to preserve the distinct character areas and community form, while enhancing and transforming areas with greatest potential for change to improve economic activity and align them with the community vision. (See Figure LU-4 Land Use Map.) New development shall be located within, contiguous with, or in close proximity to existing developed areas with adequate public services and where it will not have significant effects, either individually or cumulatively, on coastal resources.
- Policy LU-1.6 Innovative Housing Design.** Remove barriers to and create opportunities for innovative or nontraditional housing forms such as tiny houses, cohousing, and intergenerational housing.
- Policy LU-1.7 Mobile Home Parks.** Protect low-income housing opportunities offered by mobile home parks.
- Policy LU-3.4 High-Quality Jobs.** Support high-quality new development and redevelopment that provides for new economic activities, creates working family jobs that allow for upward mobility, improves housing affordability, and helps retain young individuals and families in the community.
- Policy LU-3.5 Infill Development.** Promote infill development on vacant or underutilized properties in the city as the preferred strategy for most new development in Morro Bay.

With incorporation of these goals and policies, the General Plan and LCP Update would result in a net increase in housing availability in the city, including affordable housing, and would provide housing to accommodate future growth.

Additionally, the City’s Housing Element serves as a tool to identify and provide for the housing needs of the community. It identifies recent demographic and employment trends that may affect existing and future housing demand and supply. California law requires the Housing Element to establish policies and programs that support the provision of an adequate housing supply for citizens of all income levels. The Housing Element addresses the City’s ability to meet the regional housing needs as determined by the State of California. As the Housing Element is up-to-date and in compliance, it does not require updates or additional review as part of the General Plan and LCP Update, but may be appended to the Blueprint in the future. Nevertheless, any development

facilitated by the General Plan and LCP Update would be required to be consistent with applicable policies in the Housing Element.

Displacement of existing residential units could still occur during redevelopment under the General Plan and LCP Update. Although no residential development that would be displaced by implementation of the proposed General Plan and LCP Update has been identified, if any such temporary displacement did occur, the 881 new residential units that could be added as a result of the General Plan and LCP Update, including a proportion of these as affordable housing in compliance with the City's existing Housing Element and proposed Land Use Element policies, would replace displaced residences.

It is not known when or where displacement or construction of housing in the planning area would occur. Therefore, it cannot be determined what project-specific environmental impacts would result from the construction and operation of replacement housing. As potential residential development or redevelopment projects are identified, additional project specific environmental analysis, as necessary, would be completed at that time to evaluate project-specific impacts to displacement of existing residences. Because the General Plan and LCP Update and General Plan Housing Element include goals and policies to increase overall housing in the city, and there are no current plans for displacement of housing, impacts related to displacement of existing residences from the General Plan and LCP Update would be less than significant.

Mitigation Measures

No additional policy-oriented mitigation would be required to address this impact. As individual development projects are considered for construction, separate environmental review may be required, which could result in the implementation of project-specific mitigation measures.

d. Cumulative Impacts

As described above, the implementation of the General Plan and LCP Update would not contribute to the displacement of existing residences in the city. Additionally, growth facilitated by the General Plan and LCP Update would occur within the bounds of the city's planning area and would be consistent with the regional projections for the city. Therefore, the General Plan and LCP Update would not contribute to cumulative impacts related to displacement in the greater cumulative impact analysis area (San Luis Obispo County), and would not result in significant cumulative population growth impacts beyond the planning area and the incremental population impacts of the proposed General Plan and LCP Update would not be cumulatively considerable.

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4.12 Public Services and Recreation

This section assesses potential impacts to public services including fire and police protection, public schools, libraries, and parks and recreation from the proposed General Plan and LCP Update. Impacts to water, wastewater, and solid waste services are discussed in Section 4.14, *Utilities*.

4.12.1 Setting

a. Fire Protection

Fire protection, first response emergency medical services, ocean fire and rescue, and technical rescue services in Morro Bay are provided by the Morro Bay Fire Department (MBFD). MBFD also undertakes hazardous material operations along with other services such as training activities, fire prevention and code enforcement, public education and assistance, disaster preparedness, and management of the City's Emergency Operations Center.

Personnel, Facilities, and Equipment

The city is served by one fully staffed fire station (Fire Station 53/Headquarters) at 715 Harbor Street and one non-staffed fire station (Fire State 54) at 460 Bonita Street. Fire personnel for the City of Morro Bay include a fire chief, 11 career fire suppression personnel, a three-quarter-time administrative technician, a full-time fire marshal, and up to 20 part-time reserve firefighters. MBFD operates two fire engines, one quint (75-foot ladder truck), one rescue vehicle, one command vehicle, two utility vehicles, and a mass casualty trailer. In addition to the City-owned fire engines, MBFD operated one engine provided by the State Office of Emergency Services (OES). In exchange for the use of the OES engine, the City agrees to staff and respond the engine to emergencies beyond City jurisdiction when requested (Fire-Apparatus webpage, City of Morro Bay, accessed January 25, 2018; 2020 McLean, personal communication).

Aid Agreements

MBFD participates in both mutual aid and automatic aid agreements with neighboring communities. These reciprocal agreements give the MBFD authority to rapidly deploy resources to areas outside jurisdictional boundaries when the need arises. MBFD Firefighters and paramedics respond cooperatively with the Morro Bay Harbor Patrol and U.S. Coast Guard to provide emergency services for incidents occurring offshore.

MBFD shares use of the San Luis Obispo Emergency Command Center operated by a central County office, which dispatches for seven other fire departments.

Response Times

MBFD's goal is to maintain an average response time of five minutes 90 percent of the time. MBFD has divided the city into nine response zones or districts and averaged its response time to each zone. The department uses three additional zones (10, 11, and 12) to identify automatic or mutual aid calls outside the city limits. Response time incorporates the sum of dispatch time, fire fighter reflex time and driving time (City of Morro Bay 2004).

The Insurance Service Office (ISO), a national rating service sponsored by fire insurance carriers to measure firefighting capability to reduce structural fire losses, provides rankings to firefighting

capability, including response time, on a classification scale of 1-10, with Class 1 being the best level of service and Class 10 being no service at all. The ISO assigned the City of Morro Bay a Class 4 rating in 2013.

2014 was the busiest year for MBFD to date, with 1,908 incidents. MBFD experienced a 3.6 percent increase over the previous year's incidents in 2014, with a 10-year average of two percent increase annually (City of Morro Bay 2015).

Wildland Fire Hazards

San Luis Obispo County has a Mediterranean climate, with warm dry summers and relatively cool, moderately wet winters. Because summers are generally warm and dry, the risk of wildfires is highest in late summer and early fall. Fog and cool weather that are common in the coastal regions help to maintain moisture levels in vegetation along the coast, which helps to minimize fire risk. However, the hot and dry conditions of the Santa Lucia Mountains and the inland plains and valleys of the County can dry vegetation, increasing fire risk.

Vegetation in Morro Bay is mostly limited to low-growing grasses and scattered shrubs, characteristic of disturbed north coastal grasslands habitat. High humidity levels and cool ocean influenced temperatures also limit the potential for wildfires to occur. Areas of the city near Morro Bay State Park contain some native vegetation that present a moderate wildland/urban intermix fire hazard.

CAL FIRE determines fire hazard severity zones based on the potential fire hazard that is expected to prevail there. Factors in determining fire hazard severity zones include fuel (material that can burn), slope, and weather. CAL FIRE identifies three zones, based on increasing hazard severity: moderate, high, and very high. Moderate hazard zones are typically identified as either wildland areas supporting areas of typically low fire frequency and relatively modest fire behavior, or are developed/urbanized areas with a very high density of inflammable surfaces including roadways, irrigated lawn/parks, and low total vegetation cover (less than 30 percent) that is highly fragmented and low in flammability (e.g., irrigated, manicured, managed vegetation). There is one area within the limits of the City of Morro Bay with very-high fire hazard. The majority of the developed portion of Morro Bay is located outside of a mapped fire hazard severity zone. Wildland fire hazards are discussed in more detail in Section 4.7, *Hazards and Hazardous Materials*.

Climate Change and Future Fire Potential

The San Luis Obispo County Hazard Mitigation Plan identifies climate change as resulting in a warming trend that will result in longer, hotter, and drier fire seasons in the County. The region has been experiencing longer, hotter, and drier summers, which desiccates vegetation; this can result in larger and more intense wildfires that can impact agriculture and cities, particularly affecting the urban areas within the wildland/urban interface. This trend is expected to continue as a result of climate change. In addition, drought conditions in California increase the risk of wildfires for Morro Bay and surrounding areas.

b. Police Protection

The Morro Bay Police Department (MBPD) provides police protection services within the planning area. MBPD has two divisions: the Operations Division which includes code enforcement, equipment/ fleet management, investigations, patrol operations, special operations, and training programs; and the Support Services Division which includes business and support operations, public

safety communications, police finances, police records, and property and evidence. MBPD also runs or participates in a variety of community-based programs, including a police volunteer program, a police Explorer program, and an active neighborhood watch program.

Personnel, Facilities, and Equipment

According to the Community Baseline Assessment for the General Plan and LCP Update, the MBPD headquarters are located at 850 Morro Bay Boulevard. MBPD currently operates with a police chief, a commander, a support services manager, five sergeants, a detective, ten officers, one full-time and one part-time records clerks, and one part-time property and evidence technician (2020 Johnson, personal communication). This staffing reflects a reduction since 2010 due to budget constraints (Appendix B). MBPD officers serve a variety of roles including patrol, school resource officer, detectives, explorer advisor, regional SWAT team operator, bicycle patrol, and drug recognition evaluator.

Aid Agreements

Morro Bay has mutual aid agreements with neighboring communities including Los Osos, Cayucos, Cambria, and San Luis Obispo County. As of mid-2014, the MBPD conducts dispatching with the San Luis Obispo Sheriff’s Office as the result of an agreement for both fire and police dispatching. The regionalized dispatching is intended to provide enhanced coordination for multiple jurisdictional responses during emergencies, improved organizational efficiency using multiple dispatchers, and increased access for the community (Appendix B).

Types of Calls

In 2014, the most recent reporting year, MBPD had 10,865 individual items to respond to, including calls for service and actions initiated by police officers. Officers made 578 arrests, wrote 1,247 police reports, and investigated 22 traffic collision reports (MBPD 2014; MBPD 2019).

c. Schools

The San Luis Coastal Unified School District (SLCUSD) provides elementary school (Kindergarten through 12th Grade) public education services to Morro Bay. There are 15 schools in SLCUSD, two of which are located in the General Plan and LCP Update planning area: Del Mar Elementary and Morro Bay High School. Middle-school aged children (grades 6-8) attend Los Osos Middle School, which is in the unincorporated community of Los Osos, south of the City of Morro Bay.

Enrollment

Table 4.12-1 identifies the enrollments and staffing for the 2017-2018 school year for the schools in the planning area. Table 4.12-2 shows enrollment trends for these two schools.

Table 4.12-1 2017-2018 Enrollment for SLCUSD Schools in Morro Bay

School Name	Grades	Enrollment	Teachers	Average Class Size
Del Mar Elementary	TK-5	375	24	23.4
Morro Bay High	9-12	821	44	25.8

Sources: California Department of Education 2018a, 2018b

Table 4.12-2 Enrollment Trends for SLCUSD Schools in Morro Bay

School Name	2009-	2010-	2011-	2012-	2013-	2014-	2015-	2016-	2017-	% Change
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2009-2010 to 2017-2018
Del Mar Elementary	448	438	463	484	456	443	398	409	375	-16.3%
Morro Bay High	857	849	845	852	825	867	860	813	821	-4.2%

Source: California Department of Education 2018c

Based on the data presented in Table 4.12-1, the average class size for Del Mar Elementary School is 23.4 and the average class size for Morro Bay High School is 25.8, and the student to teacher ratio was 15.6 to 1 at Del Mar Elementary School and 18.6 to 1 at Morro Bay High School during the 2017-2018 school year. As shown in Table 4.12-2, enrollment at both Del Mar Elementary School and Morro Bay High School decreased between the 2009-2010 and 2017-2018 school years.

Facilities Master Plan

During the 2013-14 school year, SLCUSD updated its Facilities Master Plan. This process included updating educational specifications, conducting a needs assessment, and developing a vision for potential facility plans throughout SLCUSD. The Facilities Master Plan provides macro-level information about the buildings, grounds, existing conditions, and enrollment within SLCUSD and uses this information to determine the most optimal facilities for teaching and learning for each of the schools in SLCUSD. According to the facility data and assessment for Del Mar Elementary School in the SLCUSD Facilities Master Plan, Del Mar Elementary School facilities total 49,552 square feet and require an additional 8,653 square feet to meet SLCUSD’s standard elementary program model. According the facility data and assessment for Morro Bay High School in the SLCUSD Facilities Master Plan, Morro Bay High School facilities total 176,775 square feet, which exceeds SLCUSD’s standard high school program model by 48,576 square feet (SLCUSD 2014). In recent years Morro Bay High School has expanded facilities with the addition of a pool and expansion, renovation, and construction of other facilities through Measure D funding.

d. Public Libraries

Library services are provided in the city by the Morro Bay Library. The library, located at 625 Harbor Street, is part of the San Luis Obispo County Libraries network of information centers serving six of the seven incorporated cities and all of the unincorporated communities in the County. Morro Bay Library offers circulation of books, magazines, newspapers, government publications, and other special publications, in addition to providing free internet access on library computers and via Wi-Fi (County of San Luis Obispo 2018).

e. Parks, Recreation, and Open Space

The Open Space/Recreation land use designation comprises over 5,100 acres of recreation and open space area in Morro Bay’s planning area, including 50 acres of local parkland and three linear miles of public beaches. Residents and visitors use these sites for both passive and active recreation, including organized sports, surfing, running, walking, and picnics, and children’s play areas. Open

space in the planning area consists of resource-based parks and community-based parks, which are described in greater detail below.

Community-Based Open Space

Community-based open space in Morro Bay is designated for developed parks located in neighborhoods and commercial areas. Community-based open space is provided in approximately 12 parks in the city and includes playgrounds, picnic areas, outdoor shade shelters, playing fields and courts, and other man-made structures. Approximately half of the community-based parks are City-owned, while the rest are funded from a variety of other sources.

Resource-Based Open Space

Resource-based open space in Morro Bay is primarily managed to protect and preserve natural resources while providing scenic and passive uses for residents and visitors. These are generally unimproved areas that preserve open space, such as environmentally sensitive habitat areas, coastlines, and wetlands. Resource-based open space areas can be City-owned, State-owned, or privately owned lands. The City manages three resource-based parks in Morro Bay, while the State operates two state parks, a state beach, and a state marine recreation management area.

Table 4.12-3 identifies the existing open space in the planning area by category and acreage.

Table 4.12-3 Existing Open Space Area by Type in Morro Bay Planning Area

Type	Approximate Acreage
City-owned community-based parks	28
City-owned resource-based parks	5
Other community-based parks	14
Other resource-based parks	5,084

Source: Community Baseline Assessment for the General Plan and LCP Update (Appendix B)

Under the California Quimby Act, cities can require land or in-lieu fees in order to achieve a minimum of three acres per 1,000 residents, with the possibility of increasing the requirement to a maximum of five acres per 1,000 residents if the City already provides more than three acres per 1,000 residents. As shown in Table 4.12-3, the City owns and operates approximately 33 acres of accessible open space and parkland, providing an existing park service ratio of 3.1 acres per 1,000 residents for the 2016 population of 10,714.

f. Regulatory Setting

Fire Protection

Disaster Mitigation Act (2000-Present)

Section 104 of the Disaster Mitigation Act of 2000 (Public Law 106-390) requires a state mitigation plan as a condition of disaster assistance. There are two different levels of state disaster plans: “Standard” and “Enhanced.” States that develop an approved Enhanced State Plan can increase the amount of funding available through the Hazard Mitigation Grant Program. The Act has also established new requirements for local mitigation plans.

National Fire Plan (NFP) 2000

The National Fire Plan was developed under Executive Order 11246 in August 2000, following a landmark wildland fire season. Its intent is to actively respond to severe wildland fires and their impacts to communities while ensuring sufficient firefighting capacity for the future. The plan addresses firefighting, rehabilitation, hazardous fuels reduction, community assistance, and accountability.

California Fire Plan

The Strategic California Fire Plan is the State's road map for reducing the risk of wildfire. The plan was updated in 2012 and directs each CAL FIRE Unit to prepare a locally specific Fire Management Plan. In compliance with the California Fire Plan, individual CAL FIRE units are required to develop Fire Management Plans for their areas of responsibility. These documents assess the fire situation within each of CAL FIRE's 21 units and six contract counties. The plans include stakeholder contributions and priorities and identify strategic areas for pre-fire planning and fuel treatment as defined by the people who live and work with the local fire problem. The plans are required to be updated annually.

California State Multi-Hazard Mitigation Plan, Draft (updated 2013)

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. The SHMP provides guidance for hazard mitigation activities emphasizing partnerships among local, state, and federal agencies as well as the private sector. The California Office of Emergency Services (OES) prepares the State of California Multi-Hazard Mitigation Plan (SHMP). The SHMP identifies hazard risks and includes a vulnerability analysis and a hazard mitigation strategy. The SHMP is Federally required under the Disaster Mitigation Act of 2000 in order for the State to receive federal funding. The Disaster Mitigation Act of 2000 requires a State mitigation plan as a condition of disaster assistance.

Wildland-Urban Interface Building Standards

On September 20, 2007 the Building Standards Commission approved the Office of the State Fire Marshal's emergency regulations amending the California Code of Regulations, Title 24, Part 2, known as the 2007 California Building Code (CBC). These codes include provisions for ignition-resistant construction standards in the wildland urban interface.

California Fire and Building Codes

The California Building Code, Title 24, Part 2 provides building codes and standards for the design and construction of structures in California. Part 9 of Title 24 is known as the California Fire Code. By establishing minimum requirements, the code, "safeguards the public health, safety and general welfare from the hazards of fire, explosion or dangerous conditions, [...] and provides safety and assistance to fire fighters and emergency responders." The provisions of the Building and Fire Codes apply to the construction, alteration, movement enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such building structures throughout the State of California.

Government Code 65302.5: General Plan Fire Safety Element Review

This statute 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.

San Luis Obispo County and San Luis Obispo County Flood Control and Water Conservation District Local Hazard Mitigation Plan

The San Luis Obispo County and San Luis Obispo County Flood Control and Water Conservation District Local Hazard Mitigation Plan identifies measures that the County will take to lower the hazard risk to property and life. Wildfire hazard mitigation features prominently in the plan due to the relatively rural nature of the County and its high fire risk, as identified by CAL FIRE.

CAL FIRE/San Luis Obispo County Fire Community Wildfire Protection Plan

The CAL FIRE/San Luis Obispo County Fire Community Wildfire Protection Plan (CWPP) makes the connection between fuel breaks, fire breaks, road-side fuel treatments, defensible space, and fuel reduction, providing communities and agencies with guidance on wildfire prevention and protection.

Police Protection

California Commission on Peace Officer Standards and Training (POST)

The California Commission on Peace Officer Standards and Training (POST) advocates for, exchanges information with sets selection and training standards for, and works with law enforcement and other public and private entities. POST was established by the Legislature in 1959 to identify common needs that are shared by representatives of law enforcement.

Schools

California Code of Regulations

The California Code of Regulations, Title 5 Education Code, governs all aspects of education within the State.

California State Assembly Bill 2926 (AB 2926) – School Facilities Act of 1986 – was enacted by the State of California in 1986 and added to the California Government Code (Section 65995). It authorizes school districts to collect development fees, based on demonstrated need, and generate revenue for school districts for capital acquisitions and improvements. It also established that the maximum fees which may be collected under this and any other school fee authorization are \$1.50 per square foot (\$1.50/ft²) for residential development and \$0.25/ft² for commercial and industrial development.

AB 2926 was expanded and revised in 1987 through the passage of AB 1600, which added Section 66000 *et seq.* of the Government code. Under this statute, payment of statutory fees by developers serves as total mitigation under CEQA to satisfy the impact of development on school facilities. However, subsequent legislative actions have alternatively expanded and contracted the limits placed on school fees by AB 2926.

California Senate Bill 50 (SB 50)

As part of the further refinement of the legislation enacted under AB 2926, the passage of SB 50 in 1998 defined the Needs Analysis process in government Code Sections 65995.5-65998. Under the provisions of SB 50, school districts may collect fees to offset the costs associated with increasing school capacity as a result of development. The fees (Level One fees) are addressed based upon the proposed square footage of residential, commercial/industrial, and/or parking structure uses. Level Two fees require the developer to provide one-half of the costs of accommodating students in new schools, while the state would provide the other half. Level Three fees require the developer to pay the full cost of accommodating the students in new schools and would be implemented at the time the funds available from Proposition 1A (approved in 1998) are expended. School districts must demonstrate to the State their long-term facilities' needs and costs based on long-term population growth in order to qualify for this source of funding. However, voter approval of Proposition 55 in 2004 precludes the imposition of the Level Three fees for the foreseeable future. Therefore, once qualified, districts may impose only Level Two fees, as calculated according to SB 50 (Greene 1998).

Parks and Recreation

Quimby Act

The Quimby Act was established by the California legislature in 1965 to provide parks for growing communities in California. The Act authorizes cities to adopt ordinances addressing park land and/or fees for residential subdivisions for the purpose of providing and preserving open space and recreational facilities and improvements. The Act requires the provision of a minimum of three acres of park area per 1,000 persons residing within a subdivision. The Act also specifies acceptable uses and expenditures of such funds.

State Public Park Preservation Act

This primary instrument for protecting and preserving parkland is the State Public Park Preservation Act. Under the Public Resource code, cities and counties may not acquire any real property that is in use as a public park for any non-park use unless compensation or land, or both, are provided to replace the parkland acquired. This provides no net loss of parkland and facilities.

State Street and Highway Code

The State Street and Highway Code assists in providing equestrian and hiking trails within the right-of-way of county roads, streets, and highways.

4.12.2 Impact Analysis

a. Methodology and Significance Thresholds

According to Appendix G to the *CEQA Guidelines*, impacts related to public services from the proposed project would be significant if it would:

1. Result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other objectives for:
 - a. Fire Protection;

- b. Police Protection;
- c. Schools;
- d. Parks; and
- e. Other Public Facilities.

According to Appendix G to the *CEQA Guidelines*, impacts related to recreation from the proposed project would be significant if it would:

- 2. 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.
- 3. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

b. Project Impacts and Mitigation Measures

Threshold 1: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other objectives for fire protection, police protection, schools, parks, or other public facilities?

Impact PUB-1 DEVELOPMENT FACILITATED BY THE GENERAL PLAN AND LCP UPDATE WOULD RESULT IN AN INCREASE IN THE CITY’S POPULATION. THIS WOULD INCREASE DEMAND FOR FIRE, POLICE, SCHOOL, AND EMERGENCY MEDICAL SERVICES AND POTENTIALLY CREATE THE NEED FOR NEW POLICE, FIRE, SCHOOL, OR OTHER SERVICE FACILITIES. HOWEVER, COMPLIANCE WITH POLICIES IN THE GENERAL PLAN AND LCP UPDATE, PAYMENT OF CITY-REQUIRED PUBLIC FACILITIES IMPACT FEES, AND MANAGEMENT OF FUTURE GROWTH WOULD AVOID ADVERSE ENVIRONMENTAL EFFECTS ASSOCIATED WITH THE PROVISION OF NEW OR PHYSICALLY ALTERED FIRE, POLICE, SCHOOL AND OTHER PUBLIC FACILITIES. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Development facilitated by the proposed General Plan and LCP Update would result in an increase to the city’s population, which would result in an incremental increase in demand for fire and police protection, and other public services such as library services, potentially creating the need for new or expanded facilities supporting these public services. Additionally, increased residential development as a result of the General Plan and LCP Update would increase demand on public schools in the planning area, as shown in Table 4.12-4. Potential environmental impacts associated with an increase in population in the city are also discussed in Section 4.11, *Population and Housing*.

Table 4.12-4 Projection of Students from New Residential Development

Grade Level	Projected # New Units	Student Yield Rates	Projected Students
K-6	881	0.209	184
9-12		0.093	82

Note: Student yield rates comprise the average of the student yield rates for single-family and multi-family rates for the respective grade levels.

Source: SLCUSD 2016

As shown in Table 4.12-4, development facilitated by the General Plan and LCP Update would result in an increase of 184 elementary age students and 82 high school age students to Del Mar Elementary and Morro Bay High School, respectively. According to the SLCUSD 2016 Developer Fee Justification Study and based on 2015-2016 school year enrollment rates, the coastal areas of SLCUSD, including Morro Bay, had available school capacity for 480 additional students in the K-5/6 grade levels and 409 additional students in the 9-12 grade levels. As shown in Table 4.12-2, enrollment in the SLCUSD schools in Morro Bay has decreased since the 2015-2016 school year, which would allow for additional capacity. Therefore, the General Plan and LCP Update would not be expected to directly result in the need for new or expanded schools, the construction of which could result in adverse impacts to the environment. Nevertheless, as detailed in the SLCUSD 2016 Developer Fee Justification Study, SLCUSD has identified a need to reconstruct, replace, renovate and modernize existing school facilities to adequately house incoming students from new residential development and meet the standard of educational programs currently provided by SLCUSD. In recent years Morro Bay High School has expanded facilities with the addition of a pool and expansion, renovation, and construction of other facilities through Measure D funding.

The Community Vision section of the General Plan and LCP Update establishes a Vision and Values statement for the city to provide a comprehensive vision for Morro Bay in the future and identify the community's key priorities. The community values include a Resident Services Value to provide a range of public services such as police, fire, schools, parks, and recreation services that support a diverse and multigenerational community. The General Plan and LCP Update Land Use Element includes the following goals and policies that would facilitate development in a manner that provides for the service needs while achieving the vision for the community.

Goal LU-3 Morro Bay grows in a manner that maintains community identity and well-being.

Policy LU-3.1 Growth Limits. Continue to limit the amount of development, including future population growth accommodated by *Plan Morro Bay*, to a level supported by adequate and long-term sustainable available land, water supply, and other infrastructure and service capacity.

Policy LU-3.3 Future Growth. Accommodate future growth of housing and jobs in Morro Bay that is consistent with vision, values, policies, and actions of this plan through both infill and potential limited expansion of the sphere of influence.

Additionally, in the event that new facilities or extended services are necessary, the following goals and policies from the Land Use, Community Design, Public Safety, and Environmental Justice Elements of the General Plan and LCP Update would serve to protect the environment upon development in the planning area by ensuring that development occurs in areas intended for these uses and in a manner that protects the resources in these areas.

Goal LU-1 The community for of Morro Bay reflects its vision and values, promoting a strong economy and high quality of life.

Policy LU-1.2 Realistic Development Capacity. Protection of sensitive habitats, natural landforms, scenic resources, and other coastal resources shall be a priority in all City actions and decisions, and all development standards (including with respect to height, setback, density, lot coverage, etc.) shall be interpreted as maximums (or minimums) that shall be reduced (or increased) to protect and enhance such resources and meet LCP objectives to the maximum extent feasible. Development shall only be authorized when the proposed use is

allowed per the applicable land use designation, and when it meets all applicable LCP policies and standards.

Goal CD-1 The individual identity of each of Morro Bay's character areas is embraced and represented by new and renovated development.

Policy CD-1.2 Compatible New Development. Require new development projects to be compatible with the vision for the area in which it is located, as described in the Vision for Community Character Areas, above, including ensuring that new development is located within existing developed areas and built in a manner that respects and responds to their unique natural and built environments.

GOAL PS-2 Development is protected from natural disasters and hazards to the greatest extent possible.

Policy PS-2.6 Plan Consistency. Work with fire districts, other agencies, and property owners to ensure consistency with related plans including the Morro Bay and San Luis Obispo County Emergency Operations Plans, and to coordinate efforts to prevent wildfires and grassfires through fire protection measures such as consolidation of efforts to abate fuel buildup, and access to firefighting equipment and water service.

Policy PS-2.6 Additional Fire Protection Standards for All Development. In addition to other hazard requirements that may apply, the following fire protection standards apply to all development:

- a. **New Development and Fire Safety.** New development shall meet all applicable fire safety standards and shall be sited and designed to minimize fuel modification and brush clearance to the maximum feasible extent, and to avoid such activities within ESHA and ESHA buffers on-site and on neighboring property, as well as parkland. All such requirements shall be applied as conditions of approval applicable for the life of the development.
- b. **Existing Development and Fire Safety.** Removal of major vegetation adjacent to existing development for fire safety purposes shall only be allowed upon a finding that fuel modification and brush clearance techniques are required in accordance with applicable fire safety regulations and are being carried out in a manner which reduces coastal resource impacts to the maximum feasible extent. In addition to the foregoing requirements, removal of ESHA, or removal of materials in an ESHA buffer, shall only be allowed for fire safety purposes: if it is not already prohibited by coastal permit conditions; if there are no other feasible alternatives for achieving compliance with required fire safety regulations; and if all ESHA and related impacts are mitigated in a manner that leads to no net loss of ESHA resource value.

Goal EJ-1 Morro Bay residents enjoy a high quality of life that contributes to their mental, physical, and social well-being.

Policy EJ-1.3 Services for All. Ensure the accessibility of facilities and services that meet the cultural, linguistic, gender, and sexual orientation needs of client populations.

The General Plan and LCP Update does not directly specify a maximum population for Morro Bay. However, growth (including any potential expansion of the SOI) in Morro Bay must be consistent with Measure F, limiting the city population to 12,200 residents. To exceed this number, Morro Bay would be required secure additional water resources and a majority of voters would need to elect to remove the limit. Several actions have been developed to implement the General Plan and LCP Update, including Action LU-6, which proposes to reopen public discussions about the Measure F 12,200-person limit and undertake a process to either affirm, amend, or repeal Measure F when the city's population reaches 11,700.

Compliance with the goals and policies in the General Plan and LCP Update, payment of City-required public facilities impact fees, including SLCUSD-imposed residential developer fees, as well as the constraints of Measure F, would prevent substantial population growth in the city that would result in adverse impacts related to the provision of new or expanded public services and facilities. Additionally, future development facilitated by the General Plan and LCP Update would be required to pay City-required public facilities impact fees to offset the impact of developments on public services and facilities. New public service facilities that would be constructed in the city would require project-specific environmental analysis and implementation of any necessary project-specific mitigation prior to being considered for approval. Therefore, this impact would be less than significant.

Mitigation Measures

No mitigation would be required.

<p>Threshold 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?</p>
<p>Threshold 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?</p>

Impact PUB-2 DEVELOPMENT FACILITATED BY THE GENERAL PLAN AND LCP UPDATE WOULD INCREASE THE CITY'S POPULATION WITH COMMENSURATE INCREASES IN DEMAND FOR PARKS AND RECREATION FACILITIES. ADDITIONAL PARKLAND HAS BEEN PLANNED SUCH THAT THE PARK SERVICE RATIO WOULD SATISFY THE CITY'S REQUIREMENT TO PROVIDE A MINIMUM OF THREE ACRES OR PARKLAND PER 1,000 RESIDENTS, CONSISTENT WITH QUIMBY ACT REQUIREMENTS. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Development facilitated by the proposed General Plan and LCP Update would result in an increase to the city's population which would result in an incremental increase in demand on existing public parks or other recreational facilities. The City currently owns and operates approximately 33 acres of accessible open space and parkland, providing an existing park service ratio of 3.1 acres per 1,000 residents for the 2016 population of 10,714. Although there are over 3,000 acres of State- and privately-owned parks and beaches in and around the city that provide additional recreational opportunities to city residents and visitors, State- and privately-owned facilities are not typically relied upon as city recreational facilities that count toward the applicable Quimby Act parkland standard of three acres per 1,000 residents. The General Plan and LCP Update would not directly expand the City-owned public parks and recreational areas. Based on the 2040 projected population of 12,062, the park service ratio would be reduced to approximately 2.8 acres per 1,000 people under buildout conditions without additional provision of parkland. However, as shown in Section 2,

Project Description, the planned Morro Bay Power Plant/WWTP redevelopment areas would designate additional land as Open Space/Recreational land use, allowing for potential future development of City owned and operated open space and parkland (refer to Figure 2-4).

The Community Vision section of the General Plan and LCP Update establishes a Vision and Values statement for the city to provide a comprehensive vision for Morro Bay in the future and identify the community's key priorities. The community values include a Natural Environment Value to ensure that parks and recreation spaces are resilient and accessible to all community members. The community values also include a Resident Services Value to provide a range of public services such as parks and recreation services that support a diverse and multigenerational community. The General Plan and LCP Update Open Space Element includes the following goals and policies that would facilitate development in a manner that provides for the parks and recreational service needs while achieving the vision for the community.

Goal OS-1 The public has access to plentiful and well-maintained parks, beaches, and recreational activities throughout Morro Bay.

- Policy OS-1.1 Quimby Act.** Continue to achieve a ratio of at least 3.0 acres of parks per 1,000 residents.
- Policy OS-1.3 California Coastal Trail Alignment.** Create a plan for the implementation of the California Coastal Trail. Ensure a continuous main spine of the California Coastal Trail throughout the length of the Morro Bay coastal zone, along with desirable offshoots and spurs, all within sight, smell, and sound of the ocean.
- Policy OS-1.4 Protection from Development.** Ensure that no development or project impedes public access to any park, open space, or beach. Protect, restore, and enhance all existing parks, beaches, open spaces, and trails. Prohibit new non-public recreational access structures on publicly used beaches.
- Policy OS-1.5 Coast Maintenance.** Maintain the beaches, bay, and ocean as natural recreational resources, not only for the city but also for the Central Coast region.
- Policy OS-1.6 Accessible Coast.** Maintain and enhance recreational access to the coast and its recreational facilities, and continue to provide resources that improve accessibility to the beach and shoreline for all users.
- Policy OS-1.7 Shoreline Recreation Variety.** Consider devoting portions of the coast to different preferred recreational uses while maintaining access for all users to meet the needs of both visitors and residents.
- Policy OS-1.8 Promote Recreational Activities and Opportunities.** Increase and enhance access to parks and open space, particularly access points that promote physical activity such as pedestrian- and bicycle-oriented access points.
- Policy OS-1.9 Maintain Open Space.** Improve and update park and open space facilities on a regular basis.
- Policy OS-1.10 Coastal Park Access.** Create new additional parks, open spaces, and pedestrian amenities along the shoreline to extend public accessibility.
- Policy OS-1.11 Private Park Interests.** Encourage local businesses to create parklets in areas where there will not be a significant impact to parking.

Policy OS-1.12 Park Development. Seek opportunities to develop and acquire additional parks and open space in underserved areas where needed.

Policy OS-1.15 Joint Use Agreements. Continue, renew, and expand (as needed) joint use agreements with the school district to allow community use of school fields and facilities.

Goal OS-2 The multigenerational community has access to a wide variety of recreational opportunities throughout Morro Bay.

Policy OS-2.1 Assessment of Community Needs. Update existing facilities to accommodate changing recreation interests and needs.

Policy OS-2.2 Adequate Recreation Opportunities. Ensure that recreational parks, trails, and facilities correspond to the development and growth of the city's population.

Policy OS-2.3 Quality Recreational Facilities. Ensure that maintenance, restoration, and improvements made to existing facilities accommodate all age levels and varieties of activities.

Goal OS-3 The City coordinates effectively with other public and private entities to support an active community with a diverse range of interconnected open spaces and recreation facilities to promote a healthy, engaged public.

Policy OS-3.1 Government Funding. Actively pursue state and federal grants to fund continual improvements to parks and recreational facilities.

Policy OS-3.2 State Park Collaboration. Coordinate recreational offerings with implementation of the Morro Bay State Park General Plan and the Morro Strand and Atascadero State Beach General Plan to provide a cohesive recreation system.

Policy OS-3.3 Developer Partnerships. Work with developers to incorporate recreational open space as part of future projects.

Policy OS-3.4 Private Investment. Facilitate public/private agreements to develop and maintain public open spaces, parks, and conservation areas.

Policy OS-3.5 Public Facility Collaboration. Work with the San Luis Coastal Unified School District to identify needs in the community for different recreational opportunities.

Policy OS-3.7 Innovative Funding Sources. Explore the availability of funding opportunities from corporate sponsors and private organizations in the area to increase parkland.

Implementation of these General Plan and LCP Update goals and policies, in addition to payment of required City-required park impact fees, and the growth constraints associated with Measure F would ensure that growth in the city would not result in adverse environmental effects associated with the physical deterioration of public parks and recreational facilities. The General Plan and LCP Update does not directly provide new neighborhood, community, or other city parklands that would allow the city to meet the parkland ratio established by the Quimby Act and included in the General Plan and LCP Update as Open Space Element Policy 1.1. However, the planned Morro Bay Power Plant/WWTP redevelopment areas would designate additional land as Open Space/Recreational land use, allowing for potential future development of City owned and operated open space and

parkland. The new Open Space/Recreational land use designated areas, in combination with Quimby Act in-lieu fees intended to provide additional open space and parkland, would allow the city to meet the parkland ratio included in the General Plan and LCP Update as Open Space Element Policy 1.1. Therefore, the General Plan and LCP Update would contribute to the need for new or expanded park or recreational facilities, but would also provide the policy framework and physical opportunities to provide expanded park or recreational facilities. As a result, this impact would be less than significant.

Mitigation Measures

No mitigation would be required.

c. Cumulative Impacts

The scope for potential cumulative impacts to public services and recreation includes all projects within the same service area. The analysis in this section examines the potential impacts to public services and parks and recreational facilities in Morro Bay as a result of all potential buildout in the service areas for these resources. Therefore, the analysis of impacts to these services and associated facilities is cumulative in nature. The General Plan and LCP Update would result in less than significant impacts to fire, police, school, public parks and recreation, and other public services and facilities. Therefore, the General Plan and LCP Update would result in less than significant cumulative impacts to these resources.

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4.13 Transportation

This section evaluates the potential impacts to the local and regional circulation system that would result from implementation of the General Plan and LCP Update. This includes an analysis of the potential for the General Plan and LCP Update to increase local and regional traffic volumes, increase hazards due to a design feature, interfere with emergency access, or conflict with applicable alternative transportation systems.

Transportation data in this section is based on the Morro Bay Circulation Element Update Final Technical Report, completed by Central Coast Transportation Consulting (2018). This report is provided as Appendix E to this report, and contains traffic counts, level of service (LOS) calculations, and a detailed description of the traffic forecasting prepared for the analysis.

4.13.1 Setting

The transportation network in Morro Bay encompasses infrastructure, facilities and amenities, and transit services. The system is a connected grid network, with pedestrian and bicycle infrastructure on many of the main streets.

a. Street Network

Roadways in Morro Bay are typically classified as follows:

- **Freeways.** Freeways are intended to carry high volumes and high speed traffic. Access is limited with grade-separated interchanges accommodating flows to and from the freeway mainline. Freeways are designed to maximize mobility, not to serve abutting land uses. The segment of State Route (SR) 1 in Morro Bay between South Bay Boulevard and Atascadero Road operates as a freeway.
- **Expressways.** Expressways are high volume and high speed facilities with access provided at controlled at-grade intersections. Expressways emphasize mobility and are not intended to serve abutting land uses. The segment of SR 1 in Morro Bay from Yerba Buena Street north to the city limits operates as an expressway.
- **Arterials.** Arterials balance mobility and access, carrying moderate volumes at lower speeds and serving abutting land uses. Main Street, Morro Bay Boulevard, and the segments of SR 41 in Morro Bay east of SR 1 operate as arterials. Arterials can also be divided into principal and minor arterials. Principal arterials serve more vehicles and have wider shoulders than minor arterials. Principal arterials can also have a median and partial access controls, while minor arterials always lack a median and have uncontrolled access.
- **Collectors.** Collectors gather traffic from local roads and tie into the arterial roadway network. Collector roadways often pass through residential areas and may have direct driveway access connected to individual residential parcels. Collectors can be divided into major and minor collectors, with the principal distinction between qualitative differences about their distance and the types of land uses served.
- **Local Roads (Streets).** Local roads provide access to abutting land uses and connect to the collector and arterial street network. Local roads typically constitute the largest percentages of roadways in terms of mileage.

Many roadways in Morro Bay are designed to be complete streets, accommodating multiple travel modes and user needs. Figure 4.13-1 shows the functional classifications of the existing roadways in the planning area according to the California Department of Transportation (Caltrans) and the Federal Highway Administration (FHWA). In some cases the functional classifications used by Caltrans and shown on Figure 4.13-1 differ from the roadway classifications provided above.

b. Pedestrian and Bicycle Facilities

The city's well-established grid network, mild weather, and relatively flat topography support walking and biking. The U.S. Census Bureau estimates that in 2016, 6.1 percent of working-age residents in Morro Bay walked to work, 0.3 percent bicycled to work, and 84.8 percent used vehicles to commute to work (U.S. Census Bureau 2016). Pedestrian and bicycle facilities in Morro Bay are described below.

Pedestrian Facilities

Pedestrian facilities in Morro Bay consist of sidewalks, trails and paths, and crosswalks. Sidewalks are provided along the Embarcadero and along most streets in the downtown area of Morro Bay. Most single-family residential areas in Morro Bay lack sidewalks. Section 12.04.010 of the Morro Bay Municipal Code requires that new developments conform to the City's Standard Drawings and Specifications. The City's Standard Drawings and Specifications require sidewalks for commercial, industrial, and high-density residential uses as well as on arterial, local, and collector roads not bordered by one or more of these land uses. Hillside streets in single-family residential or duplex residential zoning districts are required to provide a flat, walkable surface on one side of the road.

There are four types of crosswalks in Morro Bay: signalized crossings, controlled marked crossings, uncontrolled marked crossings, and unmarked crossings. Signalized crossings provide marked crosswalks and pedestrian signal heads. The three signalized intersections in Morro Bay provide signalized crossings on at least two legs of the intersection. Controlled marked crossings provide striped crosswalks with a stop or yield sign on at least one leg of the intersection. There are 44 controlled marked crossings in Morro Bay, mostly in the downtown area. There are two signalized crossings across SR 1, one at San Jacinto Street and a second at Yerba Buena Street. A crosswalk, green bike lane striping, and rapid flash beacon were recently installed near the Atascadero Road/SR 1 southbound ramp intersection. Uncontrolled marked crossings provide striped crosswalks at mid-block and uncontrolled locations. Unmarked crossings constitute the remainder of crosswalks wherever two public roads intersect, per the California Vehicle Code.

There are several trails and paths in Morro Bay. The Harborwalk is a multi-use bicycle and walking path connecting the Embarcadero to Morro Rock. This path is heavily used by locals and visitors. The California Coastal Trail is a hiking and bicycling trail that spans from Oregon to Mexico. The California legislature formally established the trail in 2001 and provided a general alignment. There is some existing signage for the trail along the Bayfront of the Embarcadero. Additional recreational hiking trails are provided in Morro Bay State Park. These include the Black Hill hiking areas and walking paths along the estuary near the State Park marina.

Bicycle Facilities

Bicycle facilities in Morro Bay are described in four classes of facilities:

Bikeways are facilities that provide primarily for, and promote, bicycle travel. There are four types of bikeway classifications identified by the City. These classes are as follows:

Figure 4.13-1 Existing Roadways in the Planning Area



- **Class I.** Paths or trails, separated from roadways, for the exclusive use of bicycle and pedestrian modes of travel with a minimum of vehicular cross-flow. The Harborwalk path is an example of a Class I bikeway facility. Approximately 3.6 miles of Class I bikeways exist in Morro Bay.
- **Class II.** Striped lane for one-way bicycle travel on a street or highway. Approximately 7.1 miles of Class II bikeways exist in Morro Bay.
- **Class III.** Roads where bicycles and vehicles share the travel lanes of the roadway. These routes are supplemented with signs and pavement legends including sharrows, which are shared-lane markings. The section of Beachcomber Street south of Yerba Buena Street is an example of a Class III bike route with sharrows.
- **Class IV.** Designated lanes for bicycles on roadways, but which are also separated from the roadway traffic by barricades, such as bollards, grade separation, or on-street parking. No Class IV bikeway facilities currently exist in Morro Bay.

c. Public Transit

Regional Transit

The San Luis Obispo Regional Transit Authority (RTA) is a joint powers authority providing fixed-route regional service throughout San Luis Obispo County and serving the Morro Bay Transit Center on Harbor Street in Morro Bay. RTA provides American with Disabilities Act paratransit service through the Runabout, a demand response system operating within three-quarters of a mile of all fixed-route services in San Luis Obispo County. RTA ridership has consistently increased each year since 2007 (Appendix E).

RTA Route 12 runs from Morro Bay to San Luis Obispo with stops in Los Osos, Cuesta College, and California Polytechnic State University (Cal Poly). It runs on one-hour headways on weekdays and two-hour headways on weekends. RTA Route 15 runs from Morro Bay to San Simeon with stops in Cayucos and Cambria. It operates on two- to three-hour headways on weekdays and Saturdays and four-hour headways on Sundays (Appendix E).

Local Transit

The City operates Morro Bay Transit, which provides fixed-route bus service with hourly headways from 6:25 a.m. to 6:45 p.m. on weekdays and 8:25 a.m. to 4:25 p.m. on Saturdays. Curb-to-curb service is provided within three-quarters of a mile of the fixed route on a reservation basis. This route serves the major campgrounds, high school, senior center, grocery store, and neighborhoods throughout Morro Bay (Appendix E).

The Morro Bay Trolley operates three loops from Memorial Day weekend through the first weekend in October. The routes serve north Morro Bay, the downtown area, and the waterfront with headways of less than one hour. Stops are provided at the State Park campground, downtown, the Embarcadero, Morro Rock, and Morro Strand campground (Appendix E).

Ridership on the Morro Bay Transit Fixed Route and Call-A-Ride service increased by about 30 percent from fiscal years 2012 to 2015. However, over the same period, Morro Bay Trolley ridership decreased by about 15 percent (Appendix E).

The Morro Bay Senior Citizens, Inc. operates a senior transportation shuttle on Monday through Thursday from 9:00 a.m. to 4:00 p.m. It serves destinations throughout San Luis Obispo County.

d. Travel Characteristics

Travel Modes and Distance Travelled

U.S. Census Bureau data for mode travel to and from places of employment provide general travel characteristics and patterns of Morro Bay residents. As shown in Table 4.13-1, residents have a higher rate of carpooling, walking to work, and other modes, such as taxicabs or motorcycles, compared to the countywide average. Morro Bay residents have a lower rate of driving alone to work, compared to the countywide average, but also a lower rate of using public transit or bicycling to work.

In comparison to State and countywide trends, the mean travel time of Morro Bay residents to work in 2016 was approximately 21 minutes, with San Luis Obispo County and State commute travel times averaging approximately 22 and 28 minutes, respectively (U.S. Census Bureau 2016).

Table 4.13-1 Travel Mode Comparison for Work Trips

Jurisdiction	Drive Alone	Carpool	Transit	Walk	Bicycle	Work at Home	Other
Morro Bay	70.6%	14.2%	0.8%	6.1%	0.3%	6.2%	1.8%
San Luis Obispo County	74.0%	10.4%	1.6%	4.2%	2.2%	6.7%	0.9%

Notes: Data is provided for 2016 for working age residents. Working age is considered 16 years old.

Source: U.S. Census Bureau 2016

Existing Traffic Volumes and Capacity

Vehicle miles traveled (VMT) measures travel on roadways by all types of motorized vehicles carrying passengers or cargo. Each mile traveled is counted as one vehicle mile regardless of the number of people in the vehicle. VMT is typically expressed as VMT per day. Table 4.13-2 shows daily VMT in Morro Bay’s Sphere of Influence (SOI) as of 2016. In this table, the column titled “Daily VMT in SOI” reflects the vehicle miles traveled entirely within city limits and the city sphere of influence. The column titled “Daily VMT in the County” reflects the vehicle miles traveled within the city sphere of influence and those trips that originated in San Luis Obispo County and concluded in Morro Bay, or vice versa. The final column, “Daily VMT in State,” reflects vehicle miles traveled within the city sphere of influence, and those trips that originated in Morro Bay and concluded anywhere in California, or vice versa.

Table 4.13-2 Vehicle Miles Traveled in Morro Bay

Trip Type	Daily VMT in SOI (2016)	Daily VMT in County (2016)	Daily VMT in State (2016)
Origin and destination within City SOI	52,256	52,256	52,256
Origin only within City SOI	16,061	48,024	63,788
Destination only within City SOI	16,422	50,924	66,688
Total	84,739	151,205	182,732

Source: Appendix E; SLOCOG and CA Statewide Travel Demand Models

Daily VMT is shown in Table 4.13-2 for trips with both an origin and destination within Morro Bay, and trips with either an origin or destination in Morro Bay but not both. For example, a Morro Bay

resident driving to dinner on the Embarcadero would have an origin and destination within Morro Bay. A Morro Bay resident driving to work in Paso Robles would have an origin only within Morro Bay, while a Paso Robles resident driving to work in Morro Bay would have a destination only within the Morro Bay. A Fresno County resident visiting Morro Bay would have a destination only within Morro Bay, and the trip length and VMT would be adjusted to reflect the portion of the trip occurring outside of San Luis Obispo County.

The VMT estimates provided in Table 4.13-2 were extracted from the San Luis Obispo Council of Governments (SLOCOG) Travel Demand Model calibrated for use in Morro Bay. The SLOCOG model tracks trips within San Luis Obispo County but does not reflect regional trips that continue to destinations outside of San Luis Obispo County. The California Statewide Model was used to determine the average trip lengths for trips leaving San Luis Obispo County, which were then used to forecast the daily VMT. Trips with an origin and destination in Morro Bay were counted as being 100 percent generated by the City. Trips that end or begin in Morro Bay were counted as being 50 percent generated by the City. Trips that pass through Morro Bay but do not begin or end within Morro Bay were excluded from the VMT estimates (Appendix E).

As described above, the primary regional motor vehicle facility in Morro Bay is SR 1. Traffic delays on SR 1 are primarily limited to peak-hour reductions in travel speeds where SR 1 passes Morro Bay. The segment of SR 1 within Morro Bay carries as much as approximately 28,000 daily vehicles (Caltrans 2016).

Table 4.13-3 summarizes the approximately average daily traffic volumes in 2016 on key collector streets that pass through residential areas of Morro Bay. Traffic volumes during peak hour are also shown in this table. Traffic volumes on these roadways are below the carrying capacity of the roadways (Appendix E).

Table 4.13-3 Key Collector Street Traffic Volumes

Roadway Segment	Peak Hour	Daily Traffic (2016)	Average Daily Traffic (2016)
Kern Avenue: Anchor Street to Olive Street	Thursday	1,365	1,277
	Friday	1,285	
	Saturday	1,181	
Piney Way: South Street to Vista Street	Thursday	1,524	1,440
	Friday	1,470	
	Saturday	1,326	
Beachcomber Street: Mindoro Street to Luzon Street	Thursday	355	375
	Friday	353	
	Saturday	416	
Greenwood Avenue: Elena Street to San Joaquin Street	Thursday	307	258
	Friday	287	
	Saturday	180	

Source: Appendix E

Traffic Safety

The California Office of Traffic Safety compares collision rates for cities throughout the State. There are 103 cities in the State that are in the same category as Morro Bay with a population between 10,001 and 25,000. In 2015, the most recent year for which collision rate data is published, Morro Bay was ranked 83 in its category for fatal and injury collisions, indicating that 82 similar-sized cities had higher collision rates and 20 had lower rates (California Office of Traffic Safety 2015). Most of

the collisions occur at intersections along SR 1 and along the Main Street and Morro Bay Boulevard corridors (Appendix E).

e. Traffic Study Intersections and Roadway Segments

Intersections are typically the most critical element within a roadway system because they are the points where opposing and intersecting streams of travel must be served, and the locations where the majority of travel delay occurs along a corridor. A variety of right-of-way controls exist to direct traffic through intersections.

The study area for the traffic impact analysis was selected to include the intersections most likely to be impacted by new development in Morro Bay, particularly where major streets intersect each other and/or key access points to regional facilities (Appendix E). The study area consists of the following six intersections located in Morro Bay, shown on Figure 4.13-2.

1. San Jacinto Street and SR 1.
2. San Jacinto Street and Main Street.
3. SR 41 and SR 1 Southbound Ramps.
4. SR 41 and Main Street.
5. Beach Street and Main Street
6. Morro Bay Boulevard and Quintana Road

Additionally, the study area also included the following six roadway segments in Morro Bay:

1. Embarcadero: North of Beach Street.
2. Embarcadero: North of Pacific Street.
3. Embarcadero: South of Pacific Street.
4. Morro Bay Boulevard: West of Quintana Road.
5. Main Street: South of Radcliff Drive.
6. SR 41: East of Main Street.

Level of Service Definitions

The analysis of peak-hour Level of Service (LOS) has traditionally been the primary indicator of circulation system performance. LOS values range from LOS A to LOS F. LOS A indicates excellent operating conditions with little delay to motorists, whereas LOS F represents congested conditions with excessive vehicle delay. LOS E is typically defined as the operating “capacity” of a roadway. Significant traffic impacts are defined using separate thresholds based on operational changes and multiple level of service values. The City does not have a formal LOS threshold defining acceptable operations, but historically has applied the Caltrans target of LOS C or better for intersections and roadway segments.

Table 4.13-4 defines LOS value ranges based on average delay at signalized and unsignalized intersections. Table 4.13-5 defines LOS thresholds for roadway segments based on LOS scores in the Highway Capacity Manual (HCM) (Transportation Research Board of the National Academy of Sciences 2010).

Figure 4.13-2 Study Intersection Locations and Existing Volumes

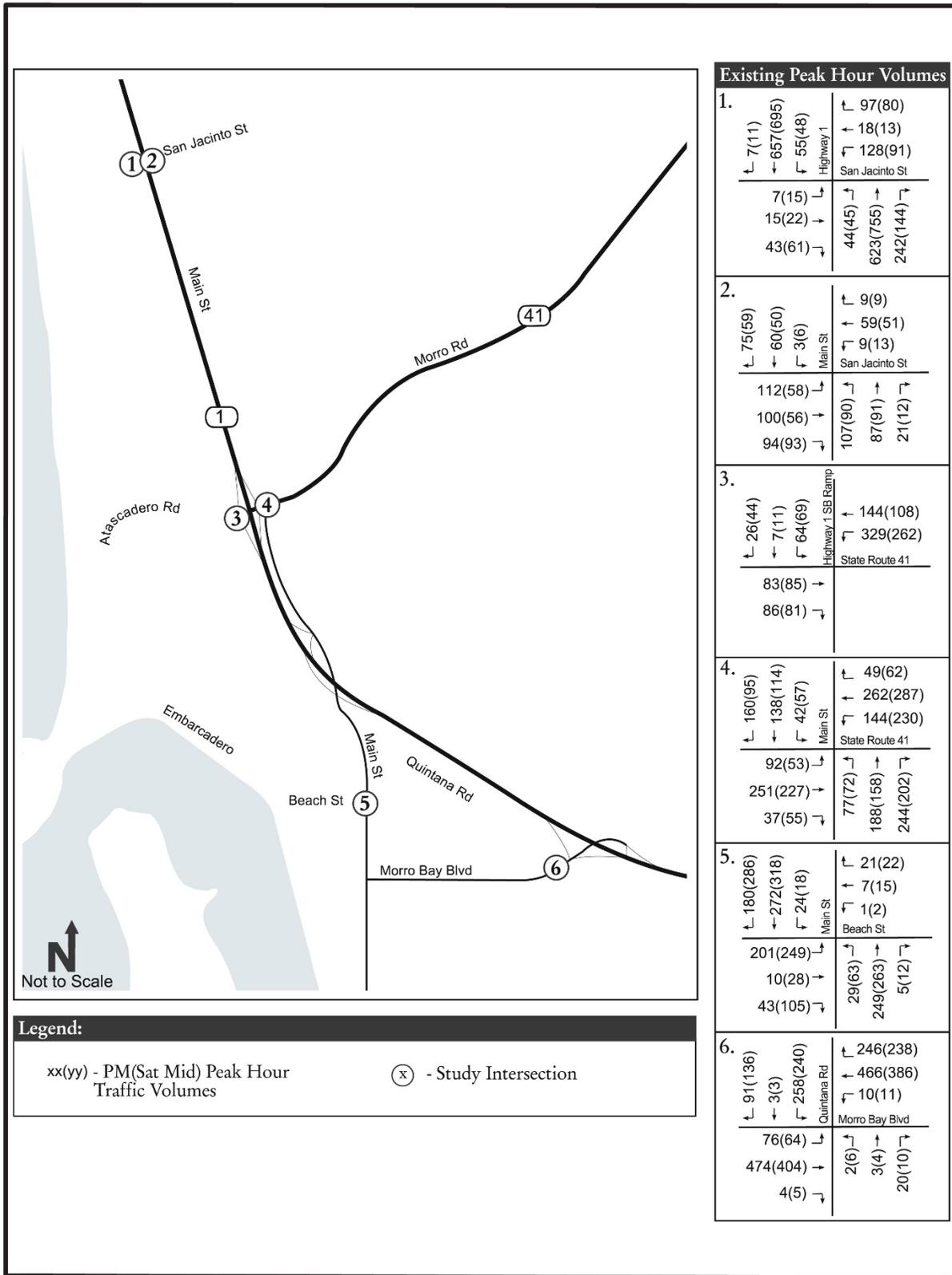


Table 4.13-4 Peak Hour Traffic Level of Service Definitions

LOS	Operational Characteristics	Average Delay (seconds per motor vehicle)		
		Signalized Intersection	Stop-sign Controlled Intersection	Two-way Stop- sign Controlled Intersection
A	Free-flow conditions with negligible to minimal delays	< 10	0 – 10	0 – 5
B	Good progression with slight delays. Short cycle-lengths typical	> 10 – 20	> 10 – 15	> 5 – 10
C	Relatively higher delays resulting from fair progression and/or longer cycle lengths	> 20 – 35	> 15 – 25	> 10 – 20
D	Somewhat congested conditions. Longer but tolerable delays may result	> 35 – 55	> 25 – 35	> 20 – 30
E	Congested conditions. Significant delays result from poor progression, long cycle lengths, and high volume-to-capacity ratios	> 55 – 80	> 35 – 50	> 30 – 45
F	Jammed or gridlock type operating conditions. Generally considered unacceptable for most drivers	> 80	> 50	> 45

Source: Highway Capacity Manual (Transportation Research Board of the National Academy of Sciences 2010)

Table 4.13-5 Roadway Segment Level of Service Thresholds

LOS	Average Delay (seconds)*
A	0 – 2.00
B	> 2.00 – 2.75
C	> 2.75 – 3.50
D	> 3.50 – 4.25
E	> 4.25 – 5.00
F	> 5.00

*Delay in seconds per vehicle, pedestrian, bicycle, and transit modes, assuming 60 square feet per person for pedestrian mode.

Source: Highway Capacity Manual (Transportation Research Board of the National Academy of Sciences 2010)

Baseline Level of Service

An analysis of operations at the study intersections and roadway segments was conducted by Central Coast Transportation Consulting. To identify existing conditions, traffic counts were conducted at each of the study intersections and roadway segments in March 2016, during the weekday afternoon (4:00 to 6:00 p.m.) peak travel period (weekday PM) and Saturday midday peak travel period (Saturday MID). The peak hour volume was determined for the weekday PM and Saturday MID peak travel periods. The existing conditions data collection sheets, LOS calculations, and traffic volume figures for each scenario are contained in Appendix E.

Existing 2016 LOS conditions at the six study intersections are summarized in Table 4.13-6. The table summarizes the analyzed weekday PM peak period and Saturday MID peak period conditions. As described above, the City does not have a formal LOS threshold defining acceptable operations, but historically has applied the Caltrans target of LOS C or better as acceptable for intersections. As

shown, most study intersections meet the current LOS C standard, with the exception of intersection 3, SR 41 and SR 1 Southbound Ramps, which operates unacceptably under weekday PM peak hour and intersection 4, SR 41 and Main Street, which operates unacceptably under weekday PM and Saturday MID peak hours.

Table 4.13-6 Level of Service at Key Intersections

Intersection	Peak Hour	Delay (seconds per motor vehicle)	LOS
1. San Jacinto Street and SR 1	Weekday PM	18.2	B
	Saturday MID	17.1	B
2. San Jacinto Street and Main Street	Weekday PM	6.7 (13.9)	- (B)
	Saturday MID	5.0 (10.0)	- (A)
3. SR 41 and SR 1 Southbound Ramps	Weekday PM	7.5 (28.7)	- (D)
	Saturday MID	6.7 (18.2)	- (C)
4. SR 41 and Main Street	Weekday PM	37.6	E
	Saturday MID	28.3	D
5. Beach Street and Main Street	Weekday PM	13.9	B
	Saturday MID	23.9	C
6. Morro Bay Boulevard and Quintana Road	Weekday PM	12.7	B
	Saturday MID	10.7	B

Notes:

Operations based on 2016 conditions.

For side-street-stop controlled intersections the worst approach's delay is reported in parentheses next to the overall intersection delay.

Unacceptable operations are shown in bold text.

Source: Appendix E

Existing 2016 LOS conditions for the six roadway segments included in the traffic study are summarized for pedestrians, bicycles, and vehicles in Table 4.13-7. The table summarizes the weekday PM peak period and Saturday MID peak period conditions for both directions on each roadway segment. As described above, the City does not have a formal LOS threshold defining acceptable operations, but historically has applied the Caltrans target of LOS C or better as acceptable for vehicle operations on roadways. However, the City and Caltrans do not have LOS thresholds for pedestrian and bicycle facilities.

As shown in Table 4.13-7, the Embarcadero north of Pacific Street and Morro Bay Boulevard west of Quintana Road operate at unacceptable LOS D for vehicles during both weekday PM and Saturday MID peak hours, in both directions. These are short roadway segments with a high number of stops per mile, which decreases their overall performance. Main Street south of Radcliff Drive and westbound SR 41 east of Main Street have high free-flow speeds and no sidewalks, resulting in pedestrian LOS D. All other segments perform at or above LOS C.

Table 4.13-7 Level of Service for Roadway Segments

Roadway Segment	Peak Hour	Direction	Pedestrian		Bicycle		Vehicle	
			LOS Score	LOS	LOS Score	LOS	LOS Score	LOS
1. Embarcadero: North of Beach Street	Weekday PM	NB	2.10	B	4.00	B	3.28	C
		SB	1.51	A	2.76	C	3.02	C
	Saturday MID	NB	2.48	B	3.02	C	3.28	C
		SB	1.77	A	2.97	C	3.02	C
2. Embarcadero: North of Pacific Street	Weekday PM	NB	1.32	A	2.86	C	3.72	D
		SB	1.16	A	2.74	B	3.72	D
	Saturday MID	NB	1.51	A	3.38	C	3.72	D
		SB	1.43	A	3.46	C	3.72	D
3. Embarcadero: South of Pacific Street	Weekday PM	NB	1.13	A	2.54	B	3.28	C
		SB	1.12	A	2.68	B	3.28	C
	Saturday MID	NB	1.32	A	3.12	C	3.28	C
		SB	1.27	A	3.12	C	3.28	C
4. Morro Bay Boulevard: West of Quintana Road	Weekday PM	EB	2.37	B	2.43	B	3.62	D
		WB	2.53	B	2.50	B	3.62	D
	Saturday MID	EB	2.27	B	2.38	B	3.62	D
		WB	2.47	B	2.47	B	3.62	D
5. Main Street: South of Radcliff Drive	Weekday PM	NB	2.56	B	2.34	B	3.28	C
		SB	3.79	D	2.48	B	3.02	C
	Saturday MID	NB	3.04	C	2.58	B	3.28	C
		SB	3.94	D	2.55	B	3.02	C
6. SR 41: East of Main Street	Weekday PM	EB	3.39	C	0.75	A	3.16	C
		WB	3.32	C	0.71	A	3.16	C
	Saturday MID	EB	3.31	C	0.71	A	3.16	C
		WB	3.56	D	0.82	A	3.16	C

Notes:

Operations based on 2016 conditions.

Source: Appendix E

Volume to Capacity Ratio

Volume to capacity ratio (V/C) is a measurement of the operating capacity of a roadway or intersection where the number of vehicles passing through is divided by the number of vehicles that could theoretically pass through when at capacity. If vehicles (V) divided by capacity (C) is less than one the facility has additional capacity. V/C increases with project traffic, but the LOS score relies on other factors that affect delays, including roadway design and intersection spacing. Therefore, the LOS score and grade for roadway segments are insensitive to vehicular volumes until V/C exceeds one.

f. Regulatory Setting

Federal

The U.S. Department of Transportation (USDOT) provides a number of grant programs, primarily for the construction and upgrading of major highways and transit facilities. Many of these grants are administered by the state and regional governments. Use of federal grant funding also invokes the National Environmental Protection Act (NEPA) in some cases.

State

Caltrans has jurisdiction over state highways. Caltrans constructs and maintains all state highways and sets design standards that are often copied by local governments.

Caltrans Authority over the State Highway System

Caltrans is responsible for planning, design, construction and maintenance of all interstate freeways and state routes. It sets design standards that are often used by local governments. Caltrans requirements are described in their Guide for Preparation of Traffic Impact Studies (Caltrans 2002), which covers the information needed for Caltrans to review impacts to State highway facilities, including freeway and arterial segments, on- and off-ramps, and signalized intersections. Caltrans builds, maintains, and operates the State Highway system in California, with a goal to allow for the safe and efficient use of the State transportation system for all users. Caltrans has set standards for the operational goals of its facilities pertaining to intersection, arterial segment, and freeway segment LOS. These standards are set forth in the Caltrans Guide for the Preparation of Traffic Impact Studies. This document establishes procedures to uniformly review the operational standards of Caltrans-maintained facilities in terms of measures of effectiveness.

According to the Caltrans Guide for the Preparation of Traffic Impact Studies, “Caltrans endeavors to maintain a target LOS at the transition between LOS C and LOS D.” As such, satisfactory operation for Caltrans intersections is the same as at City intersections. Caltrans has determined that a significant project impact occurs for any signalized intersection where project traffic causes the LOS to deteriorate from satisfactory (LOS C or better) to unsatisfactory (LOS D, E, or F); or the addition of project traffic causes an increase in delay at an intersection already operating at unsatisfactory LOS (D, E, or F).

Statewide Transportation Improvement Plan

The Statewide Transportation Improvement Plan (STIP) is a capital improvement program that plans transportation projects related to state facilities in California for the next five years. The program is updated every two years with new construction projects as more funding is provided. The California Transportation Commission approves the fund estimate and then Caltrans and regional planning agencies submit plans for transportation improvement projects. If the projects are programmed in the STIP, then relevant agencies can begin the implementation process.

SENATE BILL 743

Senate Bill (SB) 743, which was signed into law in 2013, tasked the State Office of Planning and Research (OPR) with establishing new criteria for determining the significance of transportation impacts under CEQA. SB 743 requires the new criteria to “promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses.” It also states that alternative measures of transportation impacts may include “vehicle miles traveled, vehicle miles traveled per capita, automobile trip generation rates, or automobile trips generated.” SB 743 changes the way that public agencies evaluate the transportation impacts of projects under CEQA, recognizing that roadway congestion, while an inconvenience to drivers, is not itself an environmental impact (see Pub. Resource Code, § 21099, subd. [b][2]). In addition to new exemptions for projects that are consistent with specific plans, the draft SB 743 guidelines replace congestion based metrics, such as auto delay and level of service, with VMT as the basis for determining significant impacts, unless the guidelines provide specific exceptions.

SB 743 provides opportunities to streamline CEQA for qualifying urban infill development near major transit stops in metropolitan regions statewide. A transit-oriented infill project can be exempt from CEQA if consistent with a specific plan for which an EIR was prepared and also consistent with the use, intensity, and policies of a Sustainable Communities Strategy or Alternative Planning Strategy that is certified by the California Air Resources Board (CARB) as meeting its greenhouse gas reduction targets. A City or County may designate an “infill opportunity zone” by resolution if it is consistent with the general plan and any applicable specific plan and is a transit priority area within the adopted Sustainable Communities Strategy or Alternative Planning Strategy. This infill opportunity zone is then exempt from level of service standards in the congestion management plan. In August 2014, the Governor’s Office of Planning and Research circulated its draft changes to the *CEQA Guidelines* implementing SB 743 for public comment. Revised draft guidelines were released in November 2017.

Statewide implementation of SB 743 is now required. Therefore, this EIR relies on VMT to evaluate transportation impacts, and also includes a discussion of the City’s existing LOS.

California’s Complete Streets Act

The California Complete Streets Act, adopted in 2008, requires that cities and other public agencies incorporate “complete street” policies when updating their General Plan Circulation Element, to ensure that Complete Streets principles are incorporated. Complete Streets Law was signed into law as Assembly Bill (AB) 1358. It requires that cities plan for the needs of all users, including bicyclists and pedestrians, when updating local general plans. Caltrans specifically adopted Deputy Directive 64, which addresses the needs of people of all ages and abilities concerning transportation planning. It also recognizes that transportation improvement projects are opportunities to improve safety, access, and mobility for motorists, bicyclists, pedestrians, and transit users. The Complete Streets Implementation Action Plan provides an overview of the program (Caltrans 2010).

The current Morro Bay General Plan was adopted in 1988 prior to the Complete Streets Act. A stated goal of the General Plan and LCP Update is to make Morro Bay a pleasant and safe place to walk and bike.

Regional

San Luis Obispo Council of Governments, Regional Transportation Plan

The San Luis Obispo Council of Governments (SLOCOG) is required by State and federal law to prepare, update, and adopt a Regional Transportation Plan (RTP) every four years. The most recent update to the RTP was completed by SLOCOG in 2019 (SLOCOG 2019b). The 2019 RTP addresses all modes of travel and identifies and prioritizes expenditures from anticipated funding for all modes of transportation including highways, streets and roads, transit, rail, bicycle and pedestrian, as well as transportation demand management strategies. All transportation projects that use State and federal funds, or that could significantly affect transportation within the San Luis Obispo County, must be included in the RTP. The 2019 RTP identifies active transportation projects, non-highway system projects, highway system projects, and a park and ride project in Morro Bay.

The 2019 RTP includes the following goals:

- Preserve the transportation system.
- Improve intermodal mobility and accessibility for all people.
- Support a vibrant economy.

- Improve public safety and security.
- Foster livable, healthy communities and promote social equity.
- Practice environmental stewardship.
- Practice financial stewardship.

Local

2011 Morro Bay Bicycle and Pedestrian Master Plan

The Morro Bay Bicycle and Pedestrian Master Plan, adopted in 2012, describes existing conditions and identifies goals, objectives, and planned improvements to serve bicycle and pedestrian modes of travel in Morro Bay (City of Morro Bay 2011). Goals and objectives provide the context, direction and support for specific recommendations discussion in the Master Plan. The goals provide broad vision statements and serve as the foundation of the Master Plan, while objectives provide more detailed and measurable statements. Goals of the Master Plan are as follows:

- Adopt a “Complete Streets” policy requiring bicycle and pedestrian improvements in all transportation and development (private or public) projects subject to discretionary review.
- Complete the bicycling and walking systems suggested in this plan, recognizing these projects are Economic Generators for the city.
- Develop a city-wide educational program for non-motorized use, including a paper maps, pathways for play and road safety education.
- Collaborate with businesses and business organizations to promote bicycle use and walking as part of a Visitor Serving Strategy emphasizing bike/walking based tourism.
- Provide short and long term bike parking at targeted locations while further developing the “Racks with Plaques” Program.
- Improve safety, educational, and artistic amenities along existing and future paths.

The majority of the planned bikeways under the 2007 BTP would be Class I and Class II bikeways. As described above, Class I bikeways are paths or trails, separated from roadways, for the exclusive use of bicycles and pedestrians. Class II bikeways are striped lanes for one-way bicycle travel on streets and highways.

4.13.2 Impact Analysis

a. Methodology

The following text describes the methodology applied to the analysis of transportation and circulation impacts. The year 2040 was chosen as the year for the future conditions analysis, as 2040 is the planning horizon year of the General Plan and LCP Update.

Study Scenarios

Traffic operations were evaluated for weekday PM peak hour (4:00 p.m. to 6:00 p.m.) and Saturday midday (Saturday MID) peak hour at the study intersections roadway segments for the following traffic scenarios:

- Existing Conditions (2016)
- Buildout Conditions (2040)
- Buildout Plus Project Conditions (2040)

The Buildout Conditions scenario reflects buildout of the City's current General Plan land uses. The Buildout Plus Project Conditions scenario reflects the updated land uses proposed as a part of the General Plan and LCP Update.

Analysis of Peak Hour LOS

The analysis of peak hour LOS under the future 2040 conditions of the Buildout Conditions scenario and Buildout Plus Project Conditions scenario was conducted utilizing the SLOCOG Travel Demand Model. The SLOCOG Model estimates traffic using employees for most commercial uses. Because most land use planning is based on building square footage instead of employees it was necessary to convert the planned commercial square footage to an equivalent number of employees using conversion factors. The conversion factors were developed using an inventory of existing uses and existing employees using land use data provided by SLOCOG (Appendix E).

The SLOCOG link-level model outputs were extracted for the study intersections and locations and used to develop turning movement forecasts using the difference method, where the buildout model's growth over the base year is added to the base year's traffic counts. The raw forecasts were then reviewed for reasonableness and adjusted where needed to ensure conservation of flow between closely spaced intersections (Appendix E).

Consideration of Roadway Network Improvements

The intersection of SR 41 and Main Street (study intersection 4) was assumed to provide a roundabout incorporating the northbound SR 1 on- and off-ramps consistent with the configuration described in the *State Route 1/State Route 41/Main Street Intersection Control Evaluation Step 2 Report* (Omni-Means 2016). This intersection was evaluated using the Sidra software package due to the six-leg configuration. The remaining intersection lane configurations and traffic control types were assumed to remain the same under the Buildout Conditions scenario as the Existing Conditions scenario (Appendix E).

b. Significance Thresholds

The following criteria are based on Appendix G of the *CEQA Guidelines*. Impacts would be significant if implementation of the General Plan and LCP Update would do any of the following:

1. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities;
2. Conflict or be inconsistent with *CEQA Guidelines* Section 15064.3, subdivision (b), Criteria for Analyzing Transportation Impacts;
3. Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment); and/or
4. Result in inadequate emergency access.

As described above, the City does not have a formally adopted LOS threshold defining acceptable intersection and roadway segment operations for vehicles, but historically has applied the Caltrans target of LOS C or better as acceptable. Neither the City nor Caltrans have an adopted LOS threshold

for pedestrian and bicycle facilities. In the absence of a Caltrans threshold, for purposes of this analysis LOS D was also used as the performance threshold for pedestrian and bicycle facilities. LOS D was used as the threshold for these facilities because, as described in Table 4.13-4, delays under LOS D are tolerable for pedestrian and bicycle transportation modes.

c. Project Impacts and Mitigation Measures

Threshold 1: Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Impact T-1 IMPLEMENTATION OF THE GENERAL PLAN AND LCP UPDATE WOULD INCREASE VEHICLE TRAFFIC VOLUMES, WHICH HAVE THE POTENTIAL TO INTERFERE WITH PEDESTRIAN AND BICYCLE TRAVEL ON OR ALONG ROADWAYS. THE GENERAL PLAN AND LCP UPDATE INCLUDES GOALS AND POLICIES TO IMPROVE SAFETY, ACCESS, AND PERFORMANCE OF PUBLIC TRANSIT, BICYCLE, AND PEDESTRIAN TRANSPORTATION MODES. IMPLEMENTING SPECIFIC PEDESTRIAN CIRCULATION IMPROVEMENT MEASURES AT AFFECTED FACILITIES WOULD FURTHER IMPROVE THE PERFORMANCE OF PEDESTRIAN TRANSPORTATION MODES. THEREFORE, IMPACTS TO PEDESTRIAN OPERATIONS WOULD BE REDUCED TO A LESS THAN SIGNIFICANT LEVEL WITH MITIGATION.

Table 4.13-8 summarizes the LOS for pedestrian and bicycle modes at the roadway segments included in the study area under the Existing Conditions and Buildout Plus Project Conditions scenarios.

As shown in Table 4.13-8, bicycle travel on study area roadway segments would operate at LOS D or better during the weekday PM and Saturday MID peak hours under the Buildout Plus Project Conditions scenario. Pedestrian travel would operate at LOS E or LOS F on the following roadway segments under the Buildout Plus Project Conditions scenario:

- Segment 1. Embarcadero: North of Beach Street would operate at LOS F in the northbound direction during weekday PM and Saturday MID peak hours, and at LOS E in the southbound direction during the Saturday MID peak hour.
- Segment 4. Morro Bay Boulevard: West of Quintana Road would operate at LOS E in the eastbound direction during weekday PM and Saturday MID peak hours.
- Segment 5. Main Street: South of Radcliff Drive would operate at LOS F in the southbound direction during weekday PM and Saturday MID peak hours, at LOS F in the northbound direction during the Saturday MID peak hour, and LOS E in the northbound direction during weekday PM peak hour.
- Segment 6. SR 41: East of Main Street would operate at LOS F in both the northbound and southbound directions during the weekday PM and Saturday MID peak hours.

As shown in Table 4.13-8, under Existing Conditions scenario, pedestrian travel on Main Street: South of Radcliff Drive operates at LOS D in the southbound direction during Weekday PM and Saturday MID peak hours, and SR 41: East of Main Street would operate at LOS D in the southbound direction during Saturday MID peak hour. However, the General Plan and LCP Update would further degrade the LOS classification for pedestrian travel in 2040 on these roadway segments to LOS F. Pedestrian LOS measures pedestrian comfort and convenience based on survey data ranking the quality of the pedestrian experience on different facilities. Pedestrian LOS is not a measure of delay.

Table 4.13-8 Comparison of Pedestrian and Bicycle Level of Service for Roadway Segments with General Plan and LCP Update

Roadway Segment	Peak Hour	Direction	Pedestrian				Bicycle			
			Existing Conditions (2016)		Buildout Plus Project Conditions (2040)		Existing Conditions (2016)		Buildout Plus Project Conditions (2040)	
			LOS Score	LOS	LOS Score	LOS	LOS Score	LOS	LOS Score	LOS
1. Embarcadero: North of Beach Street	Weekday PM	NB	2.10	B	3.27	F	4.00	B	3.35	C
		SB	1.51	A	3.40	C	2.76	C	3.53	D
	Saturday MID	NB	2.48	B	4.55	F	3.02	C	3.64	D
		SB	1.77	A	4.60	E	2.97	C	3.74	D
2. Embarcadero: North of Pacific Street	Weekday PM	NB	1.32	A	1.64	A	2.86	C	3.53	D
		SB	1.16	A	1.74	A	2.74	B	3.73	D
	Saturday MID	NB	1.51	A	1.83	A	3.38	C	3.69	D
		SB	1.43	A	2.34	B	3.46	C	4.03	D
3. Embarcadero: South of Pacific Street	Weekday PM	NB	1.13	A	1.40	A	2.54	B	3.38	C
		SB	1.12	A	1.56	A	2.68	B	3.60	D
	Saturday MID	NB	1.32	A	1.47	A	3.12	C	3.47	C
		SB	1.27	A	1.84	A	3.12	C	3.80	D
4. Morro Bay Boulevard: West of Quintana Road	Weekday PM	EB	2.37	B	4.59	E	2.43	B	2.99	C
		WB	2.53	B	3.55	D	2.50	B	2.80	C
	Saturday MID	EB	2.27	B	4.29	E	2.38	B	2.94	C
		WB	2.47	B	3.44	C	2.47	B	2.77	C
5. Main Street: South of Radcliff Drive	Weekday PM	NB	2.56	B	4.43	E	2.34	B	2.96	C
		SB	3.79	D	5.00	F	2.48	B	2.88	C
	Saturday MID	NB	3.04	C	6.09	F	2.58	B	3.21	C
		SB	3.94	D	5.31	F	2.55	B	2.94	C
6. SR 41: East of Main Street	Weekday PM	EB	3.39	C	5.43	F	0.75	A	1.29	A
		WB	3.32	C	6.12	F	0.71	A	1.39	A
	Saturday MID	EB	3.31	C	5.20	F	0.71	A	1.25	A
		WB	3.56	D	7.04	F	0.82	A	1.50	A

Notes:

Unacceptable operations are shown in bold text.

Source: Appendix E

The General Plan and LCP Update Circulation Element includes several goals and policies to ensure acceptable access and performance for all modes of travel. These goals and policies would enhance the City's alternative transportation modes while continuing to accommodate automobile travel. For example, the following policies would enhance multimodal transportation and complete streets in Morro Bay:

- Policy LU-1.3 Access to Daily Needs.** Create sustainable development patterns characterized by mixed uses, walkable neighborhoods, and multimodal connections that allow residents to meet their daily needs for food, goods and services, employment, and other resources.
- Policy LU-8.10 Multimodal Access.** Emphasize access for public transit and active transportation in downtown and along the waterfront.
- Policy LU-8.11 Multimodal Connections.** Improve pedestrian connections between the downtown and waterfront areas, and increase the pedestrian appeal of downtown.
- Policy ED-1.10 Prioritize Access.** Situate new nonresidential development in easily accessible areas. Ensure that buildings can be reached by walking, biking, and public transit.
- Policy CIR-1.1 Balanced Transportation.** Work to complete a balanced multimodal transportation system that meets the needs of all users, including pedestrians, cyclists, motorists, children, seniors, and people with disabilities.
- Policy CIR-1.2 Access Improvement.** Use infrastructure improvements within public rights-of-way as an opportunity to improve street design and multimodal access.
- Policy CIR-1.3 System Connectivity.** Develop a complete and connected network of accessible sidewalks, crossings, paths, and separated bike lanes that are convenient and attractive throughout the city.
- Policy CIR-1.4 Future Enhancements.** Identify streets in the city that can be made "complete," and plan for new bikeways, sidewalks, and crosswalks on these streets by reallocating how space within the public right-of-way is used.
- Policy CIR-1.5 Regional Transit.** Coordinate with the San Luis Obispo Regional Transit Authority to ensure local transit connects smoothly with regional transit and possible future route and schedule expansions.
- Policy CIR-1.6 Local Transit Improvement.** Continue to improve the local Morro Bay Transit Deviated Fixed Route and Call-A-Ride services and ensure connections to regional transit and active transportation facilities.
- Policy CIR-1.8 Capital Improvement Program.** Use the City's Capital Improvement Program (CIP) process to prioritize, fund, and build roadway and bikeway improvements, and to address phasing and construction of traffic infrastructure throughout the city.

Policy CIR-1.11 Adequate Capacity. Maintain adequate street capacity and reduce congestion for all modes of transportation on the street and freeway system. Address congestion along corridors by enhancing the public transportation system, promoting mixed-use development patterns to reduce vehicle miles traveled (VMT), and implementing transportation demand management strategies to increase mobility options.

The following policies would promote active transportation by addressing safety concerns:

Policy CIR-2.1 Compact Development. Support mixed-use, compact-style, and other land use development patterns within existing developed areas so as to facilitate easy active transportation and transit use. (See also Policies LU-3.1, LU-3.3, LU-3.6, and LU-3.7.)

Policy CIR-2.2 Street End Pedestrian Connections. Create safer and more distinct lateral access connections across the street ends on the west side of the Embarcadero at Dunes, Harbor, Morro Bay Boulevard, Front, Pacific, Marina, and Driftwood Streets, including by relocating parking from these areas. (See also Policies LU-4.1, LU-4.5, LU-4.6, LU-7.1 through LU-7.6, and OS-1.6 and Implementation Action LU-19).

Policy CIR-2.3 Pedestrian Safety. Provide for accessible, safe, and convenient paths and crossings along major streets for all users, including the disabled, youth, and the elderly. (See also Policies LU-8.5 and OS-3.6.)

Policy CIR-2.4 Active Transportation Amenities. Provide facilities and amenities for active transportation users at public facilities, including bicycle storage and seating areas. (See also Policies LU-8.4 and OS-1.8.)

Policy CIR-2.5 Prioritizing Improvements. Prioritize infrastructure improvements that benefit bicycle and pedestrian safety and convenience around community facilities and locations in pedestrian-oriented areas. (See also Policy OS-1.8 and Implementation Action OS-1.)

Policy CIR-2.6 Destination Facilities. Require and place access areas and facilities for bicycle, pedestrian, and transit travel in front of major destinations, such as shopping centers, parks, and schools. Facilities may include any or a combination of the following: designated passenger drop-off and pickup zones, benches, lighting, secure bike parking, shelters, and street trees. (See also Policies LU-2.3 and PS-2.1.)

Policy CIR-2.7 Traffic Calming. Develop and implement strategies to calm traffic on streets that have a high amount of pedestrian and bicycle traffic, or are in neighborhoods with residences, schools, parks, or other areas frequented by children.

Implementation and adherence to the above policies and implementation programs in the General Plan and LCP Update would promote pedestrian and bicycle transportation modes and improve performance and safety of the transportation system for pedestrian, bicycle, and transit users. For example, Policy CIR-2.7 would implement strategies to calm traffic on streets with high amounts of pedestrian and bicycle use, which would reduce delays associated with vehicle traffic, such as delays at intersection crosswalks. With implementation of these policies, the General Plan and LCP Update

would result in a less than significant impact to the performance of transit and bicycle facilities. However, impacts to the performance of pedestrian facilities would result in a potentially significant impact.

Mitigation Measures

The intersection improvements described in Mitigation Measure T-1 would improve operations for vehicles at key intersections in the study area, resulting in improved operations for alternative transportation modes throughout the study area.

T-1 Pedestrian Facility Improvements

The following pedestrian facility improvements shall be added to the list of “Planned Circulation Improvements” in the General Plan and LCP Update Circulation Element.

- Embarcadero North of Beach Street: Provide sidewalks and a vehicular connection shifting traffic away from Beach Street for the redeveloped Morro Bay Power Plant site.
- Morro Bay Boulevard: Provide a landscaped buffer at least two feet wide between the sidewalk and travel lanes.
- Main Street south of Radcliffe Drive: Provide continuous sidewalks to provide acceptable pedestrian operations.
- SR 41 east of Main Street: Provide sidewalks with a landscaped buffer when adjacent properties are redeveloped.

In addition, Policy CIR-1.8 shall be revised as follows:

Policy CIR-1.8 Capital Improvement Program. Use the City's Capital Improvement Program (CIP) process to prioritize, fund, and build roadway, ~~and~~ bikeway, and pedestrian improvements, and to address phasing and construction of traffic infrastructure throughout the city.

As individual development projects are proposed, focused, project-level environmental review may be required, which could result in the implementation of project-specific mitigation measures to improve operations for pedestrians. Implementation of identified goals and policies to improve performance and safety of the transportation system for pedestrian, bicycle, and transit users would ensure that potential impacts associated with the performance of alternative transportation facilities would maintain acceptable operation of pedestrian modes.

Significance After Mitigation

Mitigation Measure T-1 and applicable policies in the General Plan and LCP Update would improve pedestrian operations at affected roadway segments. Therefore, impacts to pedestrian operations would be reduced to a less than significant level after implementation of Mitigation Measure T-1 and all applicable policies in the General Plan and LCP Update.

Threshold 2: Would the project conflict or be inconsistent with *CEQA Guidelines* Section 15064.3, subdivision (b), Criteria for Analyzing Transportation Impacts?

Impact T-2 THE GENERAL PLAN AND LCP UPDATE ANTICIPATES LAND USE GROWTH THAT WOULD RESULT IN A LONG-TERM INCREASE IN VEHICLE MILES TRAVELED (VMT) WITHIN THE CITY’S SPHERE OF INFLUENCE (SOI). THE GENERAL PLAN AND LCP UPDATE CIRCULATION ELEMENT INCLUDES GOALS AND POLICIES THAT REDUCE RELIANCE ON PASSENGER VEHICLES, FACILITATE PEDESTRIAN AND BICYCLE TRANSPORTATION, AND ESTABLISH LOCAL TARGETS FOR VMT REDUCTION. HOWEVER, FUTURE DEVELOPMENT IN MORRO BAY WOULD RESULT IN INCREASED PER SERVICE POPULATION VMT, AND NO FEASIBLE MITIGATION IS AVAILABLE THAT WOULD FULLY ADDRESS THE ANTICIPATED INCREASE IN VMT. THIS IMPACT WOULD BE SIGNIFICANT AND UNAVOIDABLE.

Table 4.13-9 shows estimated daily VMT under Existing (2016), Buildout (2040), and Buildout Plus Project (2040) conditions. Daily VMT and daily per service population are evaluated to provide a comparison of overall VMT to efficiency of VMT relative to potential land use scenarios.

Table 4.13-9 VMT in Morro Bay (Existing, Buildout and Buildout Plus Project)

Trip Type	Daily VMT in SOI	Daily VMT in SOI/ Service Population ¹	Daily VMT in County	Daily VMT in County/ Service Population ¹
Existing (2016)				
Origin and destination within City SOI	52,256	3.2	52,256	3.2
Origin only within City SOI	16,061	1.0	48,024	3.0
Destination only within City SOI	16,422	1.0	50,924	3.2
Total	84,739	5.3	151,205	9.4
Buildout (2040)				
Origin and destination within City SOI	63,301	3.6	63,301	3.6
Origin only within City SOI	18,268	1.0	53,405	3.0
Destination only within City SOI	18,535	1.1	58,616	3.3
Total	100,104	5.7	175,322	10.0
Buildout Plus Project (2040)				
Origin and destination within City SOI	123,487	3.9	123,487	3.9
Origin only within City SOI	82,925	2.6	720,021	22.8
Destination only within City SOI	91,287	2.9	782,939	24.7
Total	297,699	9.4	1,626,447	51.4

¹ Service Population describe the number of residents plus the number of employees. Consistent with Sections 4.6 and 4.16 of this EIR, this analysis uses a service population of 16,114 for Existing conditions, 17,500 for Buildout (2040) conditions, and 31,648 for Buildout Plus Project (2040) conditions.

Source: Appendix E; SLOCOG and CA Statewide Travel Demand Models

The City of Morro Bay has not yet adopted significance thresholds for evaluating potential VMT impacts. In the absence of a locally-adopted threshold, the Office of Planning and Research has published the *Technical Advisory on Evaluating Transportation Impacts in CEQA* (Technical Advisory, December 2018). The Technical Advisory recommends analyzing VMT outcomes of land use plans across the full area over which the plan may substantively affect travel patterns, including beyond the boundary of the plan or jurisdiction’s geography. The Technical Advisory recommends that

general plans may have a significant impact on transportation if proposed new residential, office, or retail land uses would in aggregate exceed a threshold of 15 percent lower per capita or per employee VMT than existing development. The Technical Advisory includes evidence connecting this level of reduction to the State's emissions goals.

The increase in total daily VMT is attributable to the increase in employment associated with substantial commercial growth envisioned in the General Plan and LCP Update land use plan. This increase would modify regional travel patterns, resulting in increased daily VMT per service population in the Morro Bay SOI and in San Luis Obispo County. As shown in Table 4.13-9, the land use growth evaluated under Buildout Plus Project conditions would result in an increase in daily VMT and daily per service population VMT over Existing conditions, which would result in a potentially significant transportation impact based on the VMT threshold described in the OPR Technical Advisory.

The General Plan and LCP Update Circulation Element includes goals and policies related to reducing VMT in Morro Bay. In addition to goals and policies described in Impact T-2, above, which would enhance the City's alternative transportation modes, reducing reliance on passenger vehicles and facilitating pedestrian and bicycle transportation, the following policies would establish local targets for VMT reduction and improve access to bicycle sharing, park and ride, and transit options:

Goal CIR-3 Traffic monitoring considers all methods of travel, with emphasis on active and sustainable transportation methods.

Policy CIR-3.2: VMT Thresholds. Achieve State-mandated reductions in VMT by establishing and adopting a VMT standard.

Policy CIR-3.3: Updating Guidelines. Regularly update guidelines for transportation impact analyses to ensure consistency with established metrics and standards.

Policy CIR-4.7: Alternative Options. Require or establish EV charging stations, bike sharing and park and ride locations throughout Morro Bay and in particular close to transit and amenities.

Consistent with Policy CIR-3.2 and CIR-3.3, individual development projects in Morro Bay would require focused, project-level environmental review, and would require mitigation to reduce VMT where potential environmental impacts are identified. Project-level analysis of potential future VMT impacts would be based on VMT thresholds established by the City consistent with General Plan and LCP Update Circulation Element Policy CIR-3.2. Based on the outcome of project-level environmental review of new development in Morro Bay, such new development may require implementation of project-specific mitigation measures to reduce identified VMT impacts. While the individual potential impacts of future development in Morro Bay are speculative, the overall potential impacts of the increase in VMT in the Morro Bay SOI and in San Luis Obispo County identified for the General Plan and LCP Update would be potentially significant.

Mitigation Measures

Future development in Morro Bay would result in increased long-term VMT, even with implementation of identified goals and policies that would reduce VMT to an extent. No additional feasible mitigation is available that would fully address the anticipated increase in VMT resulting from the General Plan and LCP Update.

Significance After Mitigation

Implementation of the goals and policies in the General Plan and LCP Update would contribute to reducing VMT in Morro Bay. However, no additional feasible mitigation is available that would fully address the anticipated increase in VMT. Therefore, impacts associated with increased VMT in the Morro Bay SOI and in San Luis Obispo County would remain significant and unavoidable after implementation of all applicable policies in the General Plan and LCP Update.

Threshold 3: Would the project substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?

Impact T-3 THE GENERAL PLAN AND LCP UPDATE IS A PROGRAMMATIC GUIDE TO TRANSPORTATION IN MORRO BAY AND DOES NOT INCLUDE PROJECT-LEVEL DESIGN FEATURES. FUTURE ROADWAY IMPROVEMENTS, SITE ACCESS, AND OTHER ROADWAY DESIGN FEATURES WOULD BE DESIGNED AND REVIEWED IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND CITY STANDARDS. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

The General Plan and LCP Update is a program-level plan that does not directly address project-level design features or specifications for roadways or other transportation facilities. The City maintains improvement standards that guide the construction of new transportation facilities to minimize design hazards for all users of the transportation system. Land use proposals that would add traffic to streets not designed to current standards are evaluated through the project-level environmental review process. If needed, mitigation measures are identified and individual improvement projects are conditioned to construct or provide funding for physical improvements that would eliminate or minimize hazards. Typical improvements include shoulder widening, adding turn pockets, adding sidewalks or crosswalks, realigning sharp curves, prohibiting certain turning movements, and signaling intersections, among other measures. New and upgraded roadways needed to accommodate new development would be designed according to applicable federal, State, and local specifications and design standards.

The General Plan and LCP Update Circulation Element includes goals and policies related to infrastructure and right-of-way safety. For example, the following policies would enhance infrastructure and right-of-way safety in Morro Bay:

Goal CIR-1 Residents and visitors can easily move about the city in a variety of safe and active ways.

Policy CIR-1.2 Access Improvement. Use infrastructure improvements within public rights-of-way as an opportunity to improve street design and multimodal access.

Policy CIR-1.3: System Connectivity. Develop a complete and connected network of accessible sidewalks, crossings, paths, and separated bike lanes that are convenient and attractive throughout the city.

Goal CIR-2 Morro Bay is a pleasant and safe place to walk and bike.

Policy CIR-2.2: Street End Pedestrian Connections. Create safer and more distinct lateral access connections across the street ends on the west side of the Embarcadero at Dunes, Harbor, Morro Bay Boulevard, Front, Pacific, Marina, and Driftwood Streets, including by relocating parking from these areas. (See also Policies LU-4.1, LU-4.5, LU-4.6, LU-7.1 through LU-7.6, and OS-1.6 and Implementation Action LU-19).

Policy CIR-2.3 Pedestrian Safety. Provide for accessible, safe, and convenient paths and crossings along major streets for all users, including the disabled, youth, and the elderly.

Policy CIR-2.7: Traffic Calming. Develop and implement strategies to calm traffic on streets that have a high amount of pedestrian and bicycle traffic, or are in neighborhoods with residences, schools, parks, or other areas frequented by children.

In addition, development and infrastructure projects in Morro Bay would be required to comply with the Morro Bay Municipal Code and applicable federal, State, and local regulations. Compliance with applicable regulations, as well as the goals and policy included in the General Plan and LCP Update regarding infrastructure safety, would ensure that potential impacts associated with transportation hazards or incompatible uses would remain less than significant.

Mitigation Measures

As individual development projects are proposed, focused, project-level environmental review may be required, which could result in the implementation of project-specific mitigation measures. Compliance with applicable regulations, as well as the identified goals and policies regarding infrastructure safety, would ensure that potential impacts associated with transportation hazards or incompatible uses would remain less than significant.

Threshold 4: Would the project result in inadequate emergency access?
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Impact T-4 DUE TO THE PROGRAMMATIC NATURE OF THE GENERAL PLAN AND LCP UPDATE AND THE POLICIES TO CREATE AN INTEGRATED, MULTI-MODAL TRANSPORTATION SYSTEM THE GENERAL PLAN AND LCP UPDATE WOULD NOT RESULT IN INADEQUATE EMERGENCY ACCESS. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Because the General Plan and LCP Update is a program-level planning effort, it does not include or directly address project-level design features or building specifications. Both the current General Plan and the the General Plan and LCP Update include polices that would ensure efficient circulation and adequate access are provided in the city, and that adequate emergency access be provided.

Goal CIR-1 Residents and visitors can easily move about the city in a variety of safe and active ways.

Policy CIR-1.2 Access Improvement. Use infrastructure improvements within public rights-of-way as an opportunity to improve street design and multimodal access.

Policy CIR-1.11 Adequate Capacity. Maintain adequate street capacity and reduce congestion for all modes of transportation on the street and freeway system. Address congestion along corridors by enhancing the public transportation system, promoting mixed-use development patterns to reduce vehicle miles traveled (VMT), and implementing transportation demand management strategies to increase mobility options.

Policy CIR-1.12: Climate Change Impacts on Transportation. Require ongoing evaluation of the transportation infrastructure system and its ability to withstand future effects of climate change. Identify future points to begin incorporating resilient

strategies and materials into design, using the most up-to-date guidance from the Federal Highway Administration.

Goal PS-4 Response to emergencies is quick, efficient, and effective.

Policy PS-4.1: Update Emergency Response Plan. Regularly update the Morro Bay Emergency Response Plan with updated evacuation routes and hazard information. Publicize evacuation routes and other relevant emergency procedures.

Policy PS-4.5 Transportation Requirements. Establish minimum road widths and clearances around structures to improve transportation in the event of an emergency.

Future development under the General Plan and LCP Update, as part of the City's project approval process, would be required to comply with existing regulations, including General Plan policies and Zoning regulations that have been developed to minimize impacts related to emergency access. The City would implement the General Plan programs that require the City's coordination with local emergency response providers.

In addition, Fire Department review of new development applications for adequate emergency access and evacuation routes as required as part of the City's development review process. Adherence to the State and City requirements combined with implementation of applicable General Plan and LCP Update policies listed above, would ensure adequate emergency response is maintained in Morro Bay. Therefore, potential impacts to emergency response would be less than significant.

Mitigation Measures

As individual development projects are proposed, focused, project-level environmental review may be required, which could result in the implementation of project-specific mitigation measures. Compliance with applicable State and City requirements, as well as the identified goals and policies to minimize impacts related to emergency access, would ensure that potential impacts related to emergency response would remain less than significant.

d. Cumulative Impacts

The analysis in this section examines impacts of the General Plan and LCP Update on transportation and circulation throughout the cumulative impact analysis area, which consists of San Luis Obispo County. The traffic data for both the Buildout Plus Project Conditions scenario and Buildout Conditions scenario, which were used for this analysis, reflect cumulative development as part of the overall buildout conditions of the region in the future.

The cumulative traffic impacts of the General Plan and LCP Update were determined by a comparison of the Existing Conditions scenario and the Buildout Plus Project Conditions scenario. As shown in Table 4.13-9, the cumulative land use growth evaluated under Buildout Plus Project conditions would result in an increase in daily VMT and daily per service population VMT. As discussed in Impact T-2, the individual potential impacts of future development in Morro Bay are speculative; however, the cumulative impact of the increase in VMT in the Morro Bay SOI and in San Luis Obispo County identified for the General Plan and LCP Update would be potentially significant. Future development in Morro Bay would result in increased long-term VMT, even with implementation of identified goals and policies that would reduce VMT to an extent. Consistent with Policy CIR-3.2 and CIR-3.3, individual development projects in Morro Bay would require focused, project-level environmental review, and would require mitigation to reduce VMT where

potential environmental impacts are identified. Implementation of the goals and policies in the General Plan and LCP Update would contribute to reducing VMT in Morro Bay, but no additional feasible mitigation is available that would fully address the anticipated increase in VMT resulting from the General Plan and LCP Update. Therefore, cumulative transportation impacts would remain significant and unavoidable.

4.14 Utilities

This section evaluates potential effects on utilities related to adoption and implementation of the General Plan and LCP Update by identifying anticipated demands and existing and planned service availability and determining whether any necessary facility upgrades would result in adverse environmental effects. For purposes of this EIR, utilities include: a) water supply; b) wastewater; c) solid waste and d) stormwater facilities. Potential cumulative impacts related to stormwater are evaluated and discussed in Section 4.8, *Hydrology and Water Quality*.

4.14.1 Setting

a. Water Supply

The City of Morro Bay is the primary water provider for residents and businesses in the planning area. The municipal water service area for the city is shown on Figure 4.8-2 in Section 4.8, *Hydrology and Water Quality*.

Morro Bay Municipal Water System

The City of Morro Bay manages the potable water and wastewater systems within a service area that generally corresponds with the city limits. Within the service area, the City's water system consists of approximately 72 miles of active water distribution pipelines up to 16-inches in diameter, ten treated water storage tanks, three booster pump stations, four Pressure Reducing Valve (PRV) stations, and six pressure zones (City of Morro Bay 2018c).

Water Sources and Supply

Morro Bay relies on two sources for its water supply: groundwater from the Morro Valley Basin, and imported water from the California State Water Project (SWP) conveyed by the Central Coast Water Authority (CCWA) and purchased from San Luis Obispo County. Morro Bay currently does not utilize supplier-produced surface water, storm water, or recycled water (Appendix B). The City is currently in the process of developing a third water supply source by means of a new advanced wastewater treatment facility with the ability to produce highly purified wastewater for potable reuse through groundwater injection and recovery (City of Morro Bay 2018c).

Groundwater

The City has access to and water rights permits for two local groundwater basins: Morro and Chorro Basins. The Chorro Creek water rights include a condition that the City can only pump wells when Chorro Creek flow exceeds 1.4 cubic feet per second (cfs), which can limit the availability of the resource. In total, the City has pumping rights to 1,723.5 acre-feet per year (AFY) from both basins: up to 1.2 cfs and 581 AFY from Morro Basin, and up to 3.171 cfs for Chorro Creek underflow. The City has historically operated seven drinking water wells, four of which are active in the Morro Groundwater Basin. In the Chorro Groundwater Basin, only one is active due to high nitrate levels in the others. The Chorro Basin water has not been used since 2012 for these reasons (Appendix B). The City Council in 2018 adopted Resolution 92-18 which in part directed to begin the process to relinquish water rights in the Chorro Valley, including the discontinuation of stream flow monitoring as recommended in the OneWater planning document due to the costs associated with nitrate removal from this water supply.

The water pumped from the Morro Basin also, at times, exceeds the Maximum Contaminate Level (MCL) for nitrate (45 milligrams per liter as NO₃), due to upstream agricultural application of high nitrate fertilizer. Due to the exceedance of the nitrate MCL the water is treated through the use of the City's Brackish Water Reverse Osmosis (BWRO) system for nitrate removal. The BWRO system uses the same ocean outfall as the decommissioned Seawater Water Reverse Osmosis (SWRO) system (refer to discussion of desalination, below) and is subject to the Coastal Commission permit restrictions for emergency use. Once the City's groundwater recharge and recovery is operational, the hydrogeologic model indicated a reduction in nitrate in the Morro Basin to below the MCL. Should the modeling result be proven out through physical testing during permitting and startup of the groundwater recharge and recovery system, the City will discontinue treatment of groundwater in the BWRO.

Surface Water

According to the Community Baseline Assessment for the General Plan and LCP Update, 97 percent of the City's existing water supply is provided by the SWP. The City is contractually entitled to 1,313 AFY of state water from the County of San Luis Obispo, plus an additional 174 percent drought buffer, or additional supply, to ensure reliability when the SWP has to reduce overall deliveries during dry years (Appendix B).

Desalination

The City constructed a seawater desalination facility during a drought emergency in 1992. The plant utilized a SWRO system to desalinate seawater produced from five seawater wells located along the Morro Bay harbor. The desalination facility has been decommissioned per Council Resolution 92-18 and as recommended in the OneWater Morro Bay Plan. City staff had discussed with the California Coastal Commission the possibility for operating the facility under certain emergency conditions. Continued operations of the desalination facility were determined not to be viable due to costs associated with rebuilding the system.

Future Water Supply and Demand

The OneWater Morro Bay Plan outlines projected water supply under dry-year drought conditions. Over the last decade the City of Morro Bay occasionally has had difficulty meeting water demand due reductions to allocation in State Water compounded by water quality from its Chorro Creek Groundwater Basin resources and in-stream minimum flow requirements. The City has been able to meet demands during a high drought period through a drought buffer agreement with the San Luis Obispo County Flood Control and Water Conservation District (SLOFCWCD). On several occasions the City has utilized the now expired emergency exchange water from the California Department of Corrections and Rehabilitation (CDCR) California Men's Colony water treatment plant. The City is currently under construction for a new Water Reclamation Facility (WRF) that will provide an additional source of water. The WRF is designed to produce highly purified wastewater to augment the City's water supply through groundwater injection and recovery (City of Morro Bay 2018a).

The City's water supply is projected to increase from actual use in 2015 to projected available supply in 2025. Recycled water is expected to become a contributing source of supply by 2025, and projected available supply is expected to remain constant from 2025 through 2040. The majority of demand will be met by imported surface water with the remaining supplies serving as a backup. The City is expected to have an available supply in excess of projected demand through 2040.

Table 4.14-1 shows actual water supply and demand for the city in 2015 and projected water supply and demand for the city through 2040.

Table 4.14-1 Water Supply and Demand – Actual (2015) and Projected

Year	2015	2020	2025	2030	2035	2040
	(Actual)	(Projected Availability)				
Groundwater	138	1,724	581	581	581	581
Surface Water (Purchased Imported Water)	952	1,313	1,313	1,313	1,313	1,313
Recycled Water (IPR GWR)	0	0	850	850	850	850
Total Supply	1,090	3037	2744	2744	2744	2744
Demand	1,074	1,298	1,977	2,013	2,048	2,087

Note: Units in acre-feet per year (AFY). Groundwater sources include 1,724 AFY from well extraction. Starting in 2025, groundwater sources will include 650 AFY recycled water supply from groundwater recharge. Desalinated water includes 645 AFY of treated seawater. Source: City of Morro Bay 2016a

According to the Community Baseline Assessment for the General Plan and LCP Update, per capita water use in the city has dropped from over 140 gallons per capita per day (gpcd) before 1990 to under 106 gpcd in 2010 as a result of ongoing water conservation measures. Many of the water conservation measures implemented during drought conditions, such as plumbing retrofits and prohibitions against wasting irrigation water, have provided other benefits to the community, resulting in continued, limited water consumption (Appendix B). However, water demand is expected to continue increasing through 2040, with a projected 2,087 acre-feet delivered per year by that time (City of Morro Bay 2016a).

b. Wastewater Collection and Treatment

The City of Morro Bay Public Works Department provides wastewater collection services within the planning area and co-operates its sewer system and wastewater treatment plant through a Joint Powers Authority (JPA) with the Cayucos Sanitary District (CSD). The wastewater system consists of approximately 55 miles of active gravity sewer pipelines, 1.8 miles of force mains, and three pump stations that conveys raw wastewater to the Morro Bay-Cayucos Wastewater Treatment Plant (WWTP) located on Atascadero Road (City of Morro Bay 2018c). The WWTP currently serves a population of approximately 13,300 people within and near the jurisdictional boundary of Morro Bay, and has an average daily flow of 1.089 million gallons per day (Appendix B).

As discussed in the Community Baseline Assessment for the General Plan and LCP Update, the WWTP no longer has adequate treatment capacity and cannot meet current secondary discharge requirement, which results in partially-treated sewage being discharged into the ocean. The City has evaluated options for reconstruction and expansion of the wastewater treatment plant for a number of years and approved a Coastal Development Permit (CDP) for a site near the intersection of South Bay Boulevard and State Route (SR) 1 which is currently under construction. CSD had originally been involved in the reconstruction and expansion plans but elected to withdraw from the process and construct a separate wastewater treatment plant. The replacement of the WWTP wastewater treatment plan is part of a larger set of ongoing projects identified in the OneWater

Plan. According to the Draft Water Reclamation Facility Master Plan for the WRF, the new WRF is planned to accommodate an average daily flow capacity of 0.97 million gallons at full buildout (City of Morro Bay 2016b; City of Morro Bay 2018c).

c. Solid Waste

The City contracts with Morro Bay Garbage (MBG) to provide residential and commercial waste collection services in the planning area. MBG is a subsidiary of Waste Connections Incorporated, which serves the San Luis Obispo Integrated Waste management Authority (IWMA) jurisdictional area. MBG provides collection service for household trash, recyclable materials, and clean green waste, such as untreated wood and cut grass. The estimated volume of waste collected for Morro Bay between 2010 and 2014 ranged between 106.7 and 121.7 tons per year, with no clear trend toward increasing or decreasing during that time (Appendix B).

MBG deposits waste collected in Morro Bay at the Cold Canyon Landfill, one of three landfills in the IWMA jurisdictional area. Cold Canyon Landfill is located an estimated 25 miles southeast of Morro Bay on SR 227. Solid waste transported to the landfill is either sorted and recycled or deposited into the landfill. The estimated permitted landfill capacity of the Cold Canyon Landfill is just over 23 million cubic yards and is estimated to have 62 years of remaining life (Appendix B). The California Department of Resources Recycling and Recovery (CalRecycle) reports per capita disposal rates, measures in pounds per person (both residential population and employed population) to establish compliance with Assembly Bill 939, which requires cities and counties to prepare integrated waste management plans and to divert 50 percent of solid waste from landfills. Disposal rates in the San Luis Obispo IWMA are not separated by jurisdiction. Between 2010 and 2014, the per capita disposal rates for the IWMA ranged between 4.3 and 4.9 pounds per day, and disposal rates per employee ranged between 11.5 and 13.8 pounds per day (refer to Appendix B).

d. Stormwater Facilities

The City of Morro Bay Public Works staff are responsible for the restoration, protection, and preservation of surface waters and water quality in the city, as well as maintenance, repair, mapping, and evaluation of public drainage systems. Discharges from the City's storm drain system into the creeks, ocean and bay are permitted under the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (MS4s), Order No. 2013-0001-DWQ (MS4 General Permit).

e. Regulatory Setting

Federal

Clean Water Act

The federal Clean Water Act, enacted by Congress in 1972 and amended several times since, is the primary federal law regulating water quality in the United States and forms the basis for several State and local laws throughout the country. The Act established the basic structure for regulating discharges of pollutants into the waters of the United States. The Clean Water Act gave the U.S. Environmental Protection Agency the authority to implement federal pollution control programs, such as setting water quality standards for contaminants in surface water, establishing wastewater and effluent discharge limits for various industry contaminants in surface water, establishing wastewater and effluent discharge limits for various industry categories, and imposing requirements

for controlling nonpoint-source pollution. At the federal level, the Clean Water Act is administered by the U.S. Environmental Protection Agency and U.S. Army Corps of Engineers. At the state and regional levels in California, the act is administered and enforced by the State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards (RWQCB).

Clean Water Act Section 402

Section 402 of the Clean Water Act requires that all construction sites on an acre or greater of land, as well as municipal, industrial and commercial facilities discharging wastewater or stormwater directly from a point source (e.g., pipe, ditch, or channel) into a surface water of the United States must obtain permission under the NPDES permit. All NPDES permits are written to ensure that the surface water receiving discharges will achieve specified water quality standards.

In California, the NPDES program is administered by the SWRCB through the RWQCBs and requires municipalities to obtain permits that outline programs and activities to control wastewater and stormwater pollution. Discharges from the City of Morro Bay's storm drain system are permitted under NPDES General Permit for Storm Water Discharges From Small Municipal Separate Storm Sewer Systems (MS4s), Permit No. R3-2008-0065 (MS4 General Permit). A discussion of the NPDES permit and other regulations and policies applicable to stormwater management and stormwater discharges is provided in Section 4.8, *Hydrology and Water Quality*.

Title 40 of the Code of Federal Regulations

Title 40 of the Code of Federal Regulations (CFR), Part 258 (Resource Conservation and Recovery Act, Subtitle D), contains regulations for municipal solid waste landfills and requires states to implement their own permitting programs incorporating the Federal landfill criteria.

State

Water Supply

Drinking water quality in the planning area is regulated by the California Department of Public Health (CDPH), the SWRCB, and the Central Coast RWQCB. The California Code of Regulations, Title 22 (State Drinking Water Standards) is the primary body of State legislation providing water system standards, including those for water supply, storage capacity, and water quality. Other applicable regulations and policies include the Porter-Cologne Water Quality Control Act, the Safe Drinking Water Act, and the SWRCB Non-degradation Policy.

PORTER-COLOGNE WATER QUALITY CONTROL ACT (CALIFORNIA WATER CODE)

The State of California is authorized to administer Federal or State laws regulating water pollution within the State. The Porter-Cologne Water Quality Control Act (Water Code §§ 13000, et seq.) includes provisions to address requirements of the Clean Water Act (CWA). These provisions include NPDES permitting, dredge and fill programs, and civil and administrative penalties. The Porter-Cologne Act is broad in scope and addresses issues relating to the conservation, control, and utilization of the water resources of the State. Additionally, the Porter-Cologne Act states that the quality of all the waters of the State (including groundwater and surface water) must be protected for the use and enjoyment by the people of the State.

CALIFORNIA DEPARTMENT OF WATER RESOURCES

The California Department of Water Resources (DWR) is responsible for preparing and updating the California Water Plan, which is a policy document that guides the development and management of State water resources. The plan is updated every five years to reflect changes in resources and urban, agricultural, and environmental water demands. The California Water Plan suggests ways of managing demand and augmenting supply to balance water supply with demand.

CALGREEN COMPLIANCE

CALGreen is California's first green building code and first in the nation state-mandated green building code. It is formally known as the California Green Building Standards Code, Title 24, Part 11, of the California Code of Regulations. CALGreen also specifies requirements for applications regulated by the California Building Standards Commission (BSC), California Energy Commission (CEC), Division of the State Architect (DSA), Department of Public Health (CDPH), Office of Statewide Health Planning and Development (OSHPD), and DWR. The purpose of CALGreen is to improve public health, safety, and general welfare through enhanced design and construction of buildings using concepts which reduce negative impacts and promote those principles which have a positive environmental impact and encourage sustainable construction practices including water efficiency and conservation, and environmental quality.

URBAN WATER MANAGEMENT PLANNING ACT

The Urban Water Management Planning Act of 1983 amended California Water Code to require all urban water suppliers in California to prepare and adopt an urban water management plan (UWMP) and update it every five years. This requirement applies to all suppliers providing water to more than 3,000 customers or supplying more than 3,000 AFY of water.

SUSTAINABLE GROUNDWATER MANAGEMENT ACT

In September 2014, Governor Brown signed legislation requiring that California's critical groundwater resources be sustainably managed by local agencies. The Sustainable Groundwater Management Act gives local agencies the power to sustainably manage groundwater and requires groundwater sustainability plans to be developed for medium- and high-priority groundwater basins.

WATER CONSERVATION ACT OF 2009 (SB X7-7)

Due to reductions of water available from the San Joaquin Delta, the Legislature drafted the Water Conservation Act of 2009 (SB X7-7) to protect statewide water sources. The legislation called for a 20 percent reduction in water use in California by the year 2020. The legislation amended the Water Code to call for 2020 and 2015 water use targets in the 2010 UWMPs, updates or revisions to these targets in the 2015 UWMPs and allows DWR to enforce compliance to the new water use standards. Beginning in 2016, failure to comply with interim and final targets will make the City ineligible for grants and loans from the State. In addition to an overall statewide 20 percent water use reduction, the objective of SB X7-7 is to reduce water use within each hydrologic region in accordance with the agricultural and urban water needs of each region. Currently, DWR recognizes 10 separate hydrologic regions. Each hydrologic region has been established for planning purposes and corresponds to the State's major drainage areas. The City of Morro Bay is located in the Central Coast Hydrologic Region, which includes all of Santa Cruz, Monterey, San Luis Obispo, and Santa

Barbara Counties, most of San Benito County, and parts of San Mateo County, Santa Clara County, and Ventura Counties (California DWR 2003).

MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (ASSEMBLY BILL 1881)

The updated Model Water Efficient Landscape Ordinance (WELO) required cities and counties to adopt landscape water conservation ordinances by January 31, 2010 or to adopt a different ordinance that is at least as effective in conserving water as the updated Model WELO. The City Zoning Code requirement to reduce the amount of water used in landscaping (Chapter 17.48) does not apply to single-family residential projects. In addition to Zoning Code Chapter 17.48, the City follows the State requirements in the Model WELO.

Executive Order B-29-15 required the State to revise the Model WELO to increase water efficiency standards for new and retrofitted landscapes through more efficient irrigation systems, greywater usage, on-site stormwater capture, and by limiting the portion of landscapes that can be covered in turf. It also requires reporting on the implementation and enforcement of local ordinances, with required reports due by December 31, 2015 (DWR 2017).

SENATE BILLS 610 AND 221, WATER SUPPLY ASSESSMENT AND VERIFICATION

Senate Bills (SB) 610 and 221 amended the California Water Code to require detailed analysis of water supply availability for certain types of development projects. The primary purpose of SB 610 is to improve the link between the information on water supply availability and certain land use decisions made by cities and counties. Both statutes require detailed information regarding water availability to be provided to city and county decision-makers prior to approval of specified large (greater than 500 dwelling units or 500,000 square feet of commercial space) development projects. Both statutes also require this detailed information to be included in the administrative record that serves as the evidentiary basis for an approval action by the city or county on such projects. Under SB 610 water assessments must be furnished to local governments for inclusion in any environmental documentation for certain projects as defined in Water Code 10912 subject to the California Environmental Quality Act (CEQA). Under SB 221 approval by a city or county of certain residential subdivisions requires an affirmative written verification of sufficient water supply.

Wastewater

CALIFORNIA CODE OF REGULATIONS TITLE 22

The California Department of Public Health sets specific requirements for treated effluent reuse, or recycled water, through Title 22 of the California Code of Regulations. These requirements are primarily set to protect public health. The California Code of Regulations Title 22, Division 4, Chapter 3, Sections 60301 through 60355 regulate recycled wastewater. Title 22 contains effluent requirements for four levels of wastewater treatment, from un-disinfected secondary recycled water to disinfected tertiary recycled water. Higher levels of treatment have higher effluent standards, allowing for a greater number of uses under Title 22, including irrigation of freeway landscaping, pasture for milk animals, parks and playgrounds, and vineyards and orchards for disinfected tertiary recycled water.

Salt concentrations (such as chloride, nitrogen, sodium, etc.) in the effluent are regulated based on the Water Quality Control Plan (Basin Plan) for the San Luis Obispo region, which also considers local groundwater quality. Recycled water quality goals for salts and other constituents vary depending

on the intended irrigation recipients. The RWQCB develops waste discharge requirements based on the Basin Plan, designed to protect beneficial uses of State waters. The RWQCB Basin Plan contains an anti-degradation policy so that existing quality shall be maintained (State Water Resources Control Board 2011).

Solid Waste

ASSEMBLY BILL 341

The purpose of Assembly Bill (AB) 341 is to reduce GHG emissions by diverting commercial solid waste to recycling efforts and to expand the opportunity for additional recycling services and recycling manufacturing facilities in California. In addition to Mandatory Commercial Recycling, AB 341 sets a statewide goal for 75 percent disposal reduction by the year 2020.

ASSEMBLY BILL 939

AB 939 (Public Resources Code 41780) requires cities and counties to prepare integrated waste management plans and to divert 50 percent of solid waste from landfills beginning in calendar year 2000 and each year thereafter. AB 939 also requires cities and counties to prepare source reduction and recycling elements as part of the integrated waste management plans. These elements are designed to develop recycling services to achieve diversion goals, stimulate local recycling in manufacturing, and stimulate the purchase of recycled products.

ASSEMBLY BILL 1826

AB 1826 requires businesses that generate a specified amount of organic waste per week to arrange for recycling services for that waste, and for jurisdictions to implement a recycling program to divert organic waste from businesses subject to the law, as well as report to CalRecycle on their progress in implementing an organic waste recycling program. As of January 1, 2017, businesses that generate four cubic yards or more of organic waste per week shall arrange for organic waste recycling services.

SENATE BILL 1016

SB 1016 requires that the 50 percent solid waste diversion requirement established by AB 939 be expressed in pounds per person per day. SB 1016 changed the CalRecycle review process for each municipality's integrated waste management plan. After an initial determination of diversion requirements in 2006 and establishing diversion rates for subsequent calendar years, the Board reviews a jurisdiction's diversion rate compliance in accordance with a specified schedule. Beginning January 1, 2018, the Board will be required to review a jurisdiction's source reduction and recycling element and hazardous waste element once every two years.

Local

OneWater Morro Bay Plan

The OneWater Morro Bay Plan is an update to the City of Morro Bay's previous water resources planning documents, which is intended to integrate the City's approach to water management by combining water, wastewater and stormwater into one master plan effort. The OneWater Morro Bay Plan serves as a long-range planning document to help the City meet system demands generated by future growth. This includes the City's 2016 "Draft" Water Reclamation Facility Master

Plan, the Master Water Reclamation Plan, the OneWater Morro Bay Plan, the 2015 Sanitary Sewer Management Plan, the 1996 Water Master Plan, the 2006 Wastewater Collection System Master Plan, and the 1983 Stormwater Master Plan, along with various GIS data and City Standards and policies. Water demand projections described in the OneWater Morro Bay Plan account for anticipated future water demands in Morro Bay, and general changes in land uses anticipated by the current General Plan, including but not limited to densification and associated increases in water usage.

Sewer System Management Plan (SSMP)

The SWRCB Waste Discharge Requirements (WDRs) adopted on May 2, 2006, require owners of a wastewater collection system with more than a mile of pipeline have a Sewer System Management Program in order to reduce the number and severity of Sanitary Sewer Overflows (SSO). Accordingly, the City of Morro Bay adopted its SSMP in 2009 and the most recent audit in 2016 indicated that the City is in compliance with WDRs.

Morro Bay Water Shortage Contingency Plan

The City promotes water conservation through the City's Water Shortage Contingency Plan (WSCP) which is found in Morro Bay's municipal code of ordinances within Chapter 13.04 Water Service and Rates. The Morro Bay Water Shortage Contingency Plan features the following policies that affect the municipal water supply.

STAGES OF ACTION

▪ **Stage – 1 Normal Water Supply Conditions**

The activities performed by the city during this stage include: spring-loaded shut-off nozzles are required for outdoor water use; outdoor irrigation resulting in excessive runoff is prohibited; water may be used as needed for washing and cleaning paved surfaces; water is supplied to customers at restaurants upon request only.

▪ **Stage -2 Moderately Restricted Water Supply Conditions**

Includes actions taken in stage 1 and: any use that results in excessive gutter runoff is prohibited; water may be used for washing vehicles, boats and buildings with spring-loaded shutoff nozzles, but spraying paved areas is prohibited except for public health or safety; outdoor irrigation is restricted between 10:00 am and 4:00 pm and is only to be performed on designated days; water supplied to customers at restaurants only upon request.

▪ **Stage -3 Severely Restricted Water Supply Conditions**

Washing boats, marinas, buildings and outdoor paved areas is prohibited except for public health or safety reasons; washing cars may be performed only with the use of a bucket and sponge; emptying and refilling swimming pools and commercial spas is prohibited; the use of potable water for compaction, dust control and construction purposes is prohibited; dysfunctional or leaking water fixtures in public or commercial facilities are required to be repaired within three days; all visitor-serving facilities shall prominently display water conservation educational materials and provide handouts, which outline the mandatory conservation measures being taken.

▪ **Stage -4 Critical Water Supply Conditions**

Any Water use that results in gutter runoff is prohibited; any water cleanup for public health and safety shall be performed with a bucket and brush; irrigation is to be performed only once per week, and is not allowed between 9:00 am and 5:00 pm; use of fresh water to wash down boats or docks or for other incidental activities is prohibited; Restaurants shall serve water only in response to specific request by customer; emptying and refilling all pools and spas is prohibited; use of potable water for compaction or dust control purposes in construction activities is prohibited; dysfunctional or leaking water fixtures shall be repaired immediately; all visitor-serving facilities shall prominently display these mandatory conservation requirements for the benefit and education of visitors to the community.

▪ **Stage – 5 Emergency Water Supply Conditions**

The City Council may impose water-rationing requirements as it deems appropriate.

4.14.2 Impact Analysis

a. Methodology and Significance Thresholds

Implementation of the General Plan and LCP Update could have a significant effect on water supplies, wastewater, solid waste, or stormwater conveyance, if demand associated with projected growth would result in any of the following conditions, as listed in Appendix G of the *CEQA Guidelines*:

1. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects
2. Fail to have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years
3. Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments
4. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals
5. Fail to comply with federal, state, and local statutes and regulations related to solid waste

b. Project Impacts and Mitigation Measures

Threshold 1:	Would the project require or result in the relocation of construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunication facilities, the construction of which could cause significant environmental effects?
Threshold 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 U-1 DEVELOPMENT FACILITATED BY THE GENERAL PLAN AND LCP UPDATE WOULD INCREASE THE DEMAND FOR WATER SUPPLY. HOWEVER, THE CITY OF MORRO BAY PROJECTS THAT CITY WATER SUPPLY IS SUFFICIENT TO MEET THE PROJECTED WATER DEMAND UNDER BUILDOUT ASSOCIATED WITH THE GENERAL PLAN AND LCP UPDATE. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT

The following impact analysis is based on the OneWater Morro Bay Plan, which outlines the availability of water supplies for the city through 2050. Implementation of the proposed General Plan and LCP Update may result in changes to Morro Bay’s economy, population, demographics, and environment, resulting in increased strain on the city’s water supply. As shown in Table 2-4 and discussed in Section 2, *Project Description*, Morro Bay’s population is estimated to be approximately 12,062 people in the year 2040 as a result of development facilitated by the General Plan and LCP Update. This represents an increase of 1,348 people (12.3 percent) from the estimated 2016 population of 10,714. Additionally, nonresidential square footage is estimated to increase by approximately 8.3 million square feet under the General Plan and LCP Update. These increases to population and nonresidential uses would result in an incremental increase in the city’s water demand.

The OneWater Morro Bay Plan provides estimates for water supply and demand through 2050 based on a buildout population of 12,200. Table 4.14-2 shows the water supply reliability in the city through a comparison of total projected water demand with the expected water supply in five year increments through 2040. The OneWater Morro Bay Plan is based on a projected 2040 population of 12,149, which is higher than the San Luis Obispo Council of Governments (SLOCOG) *2040 Population, Housing and Employment Forecast* medium growth population projections through 2040 (consistent with the City of Morro Bay 2014-2019 Housing Element Update). As such, the projections in Table 4.14-2 account for the water demand associated with the SLOCOG-projected population of 11,381 in 2040.

Table 4.14-2 Water Supply and Demand Comparison – Actual (2015) and Projected

Year	2015	2020	2025	2030	2035	2040
	(Actual)	(Projected)				
Supply	1,090	3,037	2,163	2,744	2,744	2,744
Demand	1,074	1,298	1,977	2,013	2,048	2,087
Remaining Supply	16	1,739	186	731	696	657

Note: Units in AFY.

Source: City of Morro Bay 2016a

As shown in Table 4.14-2, the city’s projected water supply would meet projected demand through 2040 under normal conditions.

The water projections in the OneWater Morro Bay Plan are based on SLOCOG population projections that forecast a population that is less than the projected population under buildout of the General Plan and LCP Update. Table 4.14-3 shows the city’s projected water supply compared to projected demand under single-dry-year and multiple-dry-year conditions, with demand for Year 2040 shown using both SLOCOG population projections and General Plan and LCP Update population buildout projections.

Table 4.14-3 Water Supply and Demand Comparison – Multiple Dry Years

		2020	2030	2040 (SLOCOG population projection)	2040 (General Plan and LCP Update population buildout projection)
First Year	Supply totals	3,682	4,982	4,982	4,982
	Demand totals	1,298	2,013	2,087	2,212
	Difference	2,384	2,969	2,895	2,770
Second Year	Supply totals	3,203	4,503	4,503	4,503
	Demand totals	1,298	2,013	2,087	2,212
	Difference	1,905	2,490	2,416	2,219
Third Year	Supply totals	1,620	2,920	2,920	2,920
	Demand totals	1,298	2,013	2,087	2,212
	Difference	322	907	833	708

Note: Units in AFY. Groundwater sources include 1,724 AFY from well extraction and starting in 2025, 650 AFY recycled water supply from groundwater recharge. Desalinated water includes 645 AFY of treated seawater.

Source: City of Morro Bay 2016a

As shown in Table 4.14-3, the projected remaining supply would be sufficient to meet the demand of development and the population increase facilitated by the General Plan and LCP Update through 2040 under single-dry-year and multiple-dry year conditions.

The General Plan and LCP Update identifies a series of major strategies and physical improvements that should occur to ensure a sustainable water supply to support economic development, land use changes, and development in the planning area through 2040 (the planning horizon). The General Plan and LCP Update Land Use Element contains the following goals and policies, which are consistent with the purpose of the OneWater Morro Bay Plan to encourage the sustainable use and management of water supplies in the planning area.

Goal LU-3 Morro Bay grows in a manner that maintains community identity and well-being.

Policy LU-3.1 Growth Limits. Continue to limit the amount of future population growth accommodated by Plan Morro Bay to a level supported by available land, water supply, and other infrastructure and service capacity.

Goal C-7 Morro Bay water is safe, available, and used in an environmentally responsible manner.

Policy C-7.1 Water Supply. Diversify the City's water supply.

Policy C-7.2 Water Supply Monitoring. Monitor demands on the water system and continue to limit future growth to correspond to the available water supply.

Policy C-7.3 Water Restrictions. Continue to impose restrictions on water use.

Policy C-7.4 Sustainable Water Supply and Wastewater Capacity. Development shall only be approved if it is first clearly demonstrated that the development will be served by an adequate existing water allocation and sustainable long-term public water supply, as well as adequate wastewater capacity. Consistency with Housing Element Program H-1.1 shall be maintained to prioritize allocation of water to projects containing affordable housing on existing legal lots of record. In addition, priority shall be given to Coastal Act priority uses.

Policy C-7.5 New Development and Reuse Projects. Manage new development and reuse projects and existing land uses to mitigate impacts and/or facilitate improvements to the City's water systems.

Policy C-7.6 Improve Water System. Maintain and improve water supply and distribution facilities as required to facilitate buildout. Ensure that any new or updated wastewater and water reclamation facility maximizes its ability to produce recycled water and/or to contribute to sustainable City water supplies as much as possible.

Policy C-7.7 Water Conservation Features. New development shall incorporate and utilize feasible and innovative water conservation features. Minimize economic hardship on existing residents and businesses.

Policy C-7.8 Water Conservation Practices. Continue to encourage maximum water conservation in existing land uses, and provide incentives that encourage building owners and homeowners associations to complete water efficiency retrofits. Minimize economic hardship on residents and businesses.

Policy C-7.9 Recycled Water. Encourage the use of recycled water for construction, grading, and other non-contact uses where recycled water is available or expected to be available. Development approval shall, as appropriate, include the option for re-plumbing for greywater use in the future. There is not currently a City source for recycled water.

Policy C-7.10 Public Education. Partner with and provide information to community organizations, residents, and businesses regarding methods to reduce water use.

- Policy C-7.11 Water Treatment Plant.** Continue to operate the water treatment plant as needed for emergency or non-routine purposes to ensure that the City’s minimum water quality and quantity standards are met.
- Policy C-7.14 Pollutant Runoff.** Reduce pollutants in runoff from agriculture and new development by requiring the use of the most effective best management practices currently available. All runoff shall be filtered and treated to remove expected pollutants prior to being directed to infiltration areas and/or stormwater systems. Where runoff cannot be adequately accommodated on-site through on-site systems, any excess runoff shall be conveyed inland in a nonerosive manner. Also encourage green infrastructure on designated “Green Streets” where stormwater and runoff would be managed, captured and cleansed in public rights-of-way. Main Street should be studied for potential as a Green Street.
- Policy C-7.15 Water Quality.** To reduce the potential for degradation or impairment of water quality, development shall reduce potential pollutants in stormwater and irrigation runoff and require the following:
- To the maximum extent feasible, development shall include specific measures to help reduce potential pollutants and water quality impairment, including controlling the disposal of chemicals and hazardous materials, controlling the use of pesticides and herbicides, maintaining existing stormwater capture programs, applying low-impact development designs, and requiring on-site retention and/or reuse of runoff. The City shall utilize ecologically responsible pest control methods and integrated pest management to the extent feasible on public property and encourage this practice on private property.
 - Drainage plans and erosion, sediment, and pollution control measures shall be required as conditions of approval in every application for new development that has the potential to impair water quality.
 - Construction phase stormwater pollutant controls shall be required for development with the potential for water quality impairment, including erosion controls, sediment traps and filtering of off-site stormwater flows, capture of site-generated pollutant sources, street sweeping of dirt tracked off-site, litter control, post-construction monitoring, and other best management practices. Construction-phase water quality impacts shall be avoided by minimizing the disturbed area, phasing grading activities, implementing soil stabilization and pollution prevention measures, and preventing unnecessary soil compaction. Development with the potential for water quality impairment shall, at a minimum, be designed to meet National Pollutant Discharge Elimination System stormwater runoff requirements.
 - Additionally, development shall be planned, sited, and designed in a manner that maintains or enhances on-site infiltration, reduces runoff, minimizes the transport of pollutants in runoff generated from the development, and recharges groundwater. Development shall ensure that

runoff is appropriately collected, filtered, and treated by best management practices to minimize pollutant loading to the maximum degree feasible.

Policy C-7.16 Developments of Water Quality Concern. Developments of water quality concern, including gas stations/car washes, industrial development, and others that have a greater potential for adverse impacts to water quality and hydrology due to the extent of impervious surface area, type of land use, wastewater streams, and/or proximity to coastal waters, shall require additional and context-specific best management practices to protect and enhance water quality.

Based on the water supply projections presented in the OneWater Morro Bay Plan, the city's water supply would be sufficient to meet the projected demand of the development envisioned in the General Plan and LCP Update. In addition, project-specific WSAs would be required to be prepared by proponents of future development projects in the city in accordance with SB 610. Compliance with applicable General Plan and LCP Update Land Use Element goals and policies to encourage the sustainable use and management of water supplies in the planning area would ensure that impacts associated with water demand would be less than significant.

Mitigation Measures

Mitigation measures are not required.

- Threshold 1:** Would the project require or result in the relocation of construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunication facilities, the construction of which could cause significant environmental effects?
- Threshold 3:** Would the project result in a determination that by the wastewater treatment provider which serves or may serve the project that it has does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Impact U-2 DEVELOPMENT FACILITATED BY THE GENERAL PLAN AND LCP UPDATE WOULD INCREASE DEMAND FOR WASTEWATER COLLECTION AND TREATMENT, AND THE MORRO BAY-CAYUCOS WASTEWATER TREATMENT PLANT WOULD NOT HAVE TREATMENT CAPACITY TO MEET THIS DEMAND. HOWEVER, THE CITY IS CONSTRUCTING A NEW WATER RECLAMATION FACILITY, WHICH IS DESIGNED TO MEET EXISTING NEEDS AND FUTURE DEMAND. DEVELOPMENT OF THE NEW WATER RECLAMATION FACILITY, AND IMPLEMENTATION OF THE GOALS AND POLICIES OF THE GENERAL PLAN AND LCP UPDATE WOULD ENSURE SUFFICIENT WASTEWATER TREATMENT CAPACITY. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

The projected growth envisioned in the General Plan and LCP Update would require an increase in wastewater capacity to meet the collection and treatment demand from new development. As discussed in Section 2, *Project Description*, the population of the planning area is estimated to be 12,062 in 2040. This increase of 1,348 residents equates to a 12.3 percent increase above the existing (2016) population. The city's WWTP currently serves a population of approximately 13,300 people and has an average daily flow of 1.089 million gallons per day (Appendix B). The General Plan and LCP Update recognizes that the city's WWTP is outdated and no longer has adequate capacity for the existing population, resulting in primary-treated sewage being discharged into the ocean at an estimated one million gallons per day. As such, the existing WWTP would not have capacity to

serve an increased population in the planning area. As described in Section 4.14.1(a), the City is currently constructing a new WRF to replace the existing WWTP. The WRF has been designed to receive, store, and treat the full influent wastewater flows from uses in the planning area in accordance with the effluent requirements of the NPDES permit program, and is expected to be operational by 2023. According to the Draft Water Reclamation Facility Master Plan for the WRF, the new WRF is planned to accommodate an average daily flow capacity of 0.97 million gallons per day at full buildout. Operations at the WRF are expected to begin in 2023 (City of Morro Bay 2018b; City of Morro Bay 2018c). Based on this expected operational timeframe for the new WRF and the long-term planning horizon for the proposed General Plan and LCP Update, development facilitated by the General Plan and LCP Update, and new population that may result from General Plan buildout, is not expected to result in substantial new demand on the city's wastewater treatment facilities prior to the buildout of the new WRF (beyond that anticipated under the 1988 General Plan during this period). Existing flows as well as future additional wastewater flows in the planning area as a result of population growth under the General Plan and LCP Update would be met by the capacity of the new WRF.

In addition, in 2018 the City has adopted the OneWater Morro Bay master plan for integrated management of water, wastewater, and stormwater. OneWater Morro Bay will update, replace, and expand upon the city's existing water management plans and policies to help the City meet system demands generated by future growth (Appendix B; City of Morro Bay 2018c). The following policies in the General Plan and LCP Update Conservation Element, as well as policies C-7.14 through C-7.16, as described in Impact U-1 above, would ensure proper management of wastewater systems and infrastructure for new development and redevelopment in the planning area.

Policy C-7.18 Wastewater Marine Impacts. Wastewater disposal systems which minimize or eliminate marine resource pollution, and which provide for reclamation of wastewater for reuse, shall be required. New development, including redeveloped structures, shall connect to the public wastewater treatment system.

Policy C-7.19 Infrastructure Relocation. The City shall consider the relocation of critical water and wastewater infrastructure, as necessary and feasible, to protect those services from the effects of sea level rise and other coastal hazards.

According to the General Plan and LCP Update, the city's existing WWTP no longer provides adequate capacity for the existing city population. However, the city is constructing a new WRF, which is designed to meet existing needs and future demand associated with General Plan buildout based on a buildout population of 12,200, including development facilitated by the General Plan and LCP Update. Completion of the new WRF, as well as implementation of the OneWater Morro Bay master plan and the policies in the General Plan and LCP Update Conservation Element would ensure adequate wastewater systems and infrastructure to meet future demands. Therefore, this impact would be less than significant.

Mitigation Measures

No mitigation would be required.

Threshold 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?

Threshold 5: Would the project comply with federal, state, and local statutes and regulations related to solid waste?

Impact U-3 DEVELOPMENT FACILITATED BY THE GENERAL PLAN AND LCP UPDATE WOULD INCREASE SOLID WASTE SENT TO AREA LANDFILLS. HOWEVER, COLD CANYON LANDFILL WOULD HAVE CAPACITY TO SERVE THE DEVELOPMENT ENVISIONED IN THE GENERAL PLAN AND LCP UPDATE. GOALS AND POLICIES IN GENERAL PLAN AND LCP UPDATE WOULD INCREASE THE AMOUNT OF WASTE THAT IS DIVERTED FROM THE LANDFILL AND ENCOURAGE REUSE AND RECYCLING. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

The City of Morro Bay uses Cold Canyon Landfill for solid waste disposal. As of 2016, Cold Canyon Landfill has an estimated 62-year capacity for the region. Disposal rates of solid waste in the San Luis Obispo IWMA are not separated by jurisdiction and are measured in pounds per person. According to CalRecycle, between 2010 and 2014, annual disposal rates in the IWMA ranged from an estimated 4.3 to 4.9 pounds per person. As shown in Table 2-4 in Section 2, *Project Description*, the estimated population of planning area would be 12,062 by 2040, an increase of 1,348 residents from the 2016 population.

Based on an average daily residential waste generation of 4.6 pounds per person and the 2016 population of 10,714, existing solid waste generation in the planning area is approximately 49,280 pounds (approximately 25 tons) per day. Based on an average daily residential waste generation of 4.6 pounds per person and projected population of 12,062, the estimated daily solid waste generation in the planning area in 2040 would be approximately 55,485 pounds (approximately 28 tons) per day, or an increase of 6,205 pounds (approximately 3 tons) per day. Cold Canyon Landfill has a maximum daily throughput of 1,650 tons per day. Therefore, the projected increase in solid waste generation in the planning area would increase disposal at the Cold Canyon Landfill by approximately 0.2 percent. The Cold Canyon Landfill has capacity to accommodate this increase in solid waste generation without experiencing a reduction in the current estimated 62-year capacity for the region.

In compliance with the statewide goal for 75 percent disposal reduction by the year 2020 set by AB 341, Goal C-7 of the General Plan and LCP Update Conservation Element establishes a city goal of becoming a zero waste community. Implementation of this goal would help achieve statewide goals for solid waste reduction, including those established by AB 341. In addition to Goal C-7, the General Plan and LCP Update Conservation Element includes the following policies related to solid waste reduction:

Goal C-8 Morro Bay is a zero waste community.

- Policy C-8.1 Disposal Rates.** Continue to reduce disposal rates to zero.
- Policy C-8.2 Waste Reduction and Diversion.** Incentivize household waste reduction and diversion.
- Policy C-8.3 Diversion in Multi-Family and Visitor-Serving Uses.** Improve waste diversion options in multi-family and visitor-serving accommodations.
- Policy C-8.4 Public Education.** Provide public information regarding waste reduction and diversion strategies to households.

Policy C-8.5 Partnerships. Partner with local businesses and organizations to reduce waste in the community through public information, programs, and incentives.

The projected increase in solid waste generation as a result of development facilitated by the General Plan and LCP Update would not exceed the capacity of Cold Canyon Landfill, or reduction in the current estimated 62-year capacity for the region. Additionally, the General Plan and LCP Update contains goals and policies to reduce and divert waste consistent with state goals for solid waste reduction. Therefore, this impact would be less than significant.

Mitigation Measures

No mitigation would be required.

c. Cumulative Impacts

The scope for potential cumulative impacts to utilities and service systems includes all projects within the same utility service area. The analysis in this section examines the potential impacts to water supply, wastewater, and solid waste utilities and service systems in Morro Bay as a result of all potential buildout in the service areas for these utilities. Although the City currently co-operates its sewer system and wastewater treatment plant through a JPA with CSD, and CSD had originally been involved in the reconstruction and expansion plans for wastewater treatment facilities in the area, CSD has elected to withdraw from the process and construct a separate wastewater treatment plant (Appendix B). Additionally, because Morro Bay is limited by water rights permits to pump a maximum of 1,724 AFY of groundwater in normal years (City of Morro Bay 2016a), water use as a result of the General Plan and LCP Update would not result in impacts to the basins from which the city withdraws beyond those previously identified in this section. Therefore, the analysis of impacts to these services and associated facilities is cumulative in nature. The General Plan and LCP Update would result in less than significant impacts to water and wastewater services and facilities and, therefore, would result in less than significant cumulative impacts to these resources.

Solid waste collected in the planning area is deposited at the Cold Canyon Landfill, one of three landfills in the IWMA jurisdictional area. The IWMA includes San Luis Obispo County, the Cities of Arroyo Grande, Atascadero, Grover Beach, Morro Bay, Paso Robles, Pismo Beach, and San Luis Obispo, as well as numerous community service districts. Therefore, the cumulative impact area for solid waste includes all of these areas, which all contribute to the landfills in the IWMA jurisdictional area. The population increase in the planning area as a result of the General Plan and LCP Update would result in an increase of waste disposal at Cold Canyon Landfill by approximately 0.2 percent, which would not substantially increase daily or annual waste disposal, or result in exceedance of capacity at the Cold Canyon Landfill, resulting in a less than significant contribution of the General Plan and LCP Update to cumulative impacts to waste disposal services in the area. Overall, cumulative impacts to utilities and service systems as a result of General Plan and LCP Update implementation would be less than significant. Potential cumulative impacts related to stormwater are evaluated and discussed in Section 4.8, *Hydrology and Water Quality*.

4.15 Tribal Cultural Resources

This section evaluates potential effects on tribal cultural resources related to implementation of the proposed General Plan and LCP Update.

4.15.1 Setting

The City of Morro Bay was historically occupied by the Obispeño Chumash and the Salinan tribes, and there are likely to be cultural resources in the city due to its location in proximity to various water and food sources. A full discussion of the prehistoric and ethnographic setting of the region is presented in Section 4.4, *Cultural and Paleontological Resources*.

a. Regulatory Setting

State

Assembly Bill 52

California Assembly Bill 52 of 2014 (AB 52) was enacted in July 2015 and expanded CEQA by defining a new resource category, “tribal cultural resources.” Assembly Bill 52 states that “A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment” (California Public Resources Code [PRC] Section 21084.2). It further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3). PRC Section 21074(a)(1)(A) and (B) defines tribal cultural resources as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe” and meets either of the following criteria:

- a) Listed or eligible for listing in the California Register of Historical Resources (CRHR), or in a local register of historical resources as defined in PRC Section 5020.1(k), or
- b) 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.

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified. AB 52 requires that lead agencies “begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project.” Native American tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

Senate Bill 18

California Government Code Section 65352.3 (adopted pursuant to the requirements of Senate Bill 18 [SB 18]) requires local governments to contact, refer plans to, and consult with tribal organizations prior to making a decision to adopt or amend a general or specific plan. The tribal organizations eligible to consult have traditional lands in a local government’s jurisdiction, and are identified, upon request, by the Native American Heritage Commission (NAHC). As noted in the

California Office of Planning and Research's Tribal Consultation Guidelines (2005), "The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places."

b. AB 52 and SB 18 Consultation

The City of Morro Bay conducted SB 18 consultation for the General Plan and LCP Update in 2016. The City confirmed by certified mail receipt in May 2016 that the Northern Chumash Tribal Council (NCTC) received the SB 18 invitation letter dated April 11, 2016. The City did not receive a request from the NCTC to initiate consultation during the required 90 day consultation request period (pursuant to Government Code Section 65352.3), which extended to August 5, 2016.

In June 2016 Karen White with the Salinan Tribe provided a letter stating that Morro Bay area falls within the Salinan Tribe's geographical area of traditional and cultural affiliation boundaries, presenting the Native American history of the city and its vicinity, and requesting that the Salinan Tribe be informed about projects in the city. In July 2016 Patti Dunton with the Salinan Tribe corresponded with City staff and provided a list of Salinan Sacred Sites registered with the NAHC in Morro Bay.

In December 2017 Fred Collins with NCTC corresponded with City staff and provided a letter that presents the Native American history of the city and its vicinity, resource descriptions, and recommended policies for inclusion in General Plan and LCP Update.

The City initiated California Native American tribal consultation, pursuant to AB 52, in August 2018 for the General Plan and LCP Update. No formal responses were received during the required 30 day consultation response period (pursuant to PRC 21080.3.1[b]). However, City staff met with Fred Collins with NCTC to further discuss the General Plan and LCP Update, and received a request for consultation from Mona Tucker, tribal chair of the Northern Chumash Tribe in September 2018, after the close of the 30 day consultation response period. In response to feedback from NCTC City staff included revisions in the Zoning Code regarding the Cultural Resources Overlay described in Policy C-2.4 of the General Plan and LCP Update. City staff did not receive further requests for consultation.

4.15.2 Impact Analysis

a. Methodology and Significance Thresholds

According to Appendix G of the *CEQA Guidelines*, an impact to Tribal Cultural Resources from the proposed General Plan and LCP Update would be significant if the project would:

- 1) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC 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:
 - a) Listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in PRC section 5020.1(k), or
 - b) 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.

b. Project Impacts and Mitigation Measures

Threshold 1: Would the project cause a substantial adverse change in the significance of a tribal cultural resource?

Impact TC-1 DEVELOPMENT FACILITATED BY THE GENERAL PLAN AND LCP UPDATE HAS THE POTENTIAL TO IMPACT TRIBAL CULTURAL RESOURCES. IMPLEMENTATION OF THE GOALS AND POLICIES OF THE GENERAL PLAN AND LCP UPDATE WOULD MINIMIZE THE POTENTIAL FOR IMPACTS TO PREVIOUSLY UNIDENTIFIED TRIBAL CULTURAL RESOURCES. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT WITH INCORPORATION OF MITIGATION.

Effects on tribal cultural resources can only be known once a specific project has been proposed because the effects are dependent on individual project site conditions and the characteristics of the proposed action. The following General Plan and LCP Update Conservation Element goal and policies include recommended policy language provided in response to SB 18 consultation for the General Plan and LCP Update, which would minimize the potential impact to tribal cultural resources as a result of development facilitated by the General Plan and LCP Update.

Goal C-2 Cultural and historic resources are identified for protection and showcased as a vital part of Morro Bay history.

Policy C-2.1 Historic and Cultural Resources Strategy. Develop a plan to address historic and cultural resource issues in Morro Bay, which may include conducting and updating inventories, exploring certification options, and developing context statements.

Policy C-2.2 Interagency Cooperation. Work with the Historical Society of Morro Bay and other local groups on historic preservation objectives.

Policy C-2.3 Protection of Cultural Resources. Ensure the protection of cultural and archaeological resources during development, construction, and other similar activities. Development shall avoid, to the maximum extent feasible, adversely impacting cultural and/or archaeological resources, and shall include adequate BMPs to address any such resources that may be identified during construction, including mitigation measures sufficient to allow documentation, preservation, and other forms of mitigation.

Policy C-2.4 Cultural Resources Overlay. Develop a cultural resources overlay to protect cultural, archaeological and paleontological resources in Morro Bay.

Implementation of these General Plan and LCP Update goals and policies would minimize potential impacts to tribal cultural resources as a result of development facilitated by the General Plan and LCP Update. However, new tribal cultural resources may be identified or established over the course of the implementation of the General Plan and LCP Update through the planning horizon year 2040. Although compliance with applicable regulations and implementation of General Plan and LCP Update goals and policies would minimize impacts to tribal cultural resources, the General Plan and LCP Update does not include policy language or implementation actions to address potential impacts to tribal cultural resources on a project-by-project basis within the planning area.

Therefore, impacts to tribal cultural resources would be potentially significant and additional policy-based mitigation would be required to avoid and/or minimize these potential impacts.

Mitigation Measures

Mitigation Measures CR-1(a) and CR-1(b) in Section 4.3, *Cultural Resources*, are required to address potential impacts to tribal cultural resources. As individual development projects are proposed, project-level environmental review may be required, which could result in the implementation of project-specific mitigation measures to reduce impacts to tribal cultural resources.

Significance After Mitigation

Impacts to tribal cultural resources would be less than significant with implementation of Mitigation Measures CR-1(a) and CR-1(b), which would update the General Plan and LCP Update to include a policy and implementation action to address potential impacts to unique tribal cultural resources on a project-by-project basis by requiring cultural resource studies for projects within the city and the implementation of further requirements to avoid or reduce impacts to those resources.

c. Cumulative Impacts

Tribal cultural resources are regionally specific and determined by the local tribes. However, development in the city would increase under buildout of the General Plan and LCP Update by increasing mobility and growth. The increase in growth in previously undisturbed areas would contribute to regional impacts on tribal cultural resources. Tribal consultation, in accordance with AB 52, would be required on a project-by-project basis to ensure protection of tribal cultural resources. However, tribal territory often crosses the boundaries of multiple jurisdictions within and outside of the region, and there could be individual less than significant impacts to tribal cultural resources that cumulatively would result in a significant impact. Therefore, the potential for cumulative impacts related to tribal cultural resources is potentially significant. However, implementation of the goals and policies listed under Impact TC-1, as well as implementation of Mitigation Measures CR-1(a) and CR-1(b) in Section 4.3, *Cultural Resources*, would minimize potential impacts to tribal cultural resources as a result of development facilitated by the General Plan and LCP Update. Therefore, the General Plan and LCP Update would not result in a considerable contribution to cumulative impacts to tribal cultural resources.

4.16 Energy

This section discusses the project's potential impacts relating to energy. This analysis follows the guidance for evaluation of energy impacts contained in Appendix F and Appendix G of the CEQA Guidelines. The physical environmental impacts associated with the generation of electricity and burning of fuels have been accounted for in Section 4.2, Air Quality, and Section 4.6, Greenhouse Gas Emissions. The project area in this section is defined as the planning area for Morro Bay, which includes all area within the city boundaries, as well as the city's existing Sphere of Influence (SOI) and planned future extension of the SOI.

4.16.1 Setting

Energy use relates directly to environmental quality because energy use can adversely affect air quality and can generate greenhouse gas (GHG) emissions that contribute to climate change. Fossil fuels are burned to create electricity that powers residences, heats and cools buildings, and powers vehicles. Transportation energy use is dependent on the fuel efficiency of cars, trucks, and public transportation; the different travel modes such as auto, carpool, and public transit; and the miles traveled using these modes. Construction and routine operation and maintenance of transportation infrastructure also consume energy.

a. Energy Supply

Petroleum

California is one of the top producers of petroleum in the nation with drilling operations occurring throughout the state but concentrated primarily in Kern and Los Angeles counties. A network of crude oil pipelines connects production areas to oil refineries in the Los Angeles area, the San Francisco Bay area, and the Central Valley. California oil refineries also process Alaskan and foreign crude oil received in ports in Los Angeles, Long Beach, and the San Francisco Bay area. Crude oil production in California and Alaska is in decline, and California refineries have become increasingly dependent on foreign imports (California Energy Commission [CEC] 2020a). Foreign suppliers now produce more than half of the crude oil refined in California (CEC 2016).

Petroleum Infrastructure in the Project Area

Petroleum fuels are generally purchased by individual users such as residents and employees. There are approximately three gasoline stations, but no petroleum refineries in the project area (United States Energy Information System [U.S. EIA] 2020; Google 2019). This figure also shows transmission pipelines in Morro Bay; however, these are natural gas transmission pipelines and not petroleum fuel pipelines (National Pipeline Mapping System [NPMS] 2020). According to the California Department of Conservation Division of Oil, Gas, and Geothermal Resources (DOGGR), there are no abandoned, orphaned, or operating oil wells in the project area (DOGGR 2020).

Alternative Fuels

A variety of alternative fuels are used to reduce petroleum-based fuel demand. The use of these fuels is encouraged through various statewide regulations and plans, such as the Low Carbon Fuel Standard and Senate Bill (SB) 32. Conventional gasoline and diesel may be replaced, depending on the capability of the vehicle with transportation fuels including the following:

Hydrogen

Hydrogen is being explored for use in combustion engines and fuel cell electric vehicles. The interest in hydrogen as an alternative transportation fuel stems from its clean-burning qualities, its potential for domestic production, and the fuel cell vehicle's potential for high efficiency, which is two to three times more efficient than gasoline vehicles. Currently, 43 hydrogen refueling stations are located in California; however, none are located in Morro Bay (DOE 2020a).

Biodiesel

Biodiesel is a renewable alternative fuel that can be manufactured from vegetable oils, animal fats, or recycled restaurant greases. Biodiesel is biodegradable and cleaner-burning than petroleum-based diesel fuel. Biodiesel can run in any diesel engine generally without alterations; however, fueling stations have been slow to make it available. There are currently 12 biodiesel refueling stations in California, none of which is located in Morro Bay (DOE 2020b).

Electric Vehicles

Electricity can be used to power electric and plug-in hybrid electric vehicles directly from the power grid. Electricity used to power vehicles is generally provided by the electricity grid and stored in the vehicle's batteries. Fuel cells are being explored as a way to use electricity generated onboard the vehicle to power electric motors. There are currently no operating electrical charging stations in Morro Bay (DOE 2020c).

Electricity

California

In 2018, California's in-state electricity generation totaled 80,304 megawatts. Primary fuel sources for the state's electricity generation in 2018 included natural gas, hydroelectric, solar photovoltaic, wind, nuclear, geothermal, biomass, and solar thermal (CEC 2020b). According to the 2018 Integrated Energy Policy Report, California's electric grid relies increasingly on clean sources of energy such as solar, wind, geothermal, hydroelectricity, and biomass. As this transition advances, the grid is also expanding to serve new sectors including electric vehicles, rail, and space and water heating. California has installed more renewable energy than any other state in the United States with 22,250 megawatts of utility-scale systems operational (CEC 2019c).

California's Renewables Portfolio Standard (RPS) establishes increasing renewable energy procurement requirements for electricity utilities and other load-serving entities. The 2018 IEPR Update highlights the RPS targets of 33 percent renewable energy sources by 2020 and 100 percent carbon-free energy sources by 2045, as established by SB 100 (CEC 2019c). The RPS targets under SB 100 include 33 percent renewable sources by 2020, 50 percent renewable sources by 2026, 60 percent renewable sources by 2030, and 100 percent carbon-free sources by 2045 (California Legislative Information 2018).

Pacific Gas & Electric

Pacific Gas and Electric (PG&E) is responsible for providing electric power supply in San Luis Obispo County. PG&E's power system is one of the nation's largest electric and gas utilities and maintains 106,681 circuit miles of electric distribution lines and 18,466 circuit miles of interconnected transmission lines (PG&E 2019a). In 2018, PG&E's power mix, including all PG&E-owned generation

plus the company's power purchases, consisted of 39 percent renewable resources (wind, geothermal, biomass, solar, and small hydro), 34 percent nuclear generation, 15 percent natural gas, and 13 percent large hydroelectric facilities (PG&E 2019b). According to PG&E's 2018 Integrated Resource Plan, PG&E anticipates meeting a 2030 energy load demand of between 36,922 gigawatt-hours (GWh) and 37,370 GWh (PG&E 2018).

Monterey Bay Community Power (MBCP), which provides carbon-free electricity, is the default energy provider in Morro Bay. However, residents of Morro Bay have the ability to opt out of MBCP and obtain electric power through PG&E. According to MBCP, approximately 97 percent of accounts in the MBCP service area maintain enrollment in MBCP; the remaining 3 percent of accounts opt out and connect to PG&E (MBCP 2019).

Electric Power Infrastructure in the Project Area

There are no electric power plants in the project area (U.S. EIA 2020).

Natural Gas

California

California's net natural gas production for 2018 was 180.6 billion cubic feet, or approximately 187,282 billion British thermal units (Btu; DOGGR 2018). The 2018 California Gas Report presents a comprehensive outlook for natural gas requirements and supplies for California through the year 2035. California's existing gas supply portfolio is regionally diverse and includes supplies from California onshore and offshore sources, Southwestern United States supply sources, the Rocky Mountains, and Canada. California natural gas demand, including volumes not served by utility systems, is expected to decrease at a rate of 0.5 percent per year from 2018 to 2035. The forecasted decline is due to a combination of moderate growth in the Natural Gas Vehicle market and across-the-board declines in all other market segments: residential, commercial, electric generation, and industrial markets. Gas-fired generation will continue to be the primary technology to meet the ever-growing demand for electric power; however, overall gas demand for electric generation is expected to decline at 1.4 percent per year for the next 17 years due to more efficient power plants, statewide efforts to minimize GHG emissions through aggressive programs pursuing demand-side reductions, and the acquisition of preferred power generation resources that produce little or no carbon emissions (California Gas and Electric Utilities [CGEU] 2018).

Southern California Gas

The project site is in the natural gas service area of Southern California Gas Company (SoCalGas), which spans central and southern California. SoCalGas' service area is equipped with over 101,000 miles of gas transmission and distribution pipelines. Natural gas supplied by SoCalGas is sourced primarily from gas fields in the Permian and San Juan basins in the Southwest as well as from supply sources in the Rocky Mountains, western Canada, and California (CGEU 2018).

In 2018, SoCalGas customers consumed a total of 5,156 million U.S. therms of natural gas. Residential users accounted for approximately 42 percent of SoCal Gas' natural gas consumption. Industrial and commercial users accounted for another 33 percent and 19 percent, respectively. The remainder was used for mining, construction, agricultural, and water pumping purposes (CEC 2020d). According to SoCalGas, residential sales are expected to decline by approximately 1.4 percent per year from 2018 to 2035. Furthermore, commercial sales are expected to decline by 0.7

percent per year from 2018 to 2035. The anticipated decline in both residential and commercial sales is due to aggressive energy efficiency goals and associated programs (CGEU 2018).

Natural Gas Infrastructure in the Project Area

There are no natural gas wells in the project area (DOGGR 2020). No natural gas processing plants are located in the city (U.S. EIA 2020). The project area contains a main transmission line/high pressure distribution line that runs parallel to State Route (SR) 1 (SoCal Gas 2020).

b. Energy Demand

The smallest scale at which energy consumption information is readily available is the county level. Therefore, energy consumption in San Luis Obispo County is used herein to characterize the city’s existing consumption of petroleum, electricity, and natural gas as detailed in the following subsections.

Petroleum

As shown in Table 4.16-1, San Luis Obispo County consumed an estimated 150 million gallons of gasoline and 22 million gallons of diesel fuel in 2018, which was approximately 0.7 percent of statewide gasoline consumption and approximately 1.2 percent of statewide diesel fuel consumption (CEC 2020d). Based on San Luis Obispo County’s 2018 population of 280,393 (California Department of Finance [DOF] 2019) and 2018 employment of 136,020 (Bureau of Labor Statistics 2020), San Luis Obispo County’s annual per service population fuel consumption in 2018 consisted of 360.2 gallons of gasoline and 52.8 gallons of diesel fuel. As shown in Table 4.16-1, the County consumed an average of approximately 46.3 million Btu per service population of transportation fuel in 2018.

Table 4.16-1 2018 Annual Gasoline and Diesel Consumption

Fuel Type	San Luis Obispo County (gallons)	County Per Service Population Consumption (gallons)	County Per Service Population Consumption (MMBtu)
Gasoline	150,000,000	360.2	39.5
Diesel	22,000,000	52.8	6.7
Total	172,000,000	413.1	46.3

Notes: The population of San Luis Obispo County (280,393 persons) is approximately 0.7 percent of the population of California (39,927,315 persons) (California Department of Finance 2019). Diesel and gasoline volumes are expressed in gallons while Btu volumes are expressed in millions of Btu (MMBtu).

Sources: CEC 2020d, DOF 209, Bureau of Labor Statistics 2020.

Electricity

As shown in Table 4.16-2, San Luis Obispo County consumed approximately 1,766 GWh in 2018, which was approximately 2.2 percent of electricity consumption by PG&E customers and approximately 0.6 percent of statewide electricity consumption (CEC 2020d). San Luis Obispo County’s 2018 per service population electricity consumption was approximately 4,241 kWh. As shown in Table 4.16-2, the County’s per service population electricity consumption was approximately 14.5 million Btu in 2018.

Table 4.16-2 2018 Electricity Consumption

Energy Type	San Luis Obispo County (GWh)	County Per Service Population Consumption (kWh)	County Per Service Population Consumption (MMBtu)
Electricity	1,766	4,241.0	14.5

Notes: The population of San Luis Obispo County (280,393 persons) is approximately 0.7 percent of the population of California (39,927,315 persons) (California Department of Finance 2019). Electricity consumption volumes for Fresno County and California are expressed in megawatt-hours (MWh) while County per service population consumption is expressed in kilowatt-hours (kWh) and millions of Btu (MMBtu).

Sources: CEC 2020d, DOF 209, Bureau of Labor Statistics 2020.

Natural Gas

As shown in Table 4.16-3, San Luis Obispo County consumed approximately 82 million U.S. therms in 2018, which was approximately 1.6 percent of the natural gas consumption by SoCalGas customers and approximately 0.6 percent of statewide natural gas consumption (CEC 2020c). San Luis Obispo County’s 2018 per service population natural gas consumption was approximately 196.9 U.S. therms. As shown in Table 4.16-3, the County’s per service population natural gas consumption in 2018 was approximately 14.5 million Btu.

Table 4.16-3 2018 Natural Gas Consumption

Energy Type	San Luis Obispo County (US therms)	County Per Service Population Consumption (U.S. Therms)	County Per Service Population Consumption (MMBtu)
Natural Gas	82,000,000	196.9	14.5

Notes: The population of San Luis Obispo County (280,393 persons) is approximately 0.7 percent of the population of California (39,927,315 persons) (California Department of Finance 2019). Natural gas consumption volumes for Fresno County and California are expressed in U.S therms while County per service population consumption is expressed in U.S. therms and millions of Btu (MMBtu).

Sources: CEC 2020d, DOF 209, Bureau of Labor Statistics 2020.

4.16.2 Regulatory Setting

a. Federal Regulations

Energy Independence and Security Act of 2007

The Energy Independence and Security Act, enacted by Congress in 2007, is designed to improve vehicle fuel economy and help reduce the United States’ dependence on foreign oil. It expands the production of renewable fuels, reducing dependence on oil and confronting climate change. Specifically, it does the following:

- Increases the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard that requires fuel producers to use at least 36 billion gallons of biofuel in 2022.
- Reduces United States demand for oil by setting a national fuel economy standard of 35 miles per gallon by 2020, an increase in fuel economy standards of 40 percent as compared to 2007 levels.

The Energy Independence and Security Act of 2007 also set energy efficiency standards for lighting (specifically light bulbs) and appliances. Development would also be required to install photosensors and energy-efficient lighting fixtures consistent with the requirements of 42 United States Code Section 17001 et seq.

Energy Policy and Conservation Act

Enacted in 1975, this legislation established fuel economy standards for new light-duty vehicles sold in the United States. The law placed responsibility on the National Highway Traffic and Safety Administration (NHTSA) for establishing and regularly updating vehicle standards. The United States Environmental Protection Agency (U.S. EPA) administers the Corporate Average Fuel Economy program, which determines vehicle manufacturers' compliance with existing fuel economy standards. Since the inception of the Corporate Average Fuel Economy program, the average fuel economy for new light-duty vehicles steadily increased from 13.1 miles per gallon for the 1975 model year to 30.7 miles per gallon for the 2014 model year and is proposed to increase to 54.5 by 2025. Light-duty vehicles include autos, pickups, vans, and sport-utility vehicles.

Energy Star Program

Energy Star is a voluntary labeling program introduced by U.S. EPA to identify and promote energy-efficient products to reduce GHG emissions. The program applies to major household appliances, lighting, computers, and building components such as windows, doors, roofs, and heating and cooling systems. Under this program, appliances that meet specifications for maximum energy use established under the program are certified to display the Energy Star label. In 1996, the U.S. EPA joined with the Energy Department to expand the program, which now also includes certifying commercial and industrial buildings as well as homes.

Construction Equipment Fuel Efficiency Standard

The U.S. EPA sets emission standards for construction equipment. The current iteration of emissions standards for construction equipment are the Tier 4 efficiency requirements contained in 40 Code of Federal Regulations Parts 1039, 1065, and 1068. Emissions requirements for new off-road Tier 4 vehicles were completely phased in by the end of 2015.

b. State Regulations

California Energy Action Plan

The CEC is responsible for preparing the California Energy Action Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The 2008 California Energy Action 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 several strategies, including assistance to public agencies and fleet operators in implementing incentive programs for zero-emission vehicles and addressing their infrastructure needs, as well as encouragement of urban designs that reduce vehicle miles traveled (VMT) and accommodate pedestrian and bicycle access.

Assembly Bill 2076: Reducing Dependence on Petroleum

Pursuant to Assembly Bill (AB) 2076 (Chapter 936, Statutes of 2000), the CEC and California Air Resources Board (CARB) prepared and adopted a joint-agency report, *Reducing California's Petroleum Dependence*, in 2003. Included in this report are recommendations to increase the use of alternative fuels to 20 percent of on-road transportation fuel use by 2020 and 30 percent by 2030, significantly increase the efficiency of motor vehicles, and reduce per capita VMT. One of the performance-based goals of AB 2076 is to reduce petroleum demand to 15 percent below 2003 demand. In response to the CEC's 2003 and 2005 *Integrated Energy Policy Reports*, the Governor directed the CEC to take the lead in developing a long-term plan to increase alternative fuel use.

Integrated Energy Policy Report

SB 1389 requires the CEC to conduct assessments and forecasts of all aspects of energy industry supply, production, transportation, delivery and distribution, demand, and prices. The CEC uses these assessments and forecasts to develop energy policies that conserve resources, protect the environment, ensure energy reliability, enhance the state's economy, and protect public health and safety. The most recent assessment, the *2018 Integrated Energy Policy Report*, contains two volumes. Volume I highlights the implementation of California's innovative policies and the role they have played in establishing a clean energy economy. Volume II provides more detail on several key energy policies, including decarbonizing buildings, increasing energy efficiency savings, and integrating more renewable energy into the electricity system (CEC 2019c).

Senate Bill 350

The Clean Energy and Pollution Reduction Act of 2015 (SB 350) requires a doubling of the energy efficiency savings in electricity and natural gas for retail customers through energy efficiency and conservation by December 31, 2030.

California Renewable Portfolio Standard and Senate Bill 100

Approved by former Governor Brown on September 10, 2018, SB 100 accelerates the state's Renewable Portfolio Standard program, which was last updated by SB 350 in 2015. SB 100 requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

Assembly Bill 1493: Reduction of Greenhouse Gas Emissions

AB 1493 (2002), California's Advanced Clean Cars program (referred to as "Pavley"), requires CARB to develop and adopt regulations to achieve "the maximum feasible and cost-effective reduction of GHG emissions from motor vehicles." Implementation of new regulations prescribed by AB 1493 required that the state of California apply for a waiver under the federal Clean Air Act. Although the USEPA initially denied the waiver in 2008, USEPA approved a waiver in June 2009, and in September 2009, CARB approved amendments to its initially adopted regulations to apply the Pavley standards that reduce GHG emissions to new passenger vehicles in model years 2009 through 2016. According to CARB, implementation of the Pavley regulations is expected to reduce fuel consumption while also reducing GHG emissions.

On September 19, 2019, the U.S. EPA withdrew California's Clean Air Act preemption waiver and issued the One National Program Rule, which prohibits states from establishing their own separate fuel economy standards or passing laws that substantially affect fuel economy standards. As a

result, California may no longer promulgate and enforce its tailpipe GHG emission standard and zero emission vehicle mandate.

Energy Action Plan

In 2003, the CEC and California Public Utilities Commission set forth their energy policy vision in the Energy Action Plan (EAP). The CEC adopted an update to the EAP in February 2008 (EAP II) that supplements the earlier EAP and examines the state's ongoing actions in the context of global climate change. The nine major action areas in the EAP include energy efficiency, demand response, renewable energy, electricity adequacy/reliability/infrastructure, electricity market structure, natural gas supply/demand/infrastructure, transportation fuels supply/demand/infrastructure, research/development/demonstration, and climate change (California Public Utilities Commission 2008).

Assembly Bill 1007: State Alternative Fuels Plan

AB 1007 (Chapter 371, Statutes of 2005) required the CEC to prepare a plan to increase the use of alternative fuels in California. The CEC prepared the State Alternative Fuels Plan in partnership with CARB and in consultation with other federal, state, 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.

Bioenergy Action Plan (Executive Order S-06-06)

Executive Order (EO) S-06-06 establishes targets for the use and production of biofuels and biopower and directs state agencies to work together to advance biomass programs in California while providing environmental protection and mitigation. The EO establishes the following in-state production targets to increase the production and use of bioenergy, including ethanol and biodiesel fuels made from renewable resources:

- Produce 20 percent of biofuels used in California by 2010,
- Produce 40 percent of biofuels used in California by 2020, and
- Produce 75 percent of biofuels used in California by 2050.

EO S-06-06 also calls for the state to meet a target for use of biomass electricity. The 2011 Bioenergy Action Plan identifies potential barriers and recommends actions to address them so the state can meet its clean energy, waste reduction, and climate protection goals. The 2012 Bioenergy Action Plan updates the 2011 Plan and provides a more detailed action plan to achieve the following goals:

- Increase environmentally and economically sustainable energy production from organic waste
- Encourage development of diverse bioenergy technologies that increase local electricity generation, combined heat and power facilities, renewable natural gas, and renewable liquid fuels for transportation and fuel cell applications
- Create jobs and stimulate economic development, especially in rural regions of the state
- Reduce fire danger, improve air and water quality, and reduce waste

Title 24, California Code of Regulations

California Code of Regulations, Title 24, Part 6, is California's Energy Efficiency Standards for Residential and Non-residential Buildings. The CEC established Title 24 in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption and provide energy efficiency standards for residential and nonresidential buildings. The standards are updated on an approximately three-year cycle to allow consideration and possible incorporation of new efficient technologies and methods. In 2016, the CEC updated Title 24 standards with more stringent requirements effective January 1, 2017. All buildings for which an application for a building permit is submitted on or after January 1, 2017, must follow the 2016 standards. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions. The CEC Impact Analysis for California's 2016 Building Energy Efficiency Standards estimates that the 2016 Standards are 28 percent more efficient than the previous 2013 standards for residential buildings and five percent more efficient for non-residential buildings. The building efficiency standards are enforced through the local plan check and building permit process. Local government agencies may adopt and enforce additional energy standards for new buildings as reasonably necessary due to local climatologic, geologic, or topographic conditions, provided these standards exceed those provided in Title 24.

California Green Building Standards Code (2019), California Code of Regulations Title 24, Part 11

California's Green Building Code, referred to as CalGreen, was developed to provide a consistent approach to green building in the State. Having taken effect in January 2020, the most recent version of CalGreen lays out the minimum requirements for newly constructed residential and nonresidential buildings to reduce GHG emissions through improved energy efficiency and process improvements. It also includes voluntary tiers to further encourage building practices that improve public health, safety, and general welfare by promoting a more sustainable design.

2017 Climate Change Scoping Plan

On December 14, 2017, the CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the State's 2030 GHG emissions reduction target of 40 percent below 1990 levels. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, and implementation of recently adopted policies and legislation. The 2017 Scoping Plan includes a wide variety of goals related to energy efficiency and renewable energy that are intended to help meet the State's 2030 target, including goals specifically targeted at the water sector (CARB 2017).

c. Local Regulations

San Luis Obispo Council of Governments 2019 Regional Transportation Plan

The 2019 Regional Transportation Plan (RTP) is a comprehensive assessment of all forms of transportation available in San Luis Obispo County and the region's blueprint for a transportation system that meets the mobility needs of the region's residents and visitors. The 2019 RTP contains a Sustainable Communities Strategy (SCS) as required by SB 375. Enacted in 2008, SB 375 requires that each Metropolitan Planning Organization include an SCS that provides an integrated land use and transportation plan for meeting GHG emission reduction targets set forth by the California Air Resources Board (CARB). The 2019 RTP and SCS coordinates land use, housing, and transportation

planning to reduce the amount the amount of time people spend on the road. This effort is part of a statewide strategy to reduce GHG emissions to meet regional targets, and may help attract funding for our communities and streamline permitting processes

Climate Action Plan

The following measures and implementation actions from the City of Morro Bay's Climate Action Plan would apply to energy consumption related to the proposed project (Morro Bay 2014):

- **Measure C-1 City Government Energy Efficiency Retrofits and Upgrades.** Establish a target to reduce City government energy use by 10 percent by 2020 and implement cost-effective improvements and upgrades to achieve that target.
 - **Action C-1.1:** Adopt a 10 percent City government energy use reduction target.
 - **Action C-1.2:** Establish a prioritized list of energy efficiency upgrade projects and implement them as funding becomes available.
- **Measure C-3 Renewable Energy Systems on City Property.** Pursue small-scale on-site solar energy systems at City government facilities.
 - **Action C-3.2:** Install small-scale on-site solar PV systems at select City government facilities.
- **Measure C-4 Zero- and Low-Emission City Fleet Vehicles.** Continue to replace official City vehicles and equipment with more efficient and/or alternatively fueled vehicles.
- **Measure E-4 Incentives for Exceeding Title 24 Energy Efficiency Building Standards.** Encourage new development to voluntarily exceed State energy efficiency standards.
 - **Action E-4.2:** Identify, provide and promote incentives (e.g., streamlined permitting, public recognition, etc.) for applicants whose project exceeds State requirements by a specified percent.
- **Measure E-5 Small-Scale On-Site Solar PV Incentive Program.** Facilitate the voluntary installation of small-scale on-site solar PV systems and solar hot water heaters in the community through expanded promotion of existing financial incentives, rebates, and financing programs, and by helping residents and business owners overcome common regulatory barriers and upfront capital costs.
 - **Action E-5.4:** Participate in and promote a single-family residential renewable energy financing program to encourage investment in small-scale on-site solar PV systems.
 - **Action E-5.5:** Continue to participate in and promote the AB 811 CaliforniaFIRST renewable energy financing program for multi-family residential and commercial buildings.
- **Measure TL-5 Electric Vehicle Network and Alternative Fueling Stations.** Continue to work with the APCD, Central Coast Clean Cities Coalition, and neighboring jurisdictions to create and implement the electric vehicle readiness plan.
 - **Action TL-5.2:** Provide streamlined installation and permitting procedures for vehicle charging facilities, utilizing tools provided in the electric vehicle readiness plan (e.g., sample charging permits, model ordinances, development guidelines, outreach programs).
- **Measure TL-6 Smart Growth.** Facilitate mixed-use, higher density, and infill development near transit stops, in existing community centers/downtown, and in other designated areas.
 - **Action TL-6.1:** Provide and promote incentives (e.g., parking reductions, priority permitting, deferred permit fees, etc.) for mixed-use and high-density land use categories located within ¼-mile of a transit stop or park and ride facility with regularly scheduled, daily service.

4.16.3 Impact Analysis

a. Methodology and Significance Thresholds

Significance Thresholds

Appendix G of the CEQA Guidelines considers a project to have a significant impact on energy resources if the project would:

- Result in wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or
- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Methodology

Public Resources Code Section 21100(b)(3) states that an EIR shall include “mitigation measures proposed to minimize significant effects on the environment, including, but not limited to, measures to reduce the wasteful, inefficient, and unnecessary consumption of energy.” The physical environmental impacts associated with the use of energy, including the generation of electricity and burning of fuels, have been accounted for in Section 4.2, Air Quality, and Section 4.6, Greenhouse Gas Emissions.

Energy consumption is categorized herein in terms of “direct” and “indirect” energy. Direct energy accounts for energy consumed during operation of the transportation system and land use scenario envisioned under the General Plan and Local Coastal Program (LCP) Update, such as fuel consumed by vehicles, natural gas consumed for heating and/or power, and electricity consumed for power. Indirect energy is the energy needed for construction and maintenance of the transportation system and land use scenario facilitated by the General Plan and LCP Update. The analysis of direct energy involves the quantification of anticipated transportation fuel, natural gas, and electricity consumption under the General Plan and LCP Update and a qualitative discussion of the efficiency, necessity, and wastefulness of the energy consumption. Analysis of indirect energy involves a qualitative discussion of construction and maintenance energy requirements anticipated under 2040 buildout of the General Plan and LCP Update.

Buildout of the General Plan and LCP Update would generate direct energy consumption from transportation fuel from the anticipated growth of residential, commercial and industrial land uses. Because project-level details regarding the new development under the General Plan and LCP Update are not available, 2040 buildout assumptions for direct energy impacts are used in this analysis to estimate energy usage for land use buildout. As a result, this analysis represents a conservative estimate of future energy consumption in Morro Bay.

Projections for transportation fuel consumption under 2040 buildout conditions were calculated based on the Mobile Source Emission Inventory (EMFAC) 2014 database. As such, direct energy consumption from transportation fuel for the General Plan and LCP Update is discussed based on EMFAC 2014 projections and qualitatively. For 2040 natural gas and electricity consumption under buildout of the land use scenario envisioned by the General Plan and LCP Update, consumption factors were drawn from the California Emissions Estimator Model (CalEEMod) Version 2016.3.2. The CalEEMod data is provided as Appendix C. Additional calculations conducted for this analysis are provided as Appendix F. Transportation fuel, natural gas, and electricity per service population consumption in 2040 is presented in comparison to 2018 per service population consumption for informational purposes.

b. Project Impacts and Mitigation Measures

Threshold: Would the General Plan and LCP Update result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during construction or operation?
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Impact E-1 THE GENERAL PLAN AND LCP UPDATE IS BASED ON A LAND-USE STRATEGY THAT WOULD PROMOTE GREATER ENERGY EFFICIENCY IN COMMUNITY AND MUNICIPAL OPERATIONS. GENERAL PLAN AND LCP UPDATE POLICIES AND IMPLEMENTATION PROGRAMS WOULD ENSURE THAT DEVELOPMENT UNDER THE GENERAL PLAN AND LCP UPDATE WOULD COMPLY WITH EXISTING ENERGY EFFICIENCY REGULATIONS. WASTEFUL, INEFFICIENT, OR UNNECESSARY CONSUMPTION OF ENERGY WOULD NOT OCCUR AND THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

The General Plan and LCP Update would result in the use of energy during construction and operation of new development in the planning area. Energy use during construction would be primarily in the form of fuel consumption to operate heavy equipment, light-duty vehicles, machinery, and generators for lighting. Temporary grid power may also be provided to construction trailers or electric construction equipment. Long-term operation of development projects would require permanent grid connections for electricity and natural gas service to power internal and exterior building lighting, and heating and cooling systems. In addition, the increase in vehicle trips associated with potential development would increase fuel consumption.

Indirect Construction and Maintenance Energy Use

Construction and maintenance of future land use development envisioned under the General Plan and LCP Update would result in short-term consumption of energy resulting from the use of construction equipment and processes. CALGreen includes specific requirements related to recycling, construction materials, and energy efficiency standards that would apply to construction of future development envisioned by the General Plan and LCP Update and would minimize wasteful, inefficient, and unnecessary energy consumption. Construction and operation of projects facilitated by the General Plan and LCP Update would be required to comply with relevant provisions of CALGreen and Title 24 of the California Energy Code, which would further avoid wasteful, inefficient, and unnecessary energy consumption.

New Direct Natural Gas and Electricity Consumption

Operation of new development facilitated by the General Plan and LCP Update would consume natural gas and electricity for building heating and power, lighting, and water conveyance, among other operational requirements. Table 4.16-4 shows net new per service population natural gas and electricity consumption under buildout of the General Plan and LCP Update.

Table 4.16-4 Projected 2040 Annual Natural Gas and Electricity Consumption in Morro Bay

Year	Per Service Population Consumption	Direct Energy Consumption (Daily Per Service Population MMBtu)
Natural Gas		
U.S. Therms		
2018 (SLO County Existing)	196.9	18.3
2040 (Morro Bay Buildout)	123.6	11.5
Electricity		
kWh		
2018 (SLO County Existing)	4,241.0	14.5
2040 (Morro Bay Buildout)	3,887.1	13.3

Notes: Per service population consumption in 2040 is derived from dividing estimated 2040 buildout energy consumption by service population anticipated by 2040. Per service population energy consumption is expressed in U.S. therms for natural gas, kilowatt-hours (kWh) for electricity, and millions of Btu (MMBtu) for both.

As shown in Table 4.16-4, new per service population natural gas consumption with buildout of the land use scenario envisioned under the General Plan and LCP Update would be approximately 11.5 MMBtu and approximately 13.3 MMBtu for electricity. These estimates represent a decrease in per service population energy consumption. In addition, MBCP procures a greater percentage of its electricity from renewable sources in comparison to PG&E.

The Conservation Element of the General Plan contains goals, policies, and implementation programs that would prevent inefficient, wasteful, and unnecessary energy consumption during construction and operation of development facilitated by the General Plan. The General Plan and LCP Update goals and policies that present the greatest potential for reducing wasteful, inefficient, and unnecessary energy consumption are as follows:

Conservation Element

Goal C-5: Morro Bay is a leader in energy innovation and sustainable usage.

- Policy C-5.1: Weatherization Incentive Programs.** Promote low-cost or free weatherization programs for disadvantaged residents, including low-income families and elderly individuals.
- Policy C-5.2: Energy Efficiency Standards.** Construct all new City facilities to be more energy efficient than the minimum energy efficiency standards in the California Building Standards Code, and achieve zero net energy performance for new City facilities when possible.

Goal C-6: Energy available to Morro Bay residences, businesses, and public buildings is renewable and sustainable.

- Policy C-6.1: Renewable Energy Incentive Programs.** Create incentives that promote renewable and sustainable energy systems as a component of new development or reuse projects.
- Policy C-6.2: Renewable Energy in Home and Commercial Uses.** Encourage the use of solar energy systems in homes and commercial businesses as a form of renewable energy, including in support of zero net energy goals.

Policy C-6.3: Renewable Energy in Municipal Uses. Maximize renewable energy capacity on municipal property and renewable energy use in City-sponsored projects and activities.

Policy C-6.4: Partnerships. Support public/private partnerships to implement energy efficiency, energy storage, and microgrid development to achieve cost savings, reduce energy use, and improve energy reliability.

In addition to the above policies and implementation programs, the General Plan and LCP Update encourages urban infill and mixed-use development and multimodal transportation to reduce overall energy consumption and result in greater energy efficiency throughout Morro Bay. Infill and mixed-use developments improve energy efficiency as the resulting development pattern places City residents closer to places of employment, businesses residents patronize, and public transit opportunities. By placing new services and amenities closer to where people live and work, the General Plan and LCP Update would minimize the need to drive and reduce per service population energy consumption and GHGs.

Direct Transportation Energy Use

Daily operation of the regional transportation system uses energy in the form of fuel consumed by propulsion of passenger vehicles, including automobiles, vans and trucks, and transit vehicles, including buses and trains. Increases in motor vehicle trips are primarily a combined function of population and employment growth.

Table 4.16-5 shows daily VMT and estimated fuel consumption translated into energy use (Btu) in the Morro Bay under existing conditions and future 2040 conditions with implementation of the General Plan and LCP Update.

Table 4.16-5 Direct Transportation Energy Use in Morro Bay

Year	Service Population (Residents + Employees)	Daily VMT ¹	Direct Energy Consumption (Daily Per Service Population MMBtu) ²
2016 (Existing)	16,114	84,739	43.6
2040 (Buildout)	17,600 ³	100,104	26.8
2040 (New Development Only)	15,534	197,595	26.8
2040 (Buildout + New Development)	31,648	297,699	26.8

¹ Daily VMT for Existing and Buildout + New Development General Plan and LCP Update were applied to the 2016 and 2040 scenarios, respectively.

² Daily VMT and county-level fuel consumption information was used to derive a per capita daily Btu per VMT consumption factor. (refer to Table 4.16-1).

³ Assumes population increases to Measure F limit of 12,200 with no substantial increase in employment.

Notes: Per Service Population Btu/VMT factor is expressed in singular Btu while Daily Per Service Population Direct Energy Consumption is expressed in millions of Btu (MMBtu).

As shown in Table 4.16-5 direct transportation energy demand would decrease from 43.6 daily MMBtu per service population to approximately 26.8 daily MMBtu per service population. The reduction from 2016 to 2040, which is observed across all 2040 scenarios shown in Table 4.16-5, is primarily the result of the increase in vehicle fuel efficiency anticipated by 2040 (refer to Section 4.16.1[b] for a discussion of consumption of gasoline and diesel fuel under existing conditions).

The decrease in per service population energy consumption shown in Table 4.16-5 is based on a business-as-usual estimate of 2040 VMT and does not account for proposed General Plan and LCP Update Policies from the Circulation Element that would further improve the availability of alternative transportation modes and help reduce congestion and overall demand for transportation fuels. The Circulation Element contains goals and policies to promote a reduction in VMT through support of alternative transportation. While personal automobile travel has been the predominant transportation mode for residents in the City, there are two public transit systems that service Morro Bay: San Luis Obispo Regional Transit Authority (RTA) and Morro Bay Transit (refer to Section 4.13.1[c] for a detailed discussion of existing transit facilities in and around Morro Bay). The Circulation Element identifies priorities for upgrades to bicycle facilities, sidewalks, and other amenities for alternative modes of transportation.

Circulation Element

Goal CIR-1: Residents and visitors can easily move about the city in a variety of safe and active ways.

- Policy CIR-1.1: Balanced Transportation.** Work to complete a balanced multimodal transportation system that meets the needs of all users, including pedestrians, cyclists, motorists, children, seniors, and people with disabilities.
- Policy CIR-1.2: Access Improvement.** Use infrastructure improvements within public rights-of-way as an opportunity to improve street design and multimodal access.
- Policy CIR-1.3: System Connectivity.** Develop a complete and connected network of accessible sidewalks, crossings, paths, and separated bike lanes that are convenient and attractive throughout the city.
- Policy CIR-1.4: Future Enhancements.** Identify streets in the city that can be made “complete,” and plan for new bikeways, sidewalks, and crosswalks on these streets by reallocating how space within the public right-of-way is used.
- Policy CIR-1.5: Regional Transit.** Coordinate with the San Luis Obispo Regional Transit Authority to ensure local transit connects smoothly with regional transit and possible future route and schedule expansions.
- Policy CIR-1.6: Local Transit Improvement.** Continue to improve the local Morro Bay Transit Deviated Fixed Route and Call-A-Ride services and ensure connections to regional transit and active transportation facilities.
- Policy CIR-5.3: Continuous Bicycle Network.** The City shall design a safe and logical bicycle path network that links key destinations within the planning area to promote the use of bicycles as a mode of transportation to reduce greenhouse gas emissions and to encourage exercise.

Goal CIR-2: Morro Bay is a pleasant and safe place to walk and bike.

- Policy CIR-2.1: Compact Development.** Support mixed-use, compact-style, and other land use development patterns within existing developed areas so as to facilitate easy active transportation and transit use. (See also Policies LU-3.1, LU-3.3, LU-3.6, and LU-3.7.)
- Policy CIR-2.2: Street End Pedestrian Connections.** Create safer and more distinct lateral access connections across the street ends on the west side of the Embarcadero at Dunes, Harbor, Morro Bay Boulevard, Front, Pacific, Marina, and Driftwood Streets, including by relocating parking from these areas. (See

also Policies LU-4.1, LU-4.5, LU-4.6, LU-7.1 through LU-7.6, and OS-1.6 and Implementation Action LU-19).

- Policy CIR-2.3: Pedestrian Safety.** Provide for accessible, safe, and convenient paths, sidewalks, and crossings along major streets and beach and coastal areas for all users, including the disabled, youth, and the elderly. (See also Policies LU-8.5 and OS-3.6.)
- Policy CIR-2.4: Active Transportation Amenities.** Provide facilities and amenities for active transportation users at public facilities, including bicycle storage and seating areas. (See also Policies LU-8.4 and OS-1.8.)
- Policy CIR-2.5: Prioritizing Improvements.** Prioritize infrastructure improvements that benefit bicycle and pedestrian safety and convenience around community facilities and locations in pedestrian-oriented areas. (See also Policy OS-1.8 and Implementation Action OS-1.)
- Policy CIR-2.6: Destination Facilities.** Require and place access areas and facilities for bicycle, pedestrian, and transit travel in front of major destinations, such as shopping centers, parks, and schools. Facilities may include any or a combination of the following: designated passenger drop-off and pickup zones, benches, lighting, secure bike parking, shelters, and street trees. (See also Policies LU-2.3 and PS-2.1.)
- Policy CIR-2.7: Traffic Calming.** Develop and implement strategies to calm traffic on streets that have a high amount of pedestrian and bicycle traffic, or are in neighborhoods with residences, schools, parks, or other areas frequented by children.

Goal CIR-3: Traffic monitoring considers all methods of travel, with emphasis on active and sustainable transportation methods.

- Policy CIRC-3.2: VMT Thresholds.** Achieve State-mandated reductions in VMT by establishing a VMT standard. This standard will be for roadway segments and intersections during PM peak hour.

Implementation of the General Plan and LCP Update goals and policies listed above, as well as other policies and implementation actions contained in the General Plan and LCP Update that would result in indirect energy conservation (such as the promotion of alternative transportation, water conservation, and waste reduction) would promote greater energy efficiency in municipal and community operations and development. Furthermore, the General Plan and LCP Update land-use strategy actively promotes infill and mixed-use development, which would result in increased energy efficiency overall for City residents, businesses, and City operations. Therefore, the General Plan and LCP Update would not result in wasteful, inefficient, or unnecessary consumption of energy. As a result, this impact would be less than significant.

Mitigation Measure

No mitigation is required.

Threshold: Would the General Plan and LCP Update conflict with or obstruct a state or local plan for renewable energy or energy efficiency?
--

Impact E-2 THE GENERAL PLAN AND LCP UPDATE WOULD NOT CONFLICT WITH ENERGY EFFICIENCY GOALS CONTAINED IN THE CITY OF MORRO BAY CLIMATE ACTION PLAN. CONSTRUCTION AND OPERATION OF PROJECTS FACILITATED BY THE GENERAL PLAN AND LCP UPDATE WOULD COMPLY WITH RELEVANT PROVISIONS OF THE STATE'S CALGREEN PROGRAM AND TITLE 24 OF THE CALIFORNIA ENERGY CODE. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

The City of Morro Bay's Climate Action Plan contains measures intended to increase energy efficiency and expand the use of renewable energy. As discussed in Section 4.6, Greenhouse Gas Emissions, Impact GHG-1, the General Plan and LCP Update establishes policies to reduce GHG emissions, including updating the Climate Action Plan to ensure future development is consistent with Statewide GHG-reduction targets. The General Plan and LCP Update would revise and update the General Plan land use designations and policy provisions of the City's General Plan, and would result in new infill development, located in close proximity to transit, City services, and employment centers. The Morro Bay CAP Climate Action Measure TL-6 recognizes that energy-efficient designs or growth that facilitates mixed-use, higher density, and infill development near transit stops, in existing community centers, allows for more efficient use of existing infrastructure and improves city-wide efforts to reduce GHG emissions (City of Morro Bay 2014). Therefore, the General Plan and LCP Update would facilitate the consistency of future development projects with both mandatory and voluntary measures of the CAP, resulting in reduced per service population energy consumption. Therefore, the General Plan and LCP Update would not conflict with local plans for renewable energy and energy efficiency.

As described in Impact E-1, construction and operation of new development facilitated by the General Plan and LCP Update would be consistent with General Plan goals and policies to increase energy efficiency and would be required to comply with relevant provisions of CALGreen and Title 24 of the California Energy Code. Therefore, this impact would be less than significant.

Mitigation Measure

No mitigation is required.

4.16.4 Cumulative Impacts

The analysis in this section examines impacts of the General Plan and LCP Update on cumulative energy impacts throughout the County of San Luis Obispo (the cumulative impact analysis area) and is cumulative in nature. Based on the comparisons of General Plan and LCP Update buildout electricity, natural gas, and fuel demand to existing local demand for these resources shown in Table 4.16-5 and Table 4.16-4, energy demand associated with General Plan and LCP Update buildout would result in a decrease in cumulative energy demand over the life of the General Plan and LCP Update. As described in Impact E-1, construction and operation of all new development facilitated by the General Plan and LCP Update would be consistent with General Plan goals and policies to increase energy efficiency and would be required to comply with relevant provisions of CALGreen and Title 24 of the California Energy Code. Furthermore, California's use of non-renewable electricity and natural gas are expected to continue to decline as a proportion of overall energy demand due to stringent energy efficiency measures and a growing acceptance of solar power by residential and commercial customers. A mandated increase in renewable energy use would also serve to offset any increase in non-renewable energy use resulting from the General Plan

buildout. Therefore, the General Plan and LCP Update would not be expected to contribute substantially to a cumulative increase in energy demand, result in wasteful, inefficient, or unnecessary consumption of energy, or result in the need for construction of new major facilities or substantial alteration of existing facilities to meet projected energy demands and cumulative impacts would be less than significant.

5 Other CEQA Required Discussions

This section discusses other issues for which CEQA requires analysis in addition to the specific issue areas discussed in Section 4, *Environmental Impact Analysis*. These additional issues include the project's potential to induce growth and create significant and irreversible impacts on the environment; and energy effects as set forth in *CEQA Guidelines Appendix F*.

5.1 Growth Inducement

CEQA Guidelines Section 15126.2(d) requires that EIRs discuss the potential for projects to induce population or economic growth, either directly or indirectly. CEQA also requires a discussion of ways in which a project may remove obstacles to growth.

5.1.1 Population and Economic Growth

As discussed in Section 2, *Project Description*, buildout of the General Plan and LCP Update could accommodate an estimated 1,348 new residents and 881 new dwelling units in the city beyond 2016 conditions. As shown in Table 4.11-4 in Section 4.11, *Population and Housing*, the anticipated population and housing growth in the city through 2040 under the General Plan and LCP Update is similar to the SLOCOG population and housing growth projections for the city. In addition, the land use plan and policies in the General Plan and LCP Update focus on development within the existing boundaries of the city, with limited vacant land, to create a balance of uses that improves housing options and affordability in the city, while providing for sufficient services that support anticipated population growth.

The General Plan and LCP Update would result in an increase of approximately 8.3 million square feet of nonresidential development that would generate permanent employment opportunities in the city. The General Plan and LCP Update does not specify a maximum population for Morro Bay. However, any growth (including any potential expansion of the SOI) in Morro Bay must be consistent with Measure F, limiting the city population to 12,200 residents. To exceed this number, Morro Bay must secure additional water resources, and a majority of voters must elect to remove the limit. Therefore, despite the increase in employment as a result of nonresidential development facilitated by the General Plan and LCP Update, the constraints of Measure F limit population growth potential in the city. Additionally, the General Plan and LCP Update would generate temporary employment opportunities during construction of future residential and nonresidential projects. Because construction workers would be expected to be drawn from the existing regional work force, construction of future development projects would not be considered growth-inducing.

As discussed in Section 2, *Project Description*, 1.25 percent of the city is undeveloped, with the rest of the city occupied by development or open space. With a lack of developable area, any economic expansion induced by the General Plan and LCP Update is not anticipated to result in direct physical environmental effects beyond those described throughout Section 4 of this EIR, and as a result of development expected to occur under the General Plan and LCP Update. Moreover, the environmental effects associated with future development in or around Morro Bay as a result of the General Plan and LCP Update would be addressed as part of the CEQA environmental review for individual development projects as they are considered by city decision-makers.

5.1.2 Removal of Obstacles to Growth

The City of Morro Bay is located within an urbanized area that is served by existing infrastructure. As discussed in Section 4.14, *Utilities*, and Section 4.8, *Hydrology and Water Quality*, existing infrastructure in Morro Bay would be adequate to serve development under the General Plan and LCP Update. The General Plan and LCP Update calls for redevelopment of the Morro Bay Power Plant and existing wastewater treatment plant properties in the North Embarcadero area and identifies downtown Morro Bay and the North Morro Bay neighborhood as prime areas for intensifying infill development and redevelopment. Despite these anticipated land use changes, the General Plan and LCP Update would generally preserve the existing pattern of land uses in the city. By focusing development within already urbanized areas, implementation of the General Plan and LCP Update would reduce growth pressure in undeveloped areas at the periphery of the city. This would reduce the potential for impacts relating to issues such as biological resources, regional traffic, and air quality as compared to development on lands beyond urban boundaries.

The General Plan and LCP Update planning area includes approximately 100 acres outside of the city limits, but within Morro Bay's Sphere of Influence (SOI). The City's SOI encompasses the city and the area outside of the city under County jurisdiction but indicates the city's potential future boundary and service area. Most of Morro Bay's SOI is part of the Morro Bay Estuary located just outside of the marina, which allows the city to more effectively permit dredging and other estuary maintenance activities. The current SOI also includes a small amount of land at the beachfront at the northern end of the city, west of State Route (SR) 1. Future amendments to the Morro Bay SOI being contemplated as part of the General Plan and LCP Update and evaluated in this EIR, including open space area northeast of the City Limit and the WRF area southeast of the City Limit, would be implemented in coordination with LAFCo and the County of San Luis Obispo and would be required to be consistent with applicable LAFCo policy. Therefore, any future development or land use changes anticipated beyond the city limits would be limited such that those changes do not constitute removal of an obstacle to growth.

In addition, the constraints to population growth associated with Measure F, described in Section 5.1.1, *Population and Economic Growth*, would remain in place until the City can secure additional water resources and a majority of voters have elected to remove the population limit. Therefore, implementation of the General Plan and LCP Update would not remove any existing obstacle to growth.

5.2 Irreversible Environmental Effects

The *CEQA Guidelines* require that EIRs evaluating projects that amend public plans, ordinances, or policies contain a discussion of significant irreversible environmental changes. CEQA also requires decision-makers to balance the benefits of a proposed project against its unavoidable environmental risks in determining whether to approve a project. This section addresses nonrenewable resources, the commitment of future generations to the proposed uses, and irreversible impacts associated with the development that would be facilitated by implementation of the General Plan and LCP Update.

Construction activity associated with planned development that would be accommodated under the General Plan and LCP Update would require the use of building materials and energy, some of which are nonrenewable resources. Consumption of these resources would occur with any development in the region and are not unique to Morro Bay or the General Plan and LCP Update.

The addition of new residential and nonresidential development in the city through 2040 would irreversibly increase local demand for nonrenewable energy resources such as petroleum and natural gas. Increasingly efficient building fixtures and automobile engines as well as implementation of policies included in the General Plan and LCP Update are expected to offset the demand to some degree. Energy consumption associated with buildout of the General Plan and LCP Update is discussed further in Section 5.3, *Energy Effects*.

Growth facilitated by the General Plan and LCP Update would require an irreversible commitment of law enforcement, fire protection, water supply, wastewater treatment, and solid waste disposal services. As discussed in Sections 4.12, *Public Services*, and 4.14, *Utilities*, potential impacts to public services and utilities would be less than significant level with implementation of policies included in the General Plan and LCP Update.

The anticipated increase in vehicle trips associated with buildout of the General Plan and LCP Update would incrementally contribute to local traffic, traffic noise levels, and regional air pollutant emissions. As described in Section 4.13, *Transportation*, additional vehicle trips could result in unacceptable LOS operations at some roadway intersections in the city. Impacts at these intersections may be significant and unavoidable because intersection improvements may require right-of-way that is unavailable to the city or would not sufficiently improve LOS to the City's LOS standards. Impacts related to air quality were determined to be less than significant with mitigation, except for the impacts related to consistency of the General Plan and LCP Update with the Clean Air Plan. As discussed in Section 4.2, *Air Quality*, of this EIR, the additional vehicle trips associated with buildout of the General Plan and LCP would be inconsistent with Clean Air Plan, and impacts would be significant and unavoidable.

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6 Effects Found to be Less than Significant

Section 15128 of the *CEQA Guidelines* requires an EIR briefly describe any possible effects that were determined not to be significant. The environmental factors discussed below are in response to the checklist questions listed in Appendix G of the *CEQA Guidelines* that were not discussed in the impact sections of the EIR.

6.1 Agricultural Resources

Thresholds of Significance

Pursuant to the *CEQA Guidelines*, Appendix G checklist, potentially significant impacts would occur if the proposed project would result in any of the following:

1. Convert Prime Farmland, Unique Farmland, 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;
2. Conflict with existing zoning for agricultural use, or a Williamson Act contract;
3. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220[g]), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104[g]);
4. Result in the loss of forest land or conversion of forest land to non-forest use; and/or
5. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.

Assessment of Impacts

Agricultural uses in the planning area are limited and primarily located on the east side of State Route (SR) 1 near the southeast end of the city. A small amount of prime agricultural land is located just south of Morro Creek and SR 41, east of SR 1. The remainder of the agricultural land in Morro Bay is categorized as unique farmland, farmland of local potential, and grazing land. All of the agricultural land in Morro Bay is located in the coastal zone and is protected under the Coastal Act. Additionally, the following policies in the Land Use, Open Space, and Public Safety Elements of the General Plan and LCP Update would serve to protect the existing agricultural resources in the planning area:

- Policy LU-5.2 Agricultural Uses.** Maintain prime agricultural land and other lands suitable for agricultural use in the planning area in long-term agricultural production.
- Policy OS-7.2 Place Value on Agriculture.** Continue to protect high quality agricultural areas within the City's planning area but outside the city limits for future agricultural use.
- Policy PS-2.17 Impacts on Agriculture.** Develop methods to mitigate and manage the impacts of drought on the agricultural industry, including conservation and incentives to grow less water-intensive crops.

These policies would protect the existing agricultural land in the city and ensure that adverse impacts to such resources are avoided or minimized to the extent feasible. Therefore, the project would not convert or conflict with existing zoning for agricultural resources in the planning area.

As described in Section 4.3, *Biological Resources*, Morro Bay has a wide diversity of tree (hardwood and coniferous forests, oak woodlands), shrub (chaparrals, coastal scrubs), and herbaceous (grasslands) terrestrial habitat types. These habitat types do not meet the definition of forest land as defined in Public Resources Code Section 12220(g), or timberland, as defined by Public Resources Code Section 4526. Further, the General Plan and LCP Update planning area does not contain any lands zoned for forest land or timberland production. Therefore, the project would not conflict with existing zoning for, or cause rezoning of, forest land, timber land or conversion of forest land to non-forest use. Impacts to agricultural resources as a result of the General Plan and LCP Update would be less than significant.

6.2 Mineral Resources

Thresholds of Significance

Pursuant to the State *CEQA Guidelines*, Appendix G checklist, potentially significant impacts would occur if the proposed project would result in any of the following:

1. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State; and/or
2. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

Assessment of Impacts

The landscape of San Luis Obispo County contains a variety of mineral resources. Mining of copper and coal has occurred in the county since the mid-1800s, and chromite, manganese, and mercury were mined in the early 1900s. Quarrying on Morro Rock provided the materials for construction of a jetty close to the north side of the entrance of the harbor and a breakwater to protect the south side of the entrance. In recent years, the principal developed mineral resources of San Luis Obispo County have been gypsum, clay, natural gas, petroleum, mercury, construction stone, sand, and gravel. Of these, sand and gravel remain principal mineral resources to this day.

As described in the Community Baseline Assessment for the General Plan and LCP Update (Appendix B), there are no existing mineral extraction operations in Morro Bay. The state geologist has not designated a mineral resource area of statewide or regional significance pursuant to Sections 2710 et seq. of the Public Resources Code (the Surface Mining and Reclamation Act) in the city. Similarly, the County of San Luis Obispo has not designated any Extractive Resource Areas in or adjacent to the City of Morro Bay. According to the Division of Oil, Gas & Geothermal Resources well data, there are no existing or historic petroleum wells in the city. Therefore, the project would have no impact from the loss of availability of mineral resources.

7 Alternatives

As required by Section 15126.6 of the *CEQA Guidelines*, this EIR examines a range of reasonable alternatives to the proposed General Plan and LCP Update that could feasibly achieve similar objectives but would avoid or substantially lessen significant adverse impacts associated with the General Plan and LCP Update.

The General Plan and LCP Update vision and values, and thus the project objectives, are described in Section 2.4.1, *Objectives of the General Plan and LCP Update*, and in Chapter 2, *Vision*, of the General Plan and LCP Update. The General Plan and LCP Update sets the guiding planning and land use principles for the city.

7.1 Alternatives Development and Screening Process

The analysis of alternatives focuses on the various land use scenarios that incorporate different assumptions regarding the combinations of future land uses in the planning area. Alternatives provided are intended to reduce or avoid significant and unavoidable impacts. As discussed in Section 4.0, *Environmental Impact Analysis*, the General Plan and LCP Update would have significant and unavoidable impacts related to air quality plan consistency (Impact AQ-1), increased vehicle miles traveled (VMT) (Impact T-2), and cumulative transportation impacts. An alternate location alternative is not possible because the General Plan and LCP Update is a plan guiding the growth and development of areas that are located specifically within the jurisdiction of the City. However, within Morro Bay, the alternatives below consider different patterns of land use and infrastructure to accommodate forecasted future growth and regional housing needs.

The following alternatives are evaluated in this EIR:

- Alternative 1: No Project/Continue using 1988 General Plan and 1984 LCP
- Alternative 2: Proposed General Plan and LCP Update without Morro Bay Power Plant/WWTP Redevelopment
- Alternative 3: Reduced Commercial Floor Area Ratio

Each alternative is described and analyzed below to determine whether environmental impacts would be similar to, less than, or greater than those of the preferred scenario in the General Plan and LCP Update. As required by CEQA, this section also includes a discussion of the “environmentally superior alternative” among those studied. Table 7-1 describes the buildout characteristics of the General Plan and LCP Update in comparison to each alternative.

Table 7-1 Comparison of Project Alternatives' Buildout Characteristics

Feature	Project	Alternative 1	Alternative 2	Alternative 3
Planning Area (acres)	9,274	9,274	9,274	9,274
Sphere of Influence (acres)	4,314	3,237	4,314	4,314
2040 Total Dwelling Units	7,295	6,757	6,995	7,192
2040 Population	12,062	11,149	11,541	11,867
2040 Total Non-Residential Floor Area ¹ (square feet)	10,912,591	2,921,665	5,196,224	9,581,328

¹ Does not include square footage of campgrounds

7.2 Alternative Analysis

7.2.1 Alternative 1: No Project/Continue using 1988 General Plan and 1984 LCP

7.2.1.1 Description

Section 15126.6(e) of the *CEQA Guidelines* requires a “no project” alternative be evaluated in an EIR to allow decision makers to compare the impacts of approving a proposed project with the impacts of not approving that project. *CEQA Guidelines* Section 15126.6(e)(3) describes the two general types of no project alternative: (1) when the project is the revision of an existing land use or regulatory plan, policy, or ongoing operation, the no project alternative would be the continuation of that plan; and (2) when the project is not a land use/regulatory plan, such as a specific development on an identifiable property, the no project alternative is the circumstance under which that project is not processed (i.e., no development occurs). Alternative 1 represents the former type of no project alternative and assumes the continued implementation of the 1988 General Plan and 1984 LCP.

This alternative is comprised of a land use pattern that reflects the land use identified in the existing 1988 General Plan. Under this alternative, the proposed General Plan and LCP Update would not be adopted and the existing General Plan and LCP, including the land use map and all of the General Plan and LCP goals and policies, would remain in place through the horizon year of 2040. Thus, any new development in Morro Bay would occur consistent with the existing land use designations and the allowed uses within each designation. Similarly, any new infrastructure would occur as envisioned in the existing 1988 General Plan. Development under this alternative is anticipated to be generally similar in much of the planning area but would not include mixed-use development in the downtown area, or the identified redevelopment of the former Morro Bay Power Plant and City wastewater treatment plant (WWTP) sites, resulting in more non-residential development than under the General Plan and LCP Update. As a result, overall development and anticipated growth would be reduced under the No Project Alternative compared to the General Plan and LCP Update, (refer to Table 7-1).

This alternative assumes that the City’s Sphere of Influence (SOI) would not be extended to include 1,077 acres of the planning area beyond the city limits that is identified as a future extension of

Morro Bay's SOI. Therefore, the planning area for this alternative encompasses the existing city limits and SOI.

7.2.1.2 Impact Analysis

Aesthetics

Implementation of Alternative 1 would involve less overall development and associated growth than would occur under the General Plan and LCP Update. Growth envisioned in the General Plan and LCP Update is primarily focused on infill areas within the General Plan Area and mixed-use development in the downtown area and would result in more population and physical growth as compared to the 1988 General Plan. Alternative 1, on the other hand, would continue the currently planned development pattern throughout Morro Bay. For example, Alternative 1 would not provide the potential for expanded mixed use, commercial, and institutional development, as well as recreational and open space opportunities on the former Morro Bay Power Plant and City WWTP sites, which are zoned as industrial under the existing General Plan and Zoning Code. Thus, under Alternative 1, visibility from and of scenic vistas, the city's visual character, and light and glare conditions would not be changed to the extent anticipated under the General Plan and LCP Update. In addition, development under Alternative 1 would not be as dense as the General Plan and LCP Update, impacting fewer aesthetic resources, and reducing the potential change in visual character. Therefore, impacts for Alternative 1 would remain less than significant, similar to the General Plan and LCP Update.

Air Quality

Construction-related emissions of air pollutants would be less under Alternative 1 as compared to the General Plan and LCP Update because less new development would be constructed. Full buildout of the 1988 General Plan would accommodate 6,757 housing units in Morro Bay. This would be approximately 538 fewer housing units than would be accommodated by full implementation of the General Plan and LCP Update. Therefore, the long-term on-site emissions from use of natural gas for residential heating, cooking, and water heating would be reduced compared to the General Plan and LCP Update. In addition, infill and mixed-use development under the General Plan and LCP Update would incrementally increase density in the downtown area. Therefore, Alternative 1 would result in fewer sensitive receptors exposed to toxic air contaminants (TACs) near arterial corridors. The General Plan and LCP Update includes policies that would reduce mobile source emissions by promoting mixed-use and infill development and supporting bike, pedestrian, and mass transit. As a result, the General Plan and LCP Update would reduce the per capita VMT within infill and urban areas of Morro Bay compared to the 1988 General Plan, which does not contain these policies. However, the estimated citywide traffic growth through 2040 under implementation of Alternative 1 would be lower than under the General Plan and LCP Update as a result of the lower projected commercial and residential development under this Alternative, resulting in lower total VMT. Because the majority of air quality emissions are from mobile sources, overall air quality impacts would be less under this alternative than under the General Plan and LCP Update due to the reduced total VMT. Specially, Alternative 1 would be consistent with the VMT growth assumptions in the current SLOAPCD 2001 Clean Air Plan (2001 CAP), whereas the General Plan and LCP Update was found to be inconsistent with the 2001 CAP's assumptions for VMT. Overall, air quality impacts under Alternative 1 would be reduced to a less than significant level.

Biological Resources

Alternative 1 would involve less overall disturbance, with reduced development and associated growth than would occur under the General Plan and LCP Update. While the 1988 General Plan and 1984 LCP include several objectives, policies, and programs aimed toward reducing potential impacts to sensitive biological resources from development, several goals and policies in the proposed General Plan and LCP Update Conservation Element and Open Space Element would maximize retention of sensitive natural habitats and address potential conflicts between resources conservation and recreational uses of open spaces and promote persistence of biological resources in open spaces. Development under both Alternative 1 and the General Plan and LCP Update would be required to comply with applicable federal and state laws and regulations pertaining to the avoidance, minimization, and mitigation of potential impacts to biological resources. Overall, Alternative 1 would result in reduced impacts to biological resources compared to the General Plan and LCP Update because Alternative 1 would result in less overall development. Impacts under Alternative 1 would remain significant but mitigable, similar to the General Plan and LCP Update.

Cultural Resources

Alternative 1 would involve less overall disturbance, with reduced development and associated growth than would occur under the General Plan and LCP Update. While the 1988 General Plan and 1984 LCP include an objective, a policy, and several programs aimed toward reducing potential impacts to sensitive archaeological resources from development, the 1988 General Plan and 1984 LCP does not address potential impacts to historic resources. The goal, policies, and implementation actions in the proposed General Plan and LCP Update Conservation Element and the archaeological overlay in the draft Zoning Code that would protect archaeological and historic resources would not be implemented under Alternative 1. Development under both Alternative 1 and the General Plan and LCP Update would be required to comply with applicable federal and state laws and regulations pertaining to the avoidance, minimization, and mitigation of potential impacts to cultural resources. Overall, Alternative 1 would result in reduced impacts to archaeological and historic resources compared to the General Plan and LCP Update because Alternative 1 would result in less overall development. Impacts under Alternative 1 would remain significant but mitigable, similar to the General Plan and LCP Update.

Geology and Soils

Development envisioned in the proposed General Plan and LCP Update in locations identified in the existing 1988 General Plan as Open Space and Agricultural, including potential future development within the proposed expanded SOI (although future development within the expanded SOI area would be subject to annexation to the City), would not occur under Alternative 1. Therefore, Alternative 1 would result in less ground disturbance than the General Plan and LCP Update. As a result, impacts related to geology and soils would be reduced under Alternative 1. However, Alternative 1 would not implement goals and policies in the General Plan and LCP Update Public Safety Element and Conservation Element developed to minimize risks associated with potential fault rupture, seismic shaking, and other geologic hazards in the planning area, as well as reduce the potential of erosion and loss of topsoil. Alternative 1 would not provide the potential for expanded recreational and open space opportunities on the former Morro Bay Power Plant and City WWTP sites which are zoned as industrial under the existing General Plan and Zoning Code. Both Alternative 1 and the General Plan and LCP Update would require compliance with existing state and federal regulatory requirements to avoid and minimize geology and soil hazards associated with

new development, which would reduce potential impacts. Overall, Alternative 1 would result in reduced potential impacts to geology and soils compared to the General Plan and LCP Update, and impacts under this alternative would be less than significant.

Greenhouse Gas Emissions

Alternative 1 would retain the existing 1988 General Plan and 1984 LCP, and thus would not implement General Plan and LCP Update Land Use, Economic Development, Circulation, and Conservation Element goals and policies that would promote infill and mixed-use development; support bike, pedestrian, and mass transit; establish GHG reduction goals consistent with the State's 2030 and 2050 greenhouse gas emissions reduction goals; and ensure future consistency with the Morro Bay Climate Action Plan (CAP). As a result, implementation of Alternative 1 would not reduce overall per capita GHG emissions in Morro Bay to the extent of the General Plan and LCP Update, and would not ensure that the city's emissions reductions are on the trajectory to meet the state's long term emissions goals, which have been updated since preparation of the Morro Bay CAP. Similarly, Alternative 1 would be less consistent with recently-adopted State plans and regulations for reducing GHG emissions.

The total estimated citywide traffic growth through 2040 under Alternative 1 would be lower than the General Plan and LCP Update due to the reduced non-residential development potential under this alternative. Based on the buildout VMT estimates in the General Plan and LCP Update traffic analysis (Appendix E) and the 2040 population estimates in Table 7-1, Alternative 1 would result in less of a long-term increase in VMT in comparison to the General Plan and LCP Update. While the existing 1988 General Plan does not focus on infill development or GHG emissions to the extent of the proposed General Plan and LCP Update, Alternative 1 would result in fewer total and per capita mobile-source GHG emissions compared with the General Plan and LCP Update. Overall, impacts related to GHG emissions under Alternative 1 would be lower than the General Plan and LCP Update due to the reduced potential for new development and would remain less than significant.

Hazards and Hazardous Materials

Development envisioned in the proposed General Plan and LCP Update in locations identified in the existing 1988 General Plan as Open Space and Agricultural, including potential future development within the proposed expanded SOI (although future development within the expanded SOI area would be subject to annexation to the City), would not occur under Alternative 1. Therefore, Alternative 1 would result in less ground disturbance than the General Plan and LCP Update. As a result, impacts related to hazards and hazardous materials would be reduced under Alternative 1. However, Alternative 1 would not implement goals and policies in the General Plan and LCP Update Public Safety Element developed to minimize impacts related to the use, storage, transport, and release of hazardous materials in the planning area; facilitate compliance with regulatory requirements related to hazardous waste contamination; ensure effective emergency response following a natural or human-caused disaster; and avoid and minimize wildland fire risks. Alternative 1 would retain the existing industrial zoning on the former Morro Bay Power Plant and City WWTP sites, and these sites would be able to redevelop consistent with those uses. Alternative 1 would require compliance with existing local, state, and federal regulatory requirements and policies, including the San Luis Obispo County Environmental Health Services (EHS) Hazardous Materials Program, which would reduce potential impacts related to hazards and hazardous materials, similar to the General Plan and LCP Update. Overall, Alternative 1 would result in reduced potential impacts

related to hazards and hazardous materials compared to the General Plan and LCP Update, and impacts under this alternative would be less than significant.

Hydrology and Water Quality

Development envisioned in the proposed General Plan and LCP Update in locations identified in the existing 1988 General Plan as Open Space and Agricultural, including potential future development within the proposed expanded SOI (although future development within the expanded SOI area would be subject to annexation to the City), would not occur under Alternative 1. Therefore, Alternative 1 would result in less ground disturbance than the General Plan and LCP Update. As a result, impacts related to hydrology and water quality would be reduced under Alternative 1. However, Alternative 1 would not implement goals and policies in the General Plan and LCP Update Public Safety Element and Conservation Element developed to minimize erosion and siltation; limit discharges of pollutants, including pollution associated with drainage, erosion, and stormwater; minimize adverse effects on water quality; and ensure that the risk and damage of flooding is not exacerbated. Alternative 1 would retain the existing industrial zoning on the former Morro Bay Power Plant and City WWTP sites, and these sites would be able to redevelop consistent with those uses. Alternative 1 would require compliance with existing local, state, and federal regulatory requirements and policies, including the Morro Bay Municipal Code, which would reduce potential impacts related to hydrology and water quality, similar to the General Plan and LCP Update. Overall, Alternative 1 would result in reduced potential impacts to hydrology and water quality compared to the General Plan and LCP Update, and impacts under this alternative would be less than significant.

Land Use and Planning

Under Alternative 1, additional development that would occur in Morro Bay would be consistent with the existing 1988 General Plan and 1984 LCP. Both the proposed General Plan and LCP Update and Alternative 1 would provide for the orderly development of Morro Bay, although under different development scenarios. Neither would physically divide an established community or conflict with an applicable habitat conservation plan or natural community conservation plan. As discussed in Section 4.9, *Land Use and Planning*, the General Plan and LCP Update would be consistent with applicable regional land use plans, policies, and regulations, such as the SLOCOG 2014 RTP/SCS and City zoning districts and standards. Alternative 1 would retain the existing 1988 General Plan and 1984 LCP, and thus would not include new General Plan and LCP Update policies, such as Land Use Element policies that promote infill and mixed-use development, Circulation Element policies that promote pedestrian, bicycle, and mass transit improvements, and require the City to develop environmental thresholds to limit VMT growth, and Conservation Element policies that require the City to update GHG emissions reduction targets and pursue new GHG reduction and energy efficiency strategies. Therefore, Alternative 1 would have greater impacts related to long-term land use and planning compared to the General Plan and LCP Update, although impacts would remain less than significant, similar to the General Plan and LCP Update.

Noise

Less construction and associated construction noise and vibration would occur under Alternative 1 as compared to the General Plan and LCP Update. Infill and mixed-use development facilitated by the proposed General Plan and LCP Update would increase noise near existing sensitive receptors and place new sensitive receptors in areas with high noise levels. Alternative 1 would involve less dense development and fewer noise sensitive receptors would be exposed to increased noise levels

associated with infill and mixed-use development. Therefore, Alternative 1 would have reduced noise impacts as compared to the General Plan and LCP Update, and impacts would remain less than significant.

Population and Housing

As discussed in Section 4.11, *Population and Housing*, the anticipated population growth in the city through 2040 under the General Plan and LCP Update is consistent with the SLOCOG population growth projections for the city. Alternative 1 would accommodate less population growth than the General Plan and LCP Update. Therefore, Alternative 1 would be consistent with the SLOCOG population growth projections for the city. In addition, growth in Morro Bay under Alternative 1 would still be required to be consistent with Measure F, limiting the city population to 12,200 residents. Neither Alternative 1 nor the General Plan and LCP Update would displace substantial numbers of people or housing. Therefore, impacts related to population and housing would be less than significant, similar to the General Plan and LCP Update.

Public Services and Recreation

Alternative 1 would involve less overall development and associated growth than would occur under the General Plan and LCP Update. Nevertheless, full buildout of Alternative 1 would result in an increase of 1,348 residents from the estimated 2016 population, resulting in an incremental demand for public services and recreational facilities similar to buildout facilitated by the General Plan and LCP Update. Both Alternative 1 and the General Plan and LCP Update are subject to policies that would ensure that public services continue to be provided to the city commensurate with population growth and need. In addition, project-level development under Alternative 1 would be required to pay City-required public facilities impact fees, and the City would be required to comply with Measure F, which prevents substantial population growth in the city, alleviating some of the demand on public service and recreational facilities. However, the city's existing park service ratio does not achieve the standard of three acres to 1,000 residents, pursuant to the Quimby Act, and Alternative 1 would not provide additional city parkland or recreational facilities to alleviate this deficiency, or provide the policy framework and physical opportunities to provide expanded park or recreational facilities. Impacts related to public services and recreation would be reduced in comparison to the General Plan and LCP Update due to the reduced overall development and would be less than significant.

Transportation

When compared to the proposed General Plan and LCP Update, full buildout of the 1988 General Plan would accommodate approximately 538 fewer housing units, approximately 913 fewer residents, and approximately 8.0 million fewer square feet of new non-residential development. The General Plan and LCP Update includes policies that would reduce per service population VMT compared to the 1988 General Plan by promoting mixed-use and infill development and supporting bike, pedestrian, and mass transit. However, the estimated citywide traffic growth through 2040 under implementation of Alternative 1 would be lower than under the General Plan and LCP Update because of the lower projected commercial and residential development under this Alternative. As a result, the average daily vehicle trips and VMT that would be generated from these additional residents and commercial users under the General Plan and LCP Update would be avoided with this alternative. Therefore, implementation of Alternative 1 would result in reduced traffic volumes compared to the General Plan and LCP Update.

Table 7-2, summarizes the LOS for pedestrian and bicycle modes at the roadway segments included in the study area under the Existing Conditions and Alternative 1 Buildout Conditions scenarios.

As shown in Table 7-2, bicycle travel on study area roadway segments would operate at LOS D or better during the weekday PM and Saturday MID peak hours under the Alternative 1 Buildout Conditions scenario. Pedestrian travel would operate at LOS F on Embarcadero north of Beach Street (northbound, segment 1), Main Street south of Radcliff Drive (southbound, Segment 5), and SR 41 east of Main Street (southbound and northbound, Segment 6).

Alternative 1 would retain the existing 1988 General Plan and 1984 LCP, and thus would not implement General Plan and LCP Update Land Use, Economic Development, Circulation, and Conservation Element goals and policies that would promote infill and mixed-use development and enhance the City's alternative transportation modes. As a result, implementation of Alternative 1 would not contribute to reducing per service population VMT in Morro Bay to the extent of the General Plan and LCP Update. Due to the reduced development potential of Alternative 1, this alternative would result in less of a long-term increase in VMT in comparison to the General Plan and LCP Update, but this impact would remain significant.

Mitigation Measure T-1, which is required to reduce pedestrian facility impacts associated with the General Plan and LCP Update, would be required for Alternative 1 to improve operations for pedestrians at key intersections in the study area. In addition, Alternative 1 would not include General Plan and LCP Update Circulation Element policies to enhance the city's alternative transportation modes while continuing to accommodate automobile travel. Overall, Alternative 1 would result in reduced traffic volumes and associated transportation impacts in comparison to the General Plan and LCP Update. However, the potential impact to pedestrian facilities, as well as the project-level and cumulative impact associated with increasing local and regional VMT, would remain significant and unavoidable.

Utilities

As discussed in Section 4.14, *Utilities*, the General Plan and LCP Update's potential impacts related to the provision of utilities and service systems would be less than significant. Alternative 1 would result in less development and associated growth and would not include the potential future expansion of the SOI, which is anticipated in the General Plan and LCP Update. As a result, Alternative 1 would result in reduce demand for water, wastewater treatment capacity, and other utilities. However, development pressure may occur in other, less developed areas of the city as a result of Alternative 1 because mixed-use development would not be focused in the downtown area and redevelopment of the former Morro Bay Power Plant and City WWTP sites with expanded mixed use, commercial, and institutional development, and recreational uses would not occur as is anticipated in the proposed General Plan and LCP Update. Overall, impacts to utilities would be reduced in comparison to the General Plan and LCP Update and would remain less than significant.

Tribal Cultural Resources

Alternative 1 would involve less overall disturbance, with reduced development and associated growth than would occur under the General Plan and LCP Update. Development under Alternative 1 would be subject to laws and regulations requiring Native American consultation, protection of human remains, and pre-historic artifacts. Therefore, impacts to tribal cultural resources under Alternative 1 would be reduced in comparison to the General Plan and LCP Update, because Alternative 1 would result in less overall development. Impacts under Alternative 1 would remain significant but mitigable, similar to the General Plan and LCP Update.

Table 7-2 Comparison of Pedestrian and Bicycle Level of Service for Roadway Segments with Alternative 1

Roadway Segment	Peak Hour	Direction	Pedestrian				Bicycle			
			Existing Conditions (2016)		Alternative 1 Buildout Conditions (2040)		Existing Conditions (2016)		Alternative 1 Buildout Conditions (2040)	
			LOS Score	LOS	LOS Score	LOS	LOS Score	LOS	LOS Score	LOS
1. Embarcadero: North of Beach Street	Weekday PM	Northbound	2.10	B	2.06	F	4.00	B	2.69	B
		Southbound	1.51	A	1.44	A	2.76	C	2.69	B
	Saturday MID	Northbound	2.48	B	2.41	F	3.02	C	2.98	C
		Southbound	1.77	A	1.67	A	2.97	C	2.89	C
2. Embarcadero: North of Pacific Street	Weekday PM	Northbound	1.32	A	1.27	A	2.86	C	2.68	B
		Southbound	1.16	A	1.14	A	2.74	B	2.68	B
	Saturday MID	Northbound	1.51	A	1.39	A	3.38	C	3.04	C
		Southbound	1.43	A	1.41	A	3.46	C	3.43	C
3. Embarcadero: South of Pacific Street	Weekday PM	Northbound	1.13	A	1.17	A	2.54	B	2.68	B
		Southbound	1.12	A	1.12	A	2.68	B	2.68	B
	Saturday MID	Northbound	1.32	A	1.23	A	3.12	C	2.87	C
		Southbound	1.27	A	1.27	A	3.12	C	3.12	C
4. Morro Bay Boulevard: West of Quintana Road	Weekday PM	Eastbound	2.37	B	2.60	B	2.43	B	2.53	B
		Westbound	2.53	B	2.72	B	2.50	B	2.57	B
	Saturday MID	Eastbound	2.27	B	2.48	B	2.38	B	2.48	B
		Westbound	2.47	B	2.65	B	2.47	B	2.54	B
5. Main Street: South of Radcliff Drive	Weekday PM	Northbound	2.56	B	2.47	B	2.34	B	2.28	B
		Southbound	3.79	D	3.80	F	2.48	B	2.49	B
	Saturday MID	Northbound	3.04	C	2.90	C	2.58	B	2.52	B
		Southbound	3.94	D	3.95	F	2.55	B	2.56	B
6. SR 41: East of Main Street	Weekday PM	Eastbound	3.39	C	3.45	F	0.75	A	0.77	A
		Westbound	3.32	C	3.91	F	0.71	A	0.95	A
	Saturday MID	Eastbound	3.31	C	3.37	F	0.71	A	0.74	A
		Westbound	3.56	D	4.30	F	0.82	A	1.06	A

Source: Appendix E3

Energy

Alternative 1 would retain the existing 1988 General Plan and 1984 LCP, and thus would not implement General Plan and LCP Update Land Use, Economic Development, Circulation, and Conservation Element goals and policies that would promote infill and mixed-use development; support bike, pedestrian, and mass transit; establish GHG reduction goals consistent with the State's 2030 and 2050 greenhouse gas emissions reduction goals; and ensure future consistency with the Morro Bay CAP. As a result, implementation of Alternative 1 would not reduce overall per service population direct and indirect energy consumption in Morro Bay to the extent of the General Plan and LCP Update.

The total estimated citywide traffic growth through 2040 under Alternative 1 would be lower than the General Plan and LCP Update due to the reduced non-residential development potential under this alternative. While the existing 1988 General Plan does not focus on infill development or reducing energy consumption to the extent of the proposed General Plan and LCP Update, Alternative 1 would result in lower total energy consumption compared with the General Plan and LCP Update as a result of the reduced non-residential development potential. Overall, impacts related to energy consumption under Alternative 1 would be lower than the General Plan and LCP Update due to the reduced potential for new development and would remain less than significant.

7.2.2 Alternative 2: Proposed General Plan and LCP Update without Morro Bay Power Plant/WWTP Redevelopment

7.2.2.1 Description

One of the primary long-term strategies of the proposed General Plan and LCP Update land use plan is redevelopment of the former Morro Bay Power Plant and City WWTP sites with uses that respond to their unique site attributes to provide future growth areas for the city within the existing city limit. Under the General Plan and LCP Update land use plan, the former Morro Bay Power Plant and City WWTP sites are planned to accommodate Mixed Use, Public/Institutional, Visitor Serving Commercial, and Open Space/Recreation uses with much of the development being new. Approximately 50 percent of the planned non-residential land use growth (from existing to buildout) and approximately 80 percent of the visitor-serving commercial growth would occur at the former Morro Bay Power Plant and City WWTP sites. The General Plan and LCP Update Land Use Element includes Policy LU-5.4 and Policy LU-5.5, which require the city to develop master plans for these sites and the surrounding areas.

Alternative 2 would remove Policy LU-5.4 and Policy LU-5.5 from the General Plan and LCP Update, and would revise the land use plan to include the former Morro Bay Power Plant and City WWTP sites in Open Space/Recreation, preserving natural areas and resources, and providing future recreational opportunities, consistent with other goals of the General Plan and LCP Update. This alternative would build on the preservation of natural areas within the planning area by reducing the amount of new development compared to the proposed General Plan and LCP Update.

Under Alternative 2, approximately 3.1 million square feet of new commercial development could be constructed in the planning area. This would be 5.7 million fewer square feet of new commercial square footage than could be constructed compared to the General Plan and LCP Update. Additionally, approximately 300 fewer residential units could be constructed within the planning area, as a result of the elimination of the mixed-use overlay in the Morro Bay Power Plant

redevelopment area. A comparison of the development that could occur under Alternative 2 and the General Plan and LCP Update is provided in Table 7-1.

Because 300 fewer dwelling units would be constructed under Alternative 2, population density of the city would be slightly reduced compared to the General Plan and LCP Update. Assuming 1.65 people per household, full buildout of Alternative 2 would result in a population of 11,541 in 2040. This would be approximately 521 fewer residents compared to the year 2040 population under full implementation of the General Plan and LCP Update (12,062 people). Overall, Alternative 2 would reduce the growth in population in Morro Bay through the year 2040 by approximately 4 percent and would reduce the net growth in non-residential development through the year 2040 by approximately 52 percent compared to the General Plan and LCP Update.

7.2.2.2 Impact Analysis

Aesthetics

Alternative 2 would result in an increase in designated Open Space/Recreation area on the former Morro Bay Power Plant and City WWTP sites as compared to the General Plan and LCP Update. Therefore, the existing visual character of Morro Bay would be altered less under Alternative 2 in comparison to the General Plan and LCP Update because development density would be reduced, and Open Space/Recreation area would be increased. However, providing additional Open Space/Recreation area on the former Morro Bay Power Plant and City WWTP sites would enhance the overall visual character of these sites in comparison to the existing uses. Additionally, because less new commercial development and fewer residential units would be developed under Alternative 2, and the City would include additional Open Space/Recreation, fewer new sources of light and glare would be created under this alternative. Overall, Alternative 2 would have reduced impacts to aesthetics as compared to the General Plan and LCP Update, and these impacts would be less than significant with mitigation incorporated, similar to the General Plan and LCP Update.

Air Quality

Construction-related emissions of air pollutants would be less under Alternative 2 as compared to the General Plan and LCP Update because less new development would be constructed. Because Alternative 2 would reduce the amount of growth in population in Morro Bay through the year 2040 by approximately 4 percent, and would reduce the amount of growth in non-residential development through the year 2040 by approximately 52 percent compared to the proposed General Plan and LCP Update, the long-term operational emissions from use of natural gas for heating, cooking, and water heating would be reduced compared to the General Plan and LCP Update. In addition, the estimated citywide traffic growth through 2040 under implementation of Alternative 2 would be lower than under the General Plan and LCP Update as a result of the lower projected non-residential and residential development under this Alternative, resulting in lower total VMT. Because the majority of air quality emissions are from mobile sources, overall air quality impacts would be less under this alternative than under the General Plan and LCP Update due to the reduced total VMT. Additionally, Alternative 2 would be more consistent with the 2001 CAP because it would result in less VMT growth and associated ozone precursor emissions than the General Plan and LCP Update. For these reasons, overall air quality impacts for Alternative 2 would be reduced as compared to the General Plan and LCP Update. However, impacts related to 2001 CAP consistency would remain significant and unavoidable, similar to the General Plan and LCP Update.

Biological Resources

Alternative 2 would result in less new development and an increase in designated Open Space/Recreation area on the former Morro Bay Power Plant and City WWTP sites, compared to the proposed General Plan and LCP Update. Both sites are currently developed with public facilities, and redesignating them as Open Space/Recreation would, over time, be beneficial to biological resources by providing additional habitat for plants and animals, including special status species, in the city.

Under Alternative 2, goals and policies in the Conservation Element and Open Space Element would maximize retention of sensitive natural habitats and address potential conflicts between resources conservation and recreational uses of open spaces and promote persistence of biological resources in open spaces, similar to the General Plan and LCP Update. Development under Alternative 2 would be required to comply with applicable federal and state laws and regulations pertaining to the avoidance, minimization, and mitigation of potential impacts to biological resources. Overall, Alternative 2 would result in reduced impacts to biological resources compared to the General Plan and LCP Update. However, impacts to these resources under Alternative 2 would remain significant but mitigable, similar to the General Plan and LCP Update.

Cultural Resources

Alternative 2 would result in less new development and an increase in designated Open Space/Recreation area on the former Morro Bay Power Plant and City WWTP sites, compared to the proposed General Plan and LCP Update. Under Alternative 2, the goal, policies, and implementation actions in the Conservation Element would help protect archaeological and historic resources by providing a plan for developing project-level mitigation necessary to address site-specific archaeological and historic resources, similar to the General Plan and LCP Update. Development under Alternative 2 would be required to comply with applicable federal and state laws and regulations pertaining to the avoidance, minimization, and mitigation of potential impacts to cultural resources. Overall, Alternative 2 would result in reduced potential impacts to archaeological and historic resources compared to the General Plan and LCP Update. However, impacts to these resources under Alternative 2 would remain significant but mitigable, similar to the General Plan and LCP Update.

Geology and Soils

Alternative 2 would result in less new development, and an increase in designated Open Space/Recreation area on the former Morro Bay Power Plant and City WWTP sites, compared to the proposed General Plan and LCP Update. Under Alternative 2, goals and policies in the Public Safety Element and Conservation Element that would minimize risks associated with potential fault rupture, seismic shaking, and other geologic hazards in the planning area, as well as reduce the potential of erosion and loss of topsoil, similar to the General Plan and LCP Update. Development under Alternative 2 would be required to comply with existing state and federal regulatory requirements to avoid and minimize geology and soil hazards associated with new development. Overall, Alternative 2 would result in reduced potential impacts to geology and soils in comparison to the General Plan and LCP Update, and impacts would remain less than significant.

Greenhouse Gas Emissions

Because less new development would be constructed under Alternative 2, construction-source GHG emissions would be reduced as compared to the General Plan and LCP Update. Compared to the

General Plan and LCP Update, buildout of Alternative 2 would result in fewer residential units, less non-residential development, and approximately 521 fewer residents. As a result, Alternative 2 would result in lower operational GHG emissions, including those due to VMT generation as compared to the General Plan and LCP Update. In addition, General Plan and LCP Update policies that would continue to be implemented under Alternative 2 would promote mixed-use and infill development; support bike, pedestrian, and mass transit; and ensure future consistency with the Morro Bay CAP, ensuring that the city's emissions reductions would remain the trajectory to meet the State's long term emissions goals. Overall, Alternative 2 would reduce GHG and climate change impacts in comparison to the General Plan and LCP Update, and these impacts would be less than significant.

Hazards and Hazardous Materials

Alternative 2 would result in a reduction in new development, and an increase in designated Open Space/Recreation area on the former Morro Bay Power Plant and City WWTP sites, compared to the General Plan and LCP Update. Therefore, Alternative 2 would result in less ground disturbance than the General Plan and LCP Update. As a result, impacts related to hazards and hazardous materials would be reduced under Alternative 2. The goals and policies in the Public Safety Element that would minimize any impacts related to the use, storage, transport, and release of hazardous materials in the planning area; facilitate compliance with regulatory requirements related to hazardous waste contamination; ensure effective emergency response following a natural or human-caused disaster; and avoid and minimize wildland fire risks would continue to be implemented under Alternative 2. Alternative 2 would require compliance with existing local, state, and federal regulatory requirements and policies, including the San Luis Obispo County EHS Hazardous Materials Program, which would reduce potential impacts related to hazards and hazardous materials, similar to the General Plan and LCP Update. Overall, Alternative 2 would result in reduced potential impacts related to hazards and hazardous materials in comparison to the General Plan and LCP Update, and impacts under Alternative 2 would be less than significant.

Hydrology and Water Quality

Alternative 2 would result in a reduction in new development, and an increase in designated Open Space/Recreation area on the former Morro Bay Power Plant and City WWTP sites, compared to the General Plan and LCP Update. Therefore, Alternative 2 would result in less ground disturbance than the General Plan and LCP Update. As a result, impacts related to hydrology and water quality would be reduced under Alternative 2. The goals and policies in the Public Safety Element and Conservation Element that would prevent substantial erosion and siltation, and discharges of pollutants, including pollution associated with drainage, erosion, and stormwater; minimize adverse effects on water quality; and ensure that the risk and damage of flooding is not exacerbated would continue to be implemented under Alternative 2. Alternative 2 would require compliance with existing local, state, and federal regulatory requirements and policies, including the Morro Bay Municipal Code, which would reduce potential impacts related to hydrology and water quality, similar to the General Plan and LCP Update. Overall, Alternative 2 would result in reduced potential impacts to hydrology and water quality in comparison to the General Plan and LCP Update, and impacts under Alternative 2 would be less than significant.

Land Use and Planning

Similar to the General Plan and LCP Update, Alternative 2 would provide for orderly development in Morro Bay with a reduction in both residential and non-residential development, as a result of revising the land use plan to designate the former Morro Bay Power Plant and City WWTP sites as Open Space/Recreation, rather than to accommodate Mixed Use, Public/Institutional, Visitor Serving Commercial uses. Alternative 2 would not divide an established community or conflict with an applicable habitation conservation plan. As discussed in Section 4.9, *Land Use and Planning*, the General Plan and LCP Update would be consistent with applicable regional land use plans, policies, and regulations, such as the SLOCOG 2019 RTP, and City zoning districts and standards. However, because Alternative 2 would result in fewer residential units and jobs Morro Bay, it would be less consistent with the SLOCOG 2014 RTP/SCS, which promotes infill and mixed-use development to facilitate access to pedestrian, bicycle, and mass transit, reducing vehicle trips and GHG emissions. As described above, Alternative 2 would result in reduced GHG emissions compared to the General Plan and LCP Update. Overall, impacts related to consistency with applicable land use plans, policies, or regulations would remain less than significant, similar to the General Plan and LCP Update.

Noise

Alternative 2 would result in reduced commercial, retail, office, and visitor-serving development and fewer residential units than under the General Plan and LCP Update. Therefore, Alternative 2 would result in reduced construction-related noise and vibration impacts as compared to the General Plan and LCP Update.

Because Alternative 2 would reduce the net growth in population in Morro Bay through the year 2040 by approximately 4 percent, and would reduce the net growth in non-residential development through the year 2040 by approximately 52 percent compared to the General Plan and LCP Update, the long-term operational and traffic noise would be reduced compared to the General Plan and LCP Update. With Alternative 2, the former Morro Bay Power Plant and City WWTP sites would be redesignated for Open Space/Recreation use, rather than for commercial, retail, office, visitor-serving, and residential development. Open Space/Recreation uses on these sites would result in less construction noise, traffic noise, and on-site operational noise, and there would be no new noise sensitive receptors that could be exposed to construction or operational noise impacts in these locations. Therefore, noise impacts under Alternative 2 would be reduced compared to impacts under the General Plan and LCP Update due to reduced development. However, noise impacts would remain less than significant with mitigation because Mitigation Measure N-2 to add construction vibration control measure policies to the General Plan would still apply to Alternative 2.

Population and Housing

Alternative 2 would involve less population growth in the planning area than would occur under the General Plan and LCP Update. As discussed in Section 4.11, *Population and Housing*, the anticipated population growth in the city through 2040 under the General Plan and LCP Update is similar to but less than the SLOCOG population growth projections for the city. Alternative 2 would be consistent with SLOCOG growth projections for the city, with less growth anticipated under this alternative than the General Plan and LCP Update. In addition, growth in Morro Bay under Alternative 2 would be required to be consistent with Measure F, limiting the city population to 12,200 residents. Neither Alternative 2 nor the General Plan and LCP Update would displace substantial numbers of

people or housing. Therefore, impacts related to population and housing would be less than significant, similar to the General Plan and LCP Update.

Public Services and Recreation

Alternative 2 would involve less overall development and associated growth than would occur under the General Plan and LCP Update. Nevertheless, full buildout of Alternative 2 would result in an increase of 827 residents from the estimated 2016 city population, resulting in an incremental increase in demand for public services and recreational facilities, similar to buildout facilitated by the General Plan and LCP Update. Redesignating of the former Morro Bay Power Plant and City WWTP sites for Open Space/Recreation use, rather than for commercial, retail, office, visitor-serving, and residential development, would provide opportunity sites for additional city-owned public recreational facilities. The provision of City-owned public recreational facilities under Alternative 2 would increase the city's park service ratio to meet the standard of three per 1,000 residents, consistent with the Quimby Act and Open Space Element Policy 1.1. Both Alternative 2 and the General Plan and LCP Update would include policies that would ensure public services continue to be provided to the city commensurate with population growth and need. In addition, project-level development under Alternative 2 would be required to pay City-required public facilities impact fees, and the City would be required to comply with Measure F, which prevents substantial population growth in the city, alleviating demand on public service and recreational facilities. Overall, impacts related to public services and recreation would be reduced in comparison to the General Plan and LCP Update due to the reduction in new development potential and provision of additional City-owned public recreational facilities and would be less than significant.

Transportation

When compared to the General Plan and LCP Update, Alternative 2 would accommodate approximately 300 fewer housing units, approximately 521 fewer residents, and approximately 5.7 million fewer square feet of new non-residential development. The average daily vehicle trips and VMT that would be generated from these additional residents and commercial users under the General Plan and LCP Update would be avoided with this alternative. Therefore, implementation of Alternative 2 would result in reduced traffic volumes compared to the General Plan and LCP Update.

The project traffic study (Appendix E) notes that the anticipated growth in VMT associated with buildout of the proposed General Plan and LCP Update is primarily attributable to the increase in employment associated with new potential commercial growth under the General Plan and LCP Update. Alternative 2 would reduce the net growth in non-residential development through the year 2040 by approximately 52 percent compared to the General Plan and LCP Update. Therefore, under Alternative 2, citywide traffic growth through 2040 would be reduced by more than half in comparison to the General Plan and LCP Update. However, Alternative 2 would result in greater overall citywide traffic than Alternative 1, which would continue to result in significant and unavoidable project-level and cumulative impacts from new VMT. Therefore, due to the anticipated volume of traffic from new commercial development, the anticipated growth would still result in a decline in operations at pedestrian facilities and increased overall vehicle volumes. Overall, as a result of the reduction in development under Alternative 2, project-level and cumulative transportation impacts would be reduced compared to the General Plan and LCP Update, but the anticipated growth in local and regional VMT would remain significant and unavoidable.

Utilities

As discussed in Section 4.14, *Utilities*, the General Plan and LCP Update's potential impacts related to the provision of utilities and service systems would be less than significant. Because Alternative 2 would reduce the net growth in population in Morro Bay through the year 2040 by approximately 4 percent, and would reduce the net growth in non-residential development through the year 2040 by approximately 52 percent compared to the General Plan and LCP Update, the demand for utility infrastructure and services would be reduced compared to the General Plan and LCP Update. Additionally, as a result of the redesignating of the former Morro Bay Power Plant and City WWTP sites for Open Space/Recreation use rather than for commercial, retail, office, visitor-serving, and residential development, new or increased utility needs in these areas would be reduced. Impacts would be reduced in comparison to the General Plan and LCP Update, and would remain less than significant.

Tribal Cultural Resources

Alternative 2 would involve less overall development and associated growth than would occur under the General Plan and LCP Update. As a result of the re-designation of the former Morro Bay Power Plant and City WWTP sites for Open Space/Recreation use, ground disturbance and excavation required for construction of the development envisioned in the General Plan and LCP Update would be reduced. In addition, goals and policies in the General Plan and LCP Update would continue to protect valuable tribal cultural resources, and Mitigation Measures CR-1(a) and CR-1(b) would update the General Plan and LCP Update to include a policy and implementation action to address potential impacts to unique tribal cultural resources on a project-by-project basis. Overall, tribal cultural resources impacts under Alternative 2 would be less than under the General Plan and LCP Update and impacts would remain less than significant with mitigation with required adherence to laws and regulations requiring Native American consultation, protection of human remains, and pre-historic artifacts, similar to the General Plan and LCP Update.

Energy

Compared to the General Plan and LCP Update, buildout of Alternative 2 would result in fewer residential units, less non-residential development, and approximately 521 fewer residents. As a result, Alternative 2 would result in lower direct and indirect energy consumption. In addition, General Plan and LCP Update policies that would continue to be implemented under Alternative 2 would promote mixed-use and infill development; support bike, pedestrian, and mass transit; and ensure future consistency with the Morro Bay CAP.

The total estimated citywide traffic growth through 2040 under Alternative 2 would be lower than the General Plan and LCP Update due to the reduced development potential under this alternative. Overall, the reduced potential for new development anticipated under Alternative 2 would result in lower energy consumption than the General Plan and LCP Update, and this impact would remain less than significant.

7.2.3 Alternative 3: Reduced Commercial Floor Area Ratio

7.2.3.1 Description

Under the Reduced Commercial Floor Area Ratio (FAR) Alternative, the maximum allowable FAR for the Community Commercial and Visitor-Serving Commercial land use designations would be reduced from 1.25 to 1.0 to reduce commercial density and overall vehicle miles traveled associated with new non-residential development. Approximately 75 percent of the potential new commercial development identified in Table 2-5 of this EIR is comprised of Community Commercial and Visitor-Serving Commercial land use (approximately 1.1 million square feet of Community Commercial and approximately 5.5 million square feet of Visitor Serving Commercial). Due to the reduction in overall growth, this alternative would incrementally reduce new vehicle traffic. Development under Alternative 3 assumes that all goals and policies put in place by the General Plan and LCP Update will be in force.

Under Alternative 3, approximately 7.5 million square feet of new commercial development could be constructed in the planning area. This would be 1.3 million fewer square feet of new commercial square footage than could be constructed under the General Plan and LCP Update. Additionally, approximately 103 fewer residential units could be constructed within the planning area, as a result of the FAR reduction within the planned mixed-use overlay areas. A comparison of the development that could occur under Alternative 3 and the General Plan and LCP Update is provided in Table 7-1.

Because 103 fewer dwelling units would be constructed under Alternative 3, population density of the city would be slightly reduced compared to the General Plan and LCP Update. Assuming 1.65 people per household, full buildout of Alternative 3 would result in a population of 11,867 in 2040. This would be approximately 195 fewer residents compared to the 2040 population under full implementation of the General Plan and LCP Update (12,062 people). Overall, Alternative 3 would reduce the growth in population in Morro Bay through the year 2040 by approximately 2 percent and would reduce the net growth in non-residential development through the year 2040 by approximately 12 percent compared to the General Plan and LCP Update.

7.2.3.2 Impact Analysis

Aesthetics

Alternative 3 would result in reduced commercial, retail, office, and visitor-serving development and fewer residential units than under the General Plan and LCP Update. Therefore, the existing visual character of Morro Bay would be altered less under Alternative 3 in comparison to the General Plan and LCP Update because development density would be reduced. Potential impacts associated with scenic resources and visual character would also be reduced in comparison to the General Plan and LCP Update. Additionally, because less new commercial development and fewer residential units would be developed under Alternative 3, fewer new sources of light and glare would be created under this alternative. Overall, Alternative 3 would have reduced impacts to aesthetic resources as compared to the General Plan and LCP Update, and these impacts would be less than significant with mitigation implemented, similar to the General Plan and LCP Update.

Air Quality

Construction-related emissions of air pollutants would be less under Alternative 3 as compared to the General Plan and LCP Update because less new development would be constructed. Because

Alternative 3 would reduce the amount of growth in population in Morro Bay through the year 2040 by approximately 2 percent, and would reduce the amount of growth in non-residential development through the year 2040 by approximately 12 percent compared to the proposed General Plan and LCP Update, the long-term operational emissions from use of natural gas for heating, cooking, and water heating would be reduced compared to the General Plan and LCP Update. In addition, higher-density non-residential development and mixed-use development under the General Plan and LCP Update would incrementally increase density in the downtown area. Therefore, Alternative 3 would result in fewer sensitive receptors exposed to TACs near arterial corridors. In addition, the estimated citywide traffic growth through 2040 under implementation of Alternative 3 would be lower than under the General Plan and LCP Update as a result of the lower projected non-residential and residential development under this Alternative, resulting in lower total VMT. Because the majority of air quality emissions are from mobile sources, overall air quality impacts would be less under this alternative than under the General Plan and LCP Update due to the reduced total VMT. Additionally, Alternative 3 would be more consistent with the 2001 CAP because it would result in less VMT growth and associated ozone precursor emissions than the General Plan and LCP Update. For these reasons, overall air quality impacts for Alternative 3 would be reduced as compared to the General Plan and LCP Update. However, impacts related to 2001 CAP consistency would remain significant and unavoidable, similar to the General Plan and LCP Update.

Biological Resources

Alternative 3 would encourage infill development in vacant and underutilized parcels, including redevelopment of the former Morro Bay Power Plant and City WWTP sites, but with a reduction in the commercial FAR. However, a reduction in the commercial FAR would not necessarily reduce the footprints of future commercial development projects as compared to the commercial FAR proposed under the General Plan and LCP Update, because FARs take into account a building's total floor area (including the floor area of each story of a building), not just the footprint of the building. Nonetheless, because most future development in the city would involve infill development in already urbanized areas that do not support substantial biological resources, Alternative 3 would result in similar impacts to biological resources compared to the General Plan and LCP Update. Impacts to biological resources under Alternative 3 would remain significant but mitigable, similar to the General Plan and LCP Update.

Cultural Resources

Alternative 3 would encourage infill development in vacant and underutilized parcels, including redevelopment of the former Morro Bay Power Plant and City WWTP sites, but with a reduction in the commercial FAR. As stated above under *Biological Resources* for Alternative 3, a reduction in FAR would not necessarily reduce the footprints of future development projects as compared to the General Plan and LCP Update. Nonetheless, because most future development in the city would involve infill development in already urbanized areas that may have been previously disturbed, Alternative 3 would result in similar impacts to archaeological and historic resources compared to the General Plan and LCP Update. Goals and policies in the General Plan and LCP Update would continue to protect cultural resources, and Mitigation Measures CR-1(a) and CR-1(b) would update the General Plan and LCP Update to include a policy and implementation action to address potential impacts to cultural resources on a project-by-project basis. Nonetheless, because most future development in the city would involve infill development in already urbanized areas that may have been previously disturbed, Alternative 3 would result in similar impacts to cultural resources than under the General Plan and LCP Update and impacts would remain less than significant with

mitigation with required adherence to laws and regulations requiring Native American consultation, protection of human remains, and pre-historic artifacts, similar to the General Plan and LCP Update.

Geology and Soils

Alternative 3 would encourage infill development in vacant and underutilized parcels, including redevelopment of the former Morro Bay Power Plant and City WWTP sites, but with a reduction in the commercial FAR. As stated above under *Biological Resources* for Alternative 3, a reduction in FAR would not necessarily reduce footprints of future development projects as compared to the General Plan and LCP Update. Therefore, potential ground disturbance, as well as impacts related to geology and soils, under Alternative 3 would be similar to the General Plan and LCP Update. The goals and policies in the General Plan and LCP Update Public Safety Element and Conservation Element that would minimize risks associated with potential fault rupture, seismic shaking, and other geologic hazards in the planning area, as well as reduce the potential of erosion and loss of topsoil, would continue to be implemented under Alternative 3. In addition, Alternative 3 would require compliance with existing state and federal regulatory requirements to avoid and minimize geology and soil hazards associated with new development, which would reduce potential impacts. Impacts to geology and soils under Alternative 3 would remain less than significant, similar to the General Plan and LCP Update.

Greenhouse Gas Emissions

Because less new non-residential development would be constructed under Alternative 3, construction-source GHG emissions would be reduced as compared to the General Plan and LCP Update. Compared to the General Plan and LCP Update, buildout of Alternative 3 would result in fewer residential units, less non-residential development, and approximately 195 fewer residents. As a result, Alternative 3 would result in lower operational GHG emissions, including those due to VMT generation, as compared to the General Plan and LCP Update. In addition, General Plan and LCP Update policies that would continue to be implemented under Alternative 3 would promote mixed-use and infill development; support bike, pedestrian, and mass transit; and ensure future consistency with the Morro Bay CAP, ensuring that the city's emissions reductions would remain the trajectory to meet the State's long term emissions goals. Overall, Alternative 3 would reduce GHG and climate change impacts in comparison to the General Plan and LCP Update. GHG emissions impacts would remain less than significant.

Hazards and Hazardous Materials

Alternative 3 would encourage infill development in vacant and underutilized parcels in already urbanized areas of the city, including redevelopment of the former Morro Bay Power Plant and City WWTP sites, but with a reduction in the commercial FAR. As stated above under *Biological Resources* for Alternative 3, a reduction in FAR would not necessarily reduce footprints of future development projects as compared to the General Plan and LCP Update. Therefore, potential ground disturbance, as well as impacts related to hazards and hazardous materials, under Alternative 3 would be similar to the General Plan and LCP Update. The goals and policies in the Public Safety Element that would minimize any impacts related to the use, storage, transport, and release of hazardous materials in the planning area; facilitate compliance with regulatory requirements related to hazardous waste contamination; ensure effective emergency response following a natural or human-caused disaster; and avoid and minimize wildland fire risks would continue to be implemented under Alternative 3. In addition, Alternative 3 would require

compliance with existing regulatory requirements and policies, including the San Luis Obispo County EHS Hazardous Materials Program, which would reduce potential impacts related to hazards and hazardous materials, similar to the General Plan and LCP Update. Impacts related to hazards and hazardous materials under Alternative 3 would remain less than significant, similar to the General Plan and LCP Update.

Hydrology and Water Quality

Alternative 3 would encourage infill development in vacant and underutilized parcels, including redevelopment of the former Morro Bay Power Plant and City WWTP sites, but with a reduction in the commercial FAR. As stated above under *Biological Resources* for Alternative 3, a reduction in FAR would not necessarily reduce footprints of future development projects as compared to the General Plan and LCP Update. Therefore, potential ground disturbance, as well as impacts related to hydrology and water quality, under Alternative 3 would be similar to the General Plan and LCP Update. The goals and policies in the Public Safety Element and Conservation Element that would prevent substantial erosion and siltation, and discharges of pollutants, including pollution associated with drainage, erosion, and stormwater; minimize adverse effects on water quality; and ensure that the risk and damage of flooding is not exacerbated would continue to be implemented under Alternative 3. Alternative 3 would require compliance with existing local, state, and federal regulatory requirements and policies, including the Morro Bay Municipal Code, which would reduce potential impacts related to hydrology and water quality, similar to the General Plan and LCP Update. Impacts to hydrology and water quality under Alternative 3 would remain less than significant, similar to the General Plan and LCP Update.

Land Use and Planning

Similar to the General Plan and LCP Update, Alternative 3 would provide for orderly development in Morro Bay with a reduction both residential and non-residential development, as a result of reducing the commercial floor area ratio. Alternative 3 would not divide an established community or conflict with an applicable habitation conservation plan. As discussed in Section 4.9, *Land Use and Planning*, the General Plan and LCP Update would be consistent with applicable regional land use plans, policies, and regulations, such as the SLOCOG 2014 RTP/SCS, and City zoning districts and standards. However, because Alternative 3 would result in fewer residential units and jobs Morro Bay, it would be less consistent with the SLOCOG 2014 RTP/SCS, which promotes infill and mixed-use development to facilitate access to pedestrian, bicycle, and mass transit, reducing vehicle trips and GHG emissions. As described above, Alternative 3 would result in reduced GHG emissions compared to the General Plan and LCP Update. Overall, impacts related to consistency with applicable land use plans, policies, or regulations would remain less than significant, similar to the General Plan and LCP Update.

Noise

Alternative 3 would result in reduced commercial, retail, office, and visitor-serving development and fewer residential units than under the General Plan and LCP Update. Therefore, Alternative 3 would result in reduced construction-related noise and vibration impacts as compared to the General Plan and LCP Update. Because Alternative 3 would reduce the net growth in population in Morro Bay through the year 2040 by approximately 2 percent, and would reduce the net growth in non-residential development through the year 2040 by approximately 12 percent compared to the General Plan and LCP Update, the long-term operational and traffic noise would be reduced

compared to the General Plan and LCP Update. Infill and mixed-use development facilitated by the proposed General Plan and LCP Update would increase noise near existing sensitive receptors and place new sensitive receptors in areas with high noise levels. Alternative 3 would involve less dense development and fewer noise sensitive receptors would be exposed to increased noise levels associated with infill and mixed-use development. Overall, Alternative 3 would have reduced noise impacts compared to the General Plan and LCP Update, and impacts would remain significant but mitigable.

Population and Housing

Alternative 3 would involve less population growth in the planning area than would occur under the General Plan and LCP Update. As discussed in Section 4.11, *Population and Housing*, the anticipated population growth in the city through 2040 under the General Plan and LCP Update is similar to but less than the SLOCOG population growth projections for the city. Alternative 3 would be consistent with SLOCOG growth projections for the city, with less growth anticipated under this alternative than the General Plan and LCP Update. In addition, growth in Morro Bay under Alternative 3 would be required to be consistent with Measure F, limiting the city population to 12,200 residents. Neither Alternative 3 nor the General Plan and LCP Update would displace substantial numbers of people or housing. Therefore, impacts related to population and housing would be less than significant, similar to the General Plan and LCP Update.

Public Services and Recreation

Alternative 3 would result in reduced commercial, retail, office, and visitor-serving development and fewer residential units than under the General Plan and LCP Update. Development under Alternative 3 would result in incremental increase in demand on public services and recreational facilities, but to a lesser extent than development facilitated by the General Plan and LCP Update because Alternative 3 would result in 1.3 million fewer square feet of new non-residential development and 103 fewer dwelling units than under the General Plan and LCP Update. Both Alternative 3 and the General Plan and LCP Update would include policies that would ensure public services continue to be provided to the city commensurate with population growth and need. In addition, project-level development under Alternative 3 would be required to pay City-required public facilities impact fees, and the City would be required to comply with Measure F, which prevents substantial population growth in the city, alleviating some of the demand on public service and recreational facilities. However, the City's existing park service ratio does not achieve the standard of three acres to 1,000 residents, pursuant to the Quimby Act, and Alternative 3 would not provide additional city parkland or recreational facilities to alleviate this deficiency. Alternative 3 would provide the policy framework and physical opportunities to provide expanded park or recreational facilities, similar to the proposed project. Impacts related to public services and recreation would be reduced in comparison to the General Plan and LCP Update due to the reduction in new development potential and would be less than significant.

Transportation

When compared to the General Plan and LCP Update, Alternative 3 would accommodate approximately 103 fewer housing units, approximately 195 fewer residents, and approximately 1.3 million fewer square feet of new non-residential development. The average daily vehicle trips and VMT that would be generated from these additional residents and commercial users under the

General Plan and LCP Update would be avoided with this alternative. Therefore, implementation of Alternative 3 would result in reduced traffic volumes compared to the General Plan and LCP Update.

The project traffic study (Appendix E) notes that the anticipated growth in VMT associated with buildout of the General Plan and LCP Update is primarily attributable to the increase in employment associated with new potential commercial growth under the General Plan and LCP Update.

Alternative 3 would reduce the net growth in non-residential development through the year 2040 by approximately 12 percent compared to the General Plan and LCP Update. Therefore, under Alternative 3, citywide traffic growth through 2040 would be approximately 12 percent lower than growth anticipated under the General Plan and LCP Update. However, Alternative 3 would result in greater overall citywide traffic than Alternatives 1 and 2, which would continue to result in significant and unavoidable project-level and cumulative impacts from new VMT. Therefore, due to the anticipated volume of traffic from new commercial development, the anticipated growth would still result in a decline in operations at pedestrian facilities and increased overall vehicle volumes. Overall, as a result in the reduction in development under Alternative 3, project-level and cumulative transportation impacts would be reduced compared to the General Plan and LCP Update, but the anticipated growth in local and regional VMT would remain significant and unavoidable.

Utilities

As discussed in Section 4.14, *Utilities*, the General Plan and LCP Update's potential impacts related to the provision of utilities and service systems would be less than significant. Because Alternative 3 would reduce the net growth in population in Morro Bay through the year 2040 by approximately 2 percent, and would reduce the net growth in non-residential development through the year 2040 by approximately 12 percent compared to the General Plan and LCP Update, the demand for new or expanded utility services would be reduced compared to the General Plan and LCP Update. However, development under Alternative 3 would occur in the same locations as development under the General Plan and LCP Update, so the demand for new or expanded utility infrastructure for Alternative 3 would be similar to the utility needs of development facilitated by the General Plan and LCP Update. Impacts related to the provision of utility infrastructure and services would remain less than significant, similar to the General Plan and LCP Update.

Tribal Cultural Resources

Alternative 3 would encourage infill development in vacant and underutilized parcels, including redevelopment of the former Morro Bay Power Plant and City WWTP sites, but with a reduction in the commercial FAR. As stated above under *Biological Resources* and *Cultural Resources* for Alternative 3, a reduction in FAR would not necessarily reduce the footprints of future development projects as compared to the General Plan and LCP Update. Nonetheless, because most future development in the city would involve infill development in already urbanized areas that may have been previously disturbed, Alternative 3 would result in similar impacts to tribal cultural resources compared to the General Plan and LCP Update. Goals and policies in the General Plan and LCP Update would continue to protect valuable tribal cultural resources, and Mitigation Measures CR-1(a) and CR-1(b) would update the General Plan and LCP Update to include a policy and implementation action to address potential impacts to unique tribal cultural resources on a project-by-project basis. Nonetheless, because most future development in the city would involve infill development in already urbanized areas that may have been previously disturbed, Alternative 3 would result in similar impacts to tribal cultural resources than under the General Plan and LCP

Update and impacts would remain less than significant with mitigation with required adherence to laws and regulations requiring Native American consultation, protection of human remains, and pre-historic artifacts, similar to the General Plan and LCP Update.

Energy

Compared to the General Plan and LCP Update, buildout of Alternative 3 would result in fewer residential units, less non-residential development, and approximately 195 fewer residents. As a result, Alternative 3 would result in lower direct and indirect energy consumption. In addition, General Plan and LCP Update policies that would continue to be implemented under Alternative 3 would promote mixed-use and infill development; support bike, pedestrian, and mass transit; and ensure future consistency with the Morro Bay CAP.

The total estimated citywide traffic growth through 2040 under Alternative 3 would be lower than the General Plan and LCP Update due to the reduced development potential under this alternative. Overall, the reduced potential for new development anticipated under Alternative 3 would result in lower energy consumption than the General Plan and LCP Update, and this impact would remain less than significant.

7.3 Environmentally Superior Alternative

Section 15126.6(e)(2) of the CEQA Guidelines requires that an analysis of project alternatives identify an environmentally superior alternative among the alternatives evaluated in the EIR. In general, the environmentally superior alternative as defined by CEQA should minimize adverse impacts to the project site and its surrounding environment. In some cases, an alternative will avoid one or more impacts identified for a project but introduce other new significant impacts. Therefore, selection of the environmentally superior alternative requires an overall assessment of the changes in the number and type of significant impacts. Therefore, selection of the environmentally superior alternative requires an overall assessment of the changes in the number and type of significant impacts.

This section evaluates the impact conclusions for the General Plan and LCP Update and the three alternatives under consideration. It then identifies the environmentally superior alternative for each issue area. In accordance with the CEQA Guidelines Section 15126.6, if the No Project Alternative is identified as the Environmentally Superior Alternative, the EIR shall also identify an environmentally superior alternative from among the other alternatives. Table 7-3 summarizes the environmental advantages and disadvantages associated with the proposed project and the analyzed alternatives.

In conducting the alternatives analysis, consideration must be given as to how, and to what extent, an alternative can meet the project's basic objectives. As discussed in Section 2.0, *Project Description*, the primary objective of the General Plan and LCP Update is to function as a policy document to guide land use decisions within the city planning area through the year 2040.

Table 7-3 Alternative Impact Comparison to the General Plan and LCP Update

Issue	Proposed Project Impact Classification	Alternative 1: No Project/1988 General Plan and 1984 LCP	Alternative 2: Update w/o Power Plant/WWTP Redevelopment	Alternative 3: Reduced Commercial Floor Area Ratio
Major Topics (EIR identifies significant and unavoidable impacts)				
Air Quality	Significant and Unavoidable	Less (Less than Significant)	Similar (Significant and Unavoidable)	Similar (Significant and Unavoidable)
Transportation (Increased VMT)	Significant and Unavoidable	Less (Significant and Unavoidable)	Less (Significant and Unavoidable)	Less (Significant and Unavoidable)
Transportation (Cumulative)	Significant and Unavoidable	Less (Significant and Unavoidable)	Less (Significant and Unavoidable)	Less (Significant and Unavoidable)
Other Environmental Topics (EIR identifies impacts that are less than significant with or without mitigation)				
Aesthetics	Less than Significant	Less	Less	Less
Biological Resources	Less than Significant with Mitigation Incorporated	Less	Less	Similar
Cultural Resources	Less than Significant with Mitigation Incorporated	Less	Less	Similar
Geology and Soils	Less than Significant	Less	Less	Similar
Greenhouse Gas Emissions	Less than Significant	Less	Less	Less
Hazards and Hazardous Materials	Less than Significant	Less	Less	Similar
Hydrology and Water Quality	Less than Significant	Less	Less	Similar
Land Use and Planning	Less than Significant	Greater	Similar	Similar
Noise	Less than Significant with Mitigation Incorporated	Less	Less	Less
Population and Housing	Less than Significant	Similar	Similar	Similar
Public Services and Recreation	Less than Significant	Less	Less	Similar
Utilities	Less than Significant	Less	Less	Similar
Tribal Cultural Resources	Less than Significant with Mitigation Incorporated	Less	Less	Similar
Energy	Less than Significant	Less	Less	Less
Overall		15 Less, 1 Similar, 1 Greater	14 Less, 3 Similar, 0 Greater	6 Less, 11 Similar, 0 Greater

The No Project Alternative (Alternative 1) would be environmentally superior in comparison to the General Plan and LCP Update because it would continue implementation of the existing 1988 General Plan, which would accommodate less development and growth than the General Plan and LCP Update, Alternatives 2, or Alternative 3. Although Alternative 1 would entail continued growth as dictated by the existing 1988 General Plan, this alternative would not implement new policy language included in the General Plan and LCP Update, such as policies intended to provide guidance for future development and reduce long-term community impacts associated with growth. Alternative 1 would eliminate significant and unavoidable impacts to air quality because it would result in substantially less new growth and associated new vehicle traffic and would therefore be consistent with the assumptions in the 2001 Clean Air Plan. However, Alternative 1 would not eliminate the significant and unavoidable project-level or cumulative impacts associated with increased VMT.

Alternative 2, Proposed General Plan and LCP Update without Morro Bay Power Plant/WWTP Redevelopment, would perform similar or better to the General Plan and LCP Update for all environmental resource areas. This alternative would result in no new development on the former Morro Bay Power Plant and City WWTP redevelopment sites, instead designating these sites as Open Space/Recreation. As a result of this reduction in future development and growth, Alternative 2 would result in reduced impacts to issue areas including aesthetic resources, GHG emissions, biological and cultural resources, geology, hazards, hydrology, noise, and transportation. However, Alternative 2 would not eliminate the significant and unavoidable impacts associated with air quality plan consistency or project-level or cumulative impacts associated with increased VMT, because this alternative would still result in substantial new growth and the associated increase in new vehicle traffic.

Alternative 3, the Reduced Commercial Floor Area Ratio Alternative, would perform similar or better to the General Plan and LCP Update for all environmental resource areas. This alternative would result in less new commercial growth and development overall due to the reduction in commercial FAR. As a result of this reduction in future development and growth, Alternative 3 would result in reduced impacts to issue areas including aesthetic resources, GHG emissions, noise, recreation, and transportation. However, Alternative 3 would not eliminate any of the significant and unavoidable impacts associated with the General Plan and LCP Update, because this alternative would still result in substantial new growth and the associated increase in new vehicle traffic.

Based on the information presented herein, Alternative 2 would be the environmentally superior alternative when considering overall environmental impacts relative to the performance metrics. However, designating the former Morro Bay Power Plant and City WWTP redevelopment sites as Open Space/Recreation would be inconsistent with the vision and objectives of the General Plan and LCP Update because it would eliminate urban development from areas the city has determined would contribute substantially to a pattern of compact future development, reducing long-term development pressure on agricultural lands outside the planning area. Additionally, reduced growth in these targeted redevelopment locations would be inconsistent with the goals of the General Plan and LCP Update to attract new businesses and investors and provide head-of-household jobs and affordable housing options.

After Alternative 2, Alternative 1 is the next most environmentally superior alternative when considering overall environmental impacts relative to the performance metrics. However, as discussed above, this alternative would not meet the basic project objective to provide an updated community vision for Morro Bay by updating the 1988 General Plan, and would not avoid the significant and unavoidable project-level or cumulative impacts associated with increased VMT, and

may result in additional long-term impacts associated with the need for expanded utility infrastructure.

8 Responses to Comments

This section includes responses to comments received during the circulation of the Draft Environmental Impact Report (Draft EIR) prepared for the Morro Bay General Plan and LCP Update.

The Draft EIR was circulated for a 45-day public review period that began on October 19, 2020 and ended on December 4, 2020.

8.1 Written Comments and Responses

The City of Morro Bay received five comment letters on the Draft EIR. The commenters and the page number on which each commenter's letter appear are listed in Table 9-2.

Table 8-1 Comment Letters Received

Letter No. and Commenter	Page No.
1 Gavin McCreary, Department of Toxic Substances Control	8-2
2 Brom P. Webb	8-8
3 Betty Winholtz	8-11
4 Eric Cherniss, Vistra Corp	8-17
5 Julie A. Vance, California Department of Fish and Wildlife	8-20

8.2 Responses to Public Comments

The comment letters and responses follow. The comment letters have been numbered sequentially and each separate issue raised by the commenter, if more than one, has been assigned a number. The responses to each comment identify first the number of the comment letter, and then the number assigned to each issue (Response 1-2, for example, indicates that the response is for the second issue raised in comment Letter 1).



Jared Blumenfeld
Secretary for
Environmental Protection



Department of Toxic Substances Control

Meredith Williams, Ph.D.
Director
8800 Cal Center Drive
Sacramento, California 95826-3200



Gavin Newsom
Governor

October 16, 2020

Mr. Scot Graham
City of Morro Bay
955 Shasta Avenue
Morro Bay, CA 93442
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DRAFT ENVIRONMENTAL IMPACT REPORT FOR MORRO BAY GENERAL PLAN
AND LOCAL COASTAL PROGRAM UPDATE – DATED OCTOBER 2020 (STATE
CLEARINGHOUSE NUMBER: 2017111026)

Mr. Graham:

The Department of Toxic Substances Control (DTSC) received a Draft Environmental Impact Report (EIR) for the Morro Bay General Plan and Local Coastal Program Update (Project). The Lead Agency is receiving this notice from DTSC because the Project includes one or more of the following: groundbreaking activities, work in close proximity to a roadway, work in close proximity to mining or suspected mining or former mining activities, presence of site buildings that may require demolition or modifications, importation of backfill soil, and/or work on or in close proximity to an agricultural or former agricultural site.

1-1

DTSC recommends that the following issues be evaluated in the EIR. Hazards and Hazardous Materials section:

1. The EIR should acknowledge the potential for historic or future activities on or near the project site to result in the release of hazardous wastes/substances on the project site. In instances in which releases have occurred or may occur, further studies should be carried out to delineate the nature and extent of the contamination, and the potential threat to public health and/or the environment should be evaluated. The EIR should also identify the mechanism(s) to initiate any required investigation and/or remediation and the government agency who will be responsible for providing appropriate regulatory oversight.
2. Refiners in the United States started adding lead compounds to gasoline in the 1920s in order to boost octane levels and improve engine performance. This practice did not officially end until 1992 when lead was banned as a fuel additive in California. Tailpipe emissions from automobiles using leaded gasoline

1-2

1-3

- contained lead and resulted in aerially deposited lead (ADL) being deposited in and along roadways throughout the state. ADL-contaminated soils still exist along roadsides and medians and can also be found underneath some existing road surfaces due to past construction activities. Due to the potential for ADL-contaminated soil DTSC, recommends collecting soil samples for lead analysis prior to performing any intrusive activities for the project described in the EIR. 1-3 cont'd
3. If any sites within the project area or sites located within the vicinity of the project have been used or are suspected of having been used for mining activities, proper investigation for mine waste should be discussed in the EIR. DTSC recommends that any project sites with current and/or former mining operations onsite or in the project site area should be evaluated for mine waste according to DTSC's 1998 Abandoned Mine Land Mines Preliminary Assessment Handbook (https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/11/aml_handbook.pdf). 1-4
4. If buildings or other structures are to be demolished on any project sites included in the proposed project, surveys should be conducted for the presence of lead-based paints or products, mercury, asbestos containing materials, and polychlorinated biphenyl caulk. Removal, demolition and disposal of any of the above-mentioned chemicals should be conducted in compliance with California environmental regulations and policies. In addition, sampling near current and/or former buildings should be conducted in accordance with DTSC's 2006 *Interim Guidance Evaluation of School Sites with Potential Contamination from Lead Based Paint, Termiticides, and Electrical Transformers* (https://dtsc.ca.gov/wpcontent/uploads/sites/31/2018/09/Guidance_Lead_Contamination_050118.pdf). 1-5
5. If any projects initiated as part of the proposed project require the importation of soil to backfill any excavated areas, proper sampling should be conducted to ensure that the imported soil is free of contamination. DTSC recommends the imported materials be characterized according to *DTSC's 2001 Information Advisory Clean Imported Fill Material* (https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/09/SMP_FS_Cleanfill-Schools.pdf). 1-6
6. If any sites included as part of the proposed project have been used for agricultural, weed abatement or related activities, proper investigation for organochlorinated pesticides should be discussed in the EIR. DTSC recommends the current and former agricultural lands be evaluated in accordance with DTSC's 2008 *Interim Guidance for Sampling Agricultural Properties (Third Revision)* (<https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/09/Ag-Guidance-Rev-3-August-7-2008-2.pdf>). 1-7

DTSC appreciates the opportunity to comment on the EIR. Should you need any assistance with an environmental investigation, please submit a request for Lead Agency Oversight Application, which can be found at: <https://dtsc.ca.gov/wp->

Mr. Scot Graham
October 16, 2020
Page 3

[content/uploads/sites/31/2018/09/VCP_App-1460.doc](#). Additional information regarding voluntary agreements with DTSC can be found at: <https://dtsc.ca.gov/brownfields/>.

If you have any questions, please contact me at (916) 255-3710 or via email at Gavin.McCreary@dtsc.ca.gov.

Sincerely,

A handwritten signature in blue ink that reads "Gavin McCreary". The signature is written in a cursive style and is positioned above the typed name and title.

Gavin McCreary
Project Manager
Site Evaluation and Remediation Unit
Site Mitigation and Restoration Program
Department of Toxic Substances Control

cc: (via email)

Governor's Office of Planning and Research
State Clearinghouse
State.Clearinghouse@opr.ca.gov

Mr. Dave Kereazis
Office of Planning & Environmental Analysis
Department of Toxic Substances Control
Dave.Kereazis@dtsc.ca.gov

Letter 1

COMMENTER: Gavin McCreary, Department of Toxic Substances Control

DATE: October 16, 2020

Response 1-1

The commenter states the role of the Department of Toxic Substances Control (DTSC) in reviewing the Draft EIR. The commenter notes that the project includes one or more of the following activities: groundbreaking, work in close proximity to a roadway, work in close proximity to mining or suspected mining or former mining activities, presence of site buildings that may require demolition or modifications, importation of backfill soil, and/or work on or in close proximity to an agricultural or former agricultural site. Potential impacts associated with geologic hazards are discussed in Section 4.5, Geology and Soils. Potential impacts associated with the handling of hazardous soils or other materials are discussed in Section 4.7, Hazards and Hazardous Materials. Potential impacts associated with erosion and other water quality issues are discussed in Section 4.8, Hydrology and Water Quality. Potential impacts associated with mineral resources are discussed in Section 6, Effects Found to be Less than Significant. No changes to the Draft EIR are required in response to this comment.

Response 1-2

The commenter states that the Hazards and Hazardous Materials section of the EIR should acknowledge the potential for historic or future activities to result in the release of hazardous wastes/substances in the City of Morro Bay. The commenter notes that additional studies may be required to delineate the nature and extent of contamination and the potential threat to public health and/or the environment where releases have occurred or may occur. As described on page 1-3 of the Draft EIR, the EIR fulfills the requirements for a Program EIR. By its nature, a Program EIR considers the broad effects associated with implementing a program (such as a General Plan or Specific Plan) and does not, and is not intended to, examine the specific environmental effects associated with specific projects that may be accommodated by the provisions of General or Specific Plans.

Potential impacts associated with the transport, use, storage, disposal, or release of hazardous materials are discussed in Section 4.7, Hazards and Hazardous Materials. As discussed in Impact HAZ-1 and Impact HAZ-2, compliance with existing applicable regulations and General Plan and LCP Update policies would minimize risks from routine use, transport, handling, storage, disposal, and release of hazardous materials. Storage of hazardous materials would be regulated by the San Luis Obispo County Environmental Health Services (EHS) and any additional elements as required in the California Health and Safety Code Article 1 Chapter 6.95 for Business Emergency Plan. Both the federal and State governments require all businesses that handle more than a specified amount of hazardous materials to submit a business plan to San Luis Obispo County EHS. The Draft EIR concludes that oversight by the appropriate federal, State, and local agencies and compliance by new development with applicable regulations related to the handling and storage of hazardous materials would ensure potential impacts associated with the routine use, transport, handling, storage, disposal, and release of hazardous materials be less than significant.

Response 1-3

The commenter states that soil samples should be collected for lead analysis prior to performing ground-disturbing activities along roadsides and medians and underneath existing road surfaces. As described on page 1-3 of the Draft EIR, the EIR fulfills the requirements for a Program EIR. Refer to Response 1-2 for a summary of the requirements for a Program EIR.

Potential impacts associated with development on sites that may be affected by hazardous compounds, which would include aerially deposited lead, are discussed in Section 4.7, Hazards and Hazardous Materials. Impact HAZ-3 in the Draft EIR concludes that compliance with General Plan Policy PS-4.4 and existing federal and State regulatory requirements associated with hazardous waste contamination would ensure impacts associated with development on sites that may be affected by hazardous compounds would remain less than significant.

Response 1-4

The commenter states that if sites within the project area have been used for mining activities or are suspected of having been used for mining activities, the EIR should discuss investigations for potential impacts associated with mine waste. As described on page 1-3 of the Draft EIR, the EIR fulfills the requirements for a Program EIR. Refer to Response 1-2 for a summary of the requirements for a Program EIR.

As described in Section 6, Effects Found to be Less than Significant, there are no existing mineral extraction operations in Morro Bay. The state geologist has not designated a mineral resource area of statewide or regional significance pursuant to Sections 2710 et seq. of the Public Resources Code (the Surface Mining and Reclamation Act) in the city. Similarly, the County of San Luis Obispo has not designated any Extractive Resource Areas in or adjacent to the City of Morro Bay. According to the Division of Oil, Gas & Geothermal Resources well data, there are no existing or historic petroleum wells in the city.

Potential impacts associated with development on sites that may be affected by hazardous waste are discussed in Section 4.7, Hazards and Hazardous Materials. As discussed in Impact HAZ-3, new development on documented hazardous materials sites in the planning area would be preceded by remediation under the supervision of applicable regulatory agencies. The Draft EIR concludes that potential impacts associated with mineral resources would be less than significant, and that compliance with General Plan Policy PS-4.4 and existing federal and State regulatory requirements associated with hazardous waste contamination would ensure impacts associated with development on sites that may be affected by hazardous waste would remain less than significant.

Response 1-5

The commenter states that buildings or other structures to be demolished should be surveyed for the presence of lead-based paints or products, mercury, asbestos containing materials, and polychlorinated biphenyl caulk. The commenter states that removal, demolition and disposal of any of the above-mentioned chemicals should be conducted in compliance with California environmental regulations and policies, and sampling near current and/or former buildings should be conducted in accordance with DTSC's 2006 Interim Guidance Evaluation of School Sites with Potential Contamination from Lead Based Paint, Termiticides, and Electrical Transformers. As described on page 1-3 of the Draft EIR, the EIR fulfills the requirements for a Program EIR. Refer to Response 1-2 for a summary of the requirements for a Program EIR.

Potential impacts associated with the transport, disposal, or release of hazardous materials are discussed in Section 4.7, Hazards and Hazardous Materials. As discussed in Impact HAZ-1, compliance with existing applicable regulations and General Plan and LCP Update policies would minimize risks from transport, disposal, or release of hazardous materials, including lead-based and asbestos-containing materials. The Draft EIR concludes that oversight by the appropriate federal, State, and local agencies and compliance by new development with applicable regulations related to the handling and storage of hazardous materials would ensure potential impacts associated with the transport, disposal, and release of hazardous materials be less than significant.

Response 1-6

The commenter states that projects requiring the importation of soil to backfill any excavated areas should include sampling to ensure the imported soil is free of contamination. As described on page 1-3 of the Draft EIR, the EIR fulfills the requirements for a Program EIR. Refer to Response 1-2 for a summary of the requirements for a Program EIR.

Potential impacts associated with the transport, disposal, or release of hazardous materials are discussed in Section 4.7, Hazards and Hazardous Materials. As discussed in Impact HAZ-1, compliance with existing applicable regulations and General Plan and LCP Update policies would minimize risks from transport, disposal, or release of hazardous materials, including potentially contaminated import or export soils. The Draft EIR concludes that oversight by the appropriate federal, State, and local agencies and compliance by new development with applicable regulations related to the handling and storage of hazardous materials would ensure potential impacts associated with the transport, disposal, and release of hazardous materials be less than significant.

Response 1-7

The commenter states that if sites within the project area have been used for agricultural, weed abatement or related activities, the EIR should discuss investigations for potential impacts associated with organochlorinated pesticides. As described on page 1-3 of the Draft EIR, the EIR fulfills the requirements for a Program EIR. Refer to Response 1-2 for a summary of the requirements for a Program EIR.

Potential impacts associated with development on sites that may be affected by hazardous waste, which includes agricultural pesticides, are discussed in Section 4.7, Hazards and Hazardous Materials. As discussed in Impact HAZ-3, new development on documented hazardous materials sites in the planning area would be preceded by remediation under the supervision of applicable regulatory agencies. The Draft EIR concludes that compliance with General Plan Policy PS-4.4 and existing federal and State regulatory requirements associated with hazardous waste contamination would ensure impacts associated with development on sites that may be affected by hazardous waste would remain less than significant.

From: Brom Webb <brompwebb@yahoo.com>
Sent: Saturday, October 17, 2020 3:24:08 PM
To: PlanningCommission <PlanningCommission@morrobayca.gov>
Subject: Morro Bay General Plan

Dear Planning Commission,

People still dream about not only seeing the Pacific Ocean, but swimming in it too. Looking up any variance of the word "swim" and finding it only twice in a 390 page General Plan with a City located directly adjacent to the Pacific Ocean seems a bit disengaged. The following are suggestions for the Morro Bay General Plan:

Environmental Justice should be defined in the glossary.

The Viewpoint Map should have colored pictures displaying the visual cues that can be seen throughout the City to complement the black "fields of view" circles. Displaying the importance of views from the Highways, Golf Course, beaches etc. and how to protect these pristine view sheds for the future should be overly emphasized.

2-1

Since most Cities within the County already have an optional Parks and Recreation Element, it only makes practical sense that Morro Bay would follow suit, possibly integrating the California Trail into the system. It would be nice to see the City celebrating the Morro Bay Public Golf Course that will be turning 100 years old (2023) during this General Plan timeframe with some type of historical preservation or recognition. And, strengthen public awareness about the Morro Bay Estuary and how to protect its health against future threats such as ocean acidification.

Quoting the EIR, "The City's CAP was developed to be consistent with CEQA Guidelines Section 15183.5 and SLOAPCD's CEQA Air Quality Handbook to mitigate emissions and climate change impacts and serves as a Qualified GHG Reduction Strategy for the City of Morro Bay. The CAP's target mirrors that of AB 32, setting a goal of 15 percent below baseline (2005) levels by 2020."

2-2

With 2020 virtually gone and nearly 2 trillion metric tons of carbon dioxide in the atmosphere, these guideline do not fully address the situation. By implementing an optional Element that addresses Climate Change, the City could address the need to capture carbon among other climate change programs. Natural ways to capture carbon for the area include planting trees, using mycelium at the Golf Course and substantially increasing the amount of eelgrass in the Estuary. Providing a stronger stewardship of the land and protecting the environmental resources will allow all to enjoy this area in the future.

If these suggestions are or are not addressed, a Natural Disaster Preparedness optional Element should at least be considered.

Thank you,
Brom P. Webb

Letter 2

COMMENTER: Brom P. Webb

DATE: October 17, 2020

Response 2-1

The commenter provides several comments and recommendations for the Morro Bay General Plan. Specifically, the commenter recommends that “environmental justice” be defined in the General Plan glossary; that the viewpoint map be updated with colored pictures to emphasize the importance of views from highways, beaches, and the golf course; and that the General Plan should include a Parks and Recreation Element. The focus of the responses to comments is the disposition of environmental issues that are raised in the comments, as specified by Section 15088(c) of the State CEQA Guidelines. Detailed responses are not provided to comments on the merits of the proposed General Plan and LCP Update. These comments do not raise any specific concerns with the methods or conclusions of the Draft EIR. However, the commenter’s recommendations regarding the General Plan and LCP Update will be forwarded to the appropriate decision-makers for review and consideration.

Response 2-2

The commenter states the guidelines referenced in the Draft EIR regarding the Morro Bay Climate Action Plan and Assembly Bill 32 do not fully address potential climate change impacts because the Morro Bay Climate Action Plan and Assembly Bill 32 respond to a year 2020 greenhouse gas (GHG) emissions reduction target. The commenter notes that the City could implement an optional General Plan Element that addresses Climate Change to address the need to capture carbon among other climate change programs. The commenter states that if these suggestions are not addressed, a Natural Disaster Preparedness Element should be prepared.

Potential impacts associated with GHG emissions and climate change are discussed in Section 4.6, Greenhouse Gas Emissions. As discussed in Impact GHG-1, the General Plan and LCP Update includes goals and policies intended to reduce GHG emissions from future development, as well as goals and policies that require the city to update and refine existing GHG planning efforts and thresholds beyond 2020. These goals and policies include:

- Policy C-4.1** Emissions Reduction Target. By 2020, reduce community-wide greenhouse gas emissions to 15 percent below 2005 levels. By 2040, reduce greenhouse gas emissions by 53.33 percent below the 2020 target, placing the community on a path to meet the state’s 2050 greenhouse gas emissions reduction goals.
- Policy C-4.2** Climate Action Plan. Continue to implement and regularly evaluate the Morro Bay Climate Action Plan and greenhouse gas inventory to evaluate progress, celebrate successes, and adjust strategies as needed to meet emissions goals.
- Policy C-4.3** Greenhouse Gas Inventory. Continue to update the greenhouse gas inventory to determine whether emissions are within recommended levels.
- Policy EJ-4.1** Plan Updates. Recognize and address the health effects of climate change when updating local hazard mitigation plans, hazard emergency plans, specific plans, and other policies and ordinances.

Policy EJ-4.3 Climate Change Response Plan. Prepare a response plan to be used in the implementation of Measure A-2 of the CAP to ensure the protection of vulnerable populations during times of high heat, extended drought, flooding, or other extreme weather events.

As discussed in Impact GHG-1, implementation of General Plan and LCP Update Conservation Element Policy C-4.1 would establish GHG reduction goals consistent with the State's 2030 and 2050 GHG emissions reduction goals. Conservation Element Policies C-4.2 and C-4.3 would require the City to update the CAP to comply with evolving state goals and requirements and would ensure that the CAP continues to provide measures for future development projects in the planning area to assess their consistency with City GHG reduction goals.

The focus of the responses to comments is the disposition of environmental issues that are raised in the comments, as specified by Section 15088(c) of the State CEQA Guidelines. Detailed responses are not provided to comments on the merits of the proposed General Plan and LCP Update. The commenter's recommendations that the General Plan and LCP Update include a Climate Change Element and a Natural Disaster Preparedness Element will be forwarded to the appropriate decision-makers for review and consideration.

From: betty winholtz <winholtz@sbcglobal.net>
Sent: Monday, October 19, 2020 8:39 PM
To: Gerald Luhr <gluhr@morrobayca.gov>; Michael Lucas <mlucas@morrobayca.gov>; Joseph Ingraffia <jingraffia@morrobayca.gov>; Jesse Barron <jbarron@morrobayca.gov>; Susan Stewart <sstewart@morrobayca.gov>
Cc: Scot Graham <sgraham@morrobayca.gov>
Subject: plan morro bay eir

Dear Planning Commissioners:

Here are partial comments regarding the EIR for *Plan Morro Bay*. The EIR is a critical document, and in several ways, already outdated. 3-1

This document is very difficult to negotiate. The Appendices do not have page numbers in the Table of Contents.

The first table in the document is cause alone to wonder what is being proposed for the City of Morro Bay. How do you increase the land mass of the City by tenfold, but only add 2/5s, or less than 2000 residents, to the City's population? That's not only incongruent, but what's the point? Cities are for development, not absorbing open space. 3-2

I don't understand the relevance of Appendix C. It appears to be about only SLO County. How does it tell us about the City of Morro Bay? 3-3

3.4 Coastal Structures. "No structural evaluation of the structures was conducted relative to these projected water levels." (Page A-10) Does this mean that no environmental study was done for the buildings/businesses on the Embarcadero? Isn't that a huge omission? 3-4

14.0 Water and Water Quality. Table 14.2 Impaired Water Bodies in the Planning Area (2010). A glaring omission is Morro Creek from this table. 3-5

14.0 Water and Water Quality, 14.3 Priority Findings. "plans for additional water sources may be necessary to prevent seawater intrusion into the groundwater system." (page 3-6

14-32) ESTERO BAY NEWS August 14, 2020 article states injection wells for WRF will be used to prevent salt water intrusion, not 800 acres of new water. In 3 years, from 2017 to 2020, did circumstances deteriorate that quickly, or was it known all along that the wells would not work for new water?

3-6
cont'd

It's quite challenging to speak to 2 documents, the Plan and the EIR, in only 3 minutes total. Will you deal with them separately, so a public member can have 3 minutes per document?

3-7

Sincerely,
Betty Winholtz

Letter 3

COMMENTER: Betty Winholtz

DATE: October 19, 2020

Response 3-1

The commenter states that the Draft EIR is outdated in several ways and difficult to negotiate. The commenter notes that the Appendices do not have page numbers in the Table of Contents.

The commenter does not indicate what information in the Draft EIR is outdated or raise any specific concerns with the methods or conclusions of the Draft EIR. The findings of reports and analysis that are incorporated into the Draft EIR analysis are summarized in applicable sections of the Draft EIR with reference to the corresponding Appendix. The focus of the responses to comments is the disposition of environmental issues that are raised in the comments, as specified by Section 15088(c) of the State CEQA Guidelines. Detailed responses are not provided to organizational comments, or comments on the merits of the proposed General Plan and LCP Update. These comments do not raise any specific concerns with the methods or conclusions of the Draft EIR.

Response 3-2

The commenter states that the first table in the document does not clearly indicate what is being proposed for the City. The commenter requests clarification for how the land mass of the City can be increased tenfold with an increase of less than 2,000 residents. The commenter states that cities are for development, not for absorbing open space.

The table referenced by the commenter is Table ES-1, General Plan and LCP Update Maximum Development Capacity, in the Draft EIR Executive Summary. A more detailed description of the proposed General Plan and LCP Update is included in Section 2.0, Project Description, of the Draft EIR. The increase in land mass described by the commenter appears to refer to the future Sphere of Influence (SOI) and planning area as compared to the City Limits, although the General Plan does not contemplate a tenfold increase in land area. As discussed in Section 2.3.1, Geographic Location:

“The planning area for Morro Bay includes all area within the city boundaries (approximately 3,137 acres), as well as approximately 6,137 acres beyond the city limits. A portion of the planning area beyond the city limits, approximately 100 acres consisting of part of the estuary and a small area on the northern beachfront, is in the city’s existing Sphere of Influence (SOI). Another 1,077 acres of the planning area beyond the city limits is identified as a future extension of Morro Bay’s SOI. Both the current and potential future SOI areas are under County of San Luis Obispo jurisdiction.”

As described in the General Plan and LCP Update Land Use Element, the City has an option to physically expand by adding new land to the City Limits. The General Plan and LCP Update considers this as a future option to allow for some limited outward expansion beyond current City limits to achieve large-scale conservation of parcels and a small amount of rural-scale residential use and visitor-serving amenities to serve conservation lands. In addition to this potential future SOI expansion to the northeast, the General Plan and LCP Update identifies the Dynegy Power Plant and Wastewater Treatment Plant sites as locations that can provide future development and redevelopment.

Draft EIR Figure 2-1 Figure 2-2 shows the planning area, existing SOI, and future SOI for Morro Bay. As discussed in Section 2.4.4, General Plan Land Use Map, “Within the future SOI area identified on the Land Use Map, future uses may be developed subject to annexation to the City of Morro Bay in compliance with procedures identified by the San Luis Obispo County Local Agency Formation Commission (LAFCO).” The commenter does not raise any specific concerns with the methods or conclusions of the Draft EIR. However, the commenter’s opinion regarding the purpose of cities for development will be forwarded to the appropriate decision-makers for review and consideration.

Response 3-3

The commenter states that they do not understand the relevance of Appendix C, which they indicate appears to be about SLO County. The commenter asks how this appendix applies to Morro Bay.

Appendix C to the Draft EIR includes criteria pollutant and GHG emissions modeling data associated with the Draft EIR evaluation of potential air quality and GHG emissions impacts included in Section 4.2, Air Quality, and 4.6, Greenhouse Gas Emissions. The emissions modeling is prepared using the California Emissions Estimator Model (CalEEMod), which includes locally specific data provided by the San Luis Obispo Air Pollution Control District (SLOAPCD) for projects in San Luis Obispo County, including projects in incorporated cities within the County, such as Morro Bay. Additional detail regarding CalEEMod and potential air quality and GHG emissions impacts is provided in Section 4.2, Air Quality, and 4.6, Greenhouse Gas Emissions.

Response 3-4

The commenter requests clarification regarding the Draft EIR statement that “No structural evaluation of the structures was conducted relative to these projected water levels.” The commenter asks whether statement this means no environmental study was done for the buildings/businesses on the Embarcadero.

This comment refers to the Coastal Hazard Modeling and Mapping report, which is Appendix A to the Plan Morro Bay Community Baseline Assessment (May 2017) included in Appendix B of the Draft EIR. The statement referenced by the commenter relates to the Community Baseline Assessment analysis of potential sea level rise hazards and the potential for sea level rise to result in increased frequency of overtopping coastal protection structures (i.e., seawalls and revetment), the harbor entrance channel jetty system, and shoreline protection structures (i.e., bulkhead walls and rip rap) along the bay waterfront. The Coastal Hazard Modeling and Mapping report did not include an independent evaluation of existing coastal protection structures as part of the sea level rise hazards analysis. Chapter 3.0 of the Community Baseline Assessment, Coastal Resources and Resiliency, includes an evaluation of potential sea level rise effects on coastal assets, including coastal development, under 2030 and 2050 conditions. The Sea Level Rise Adaptation Strategy Report prepared by Moffatt & Nichol in January 2018 includes sea level rise projections, coastal flooding and erosion modeling, and a discussion of adaptation strategies and costs. The discussion of adaptation strategies in the Sea Level Rise Adaptation Strategy Report includes an evaluation of coastal protection structures, such as seawalls, revetments, and bulkheads. The potential for the proposed General Plan and LCP Update to result in new impacts related to sea level rise, climate change, and GHG emissions is included in Section 4.6, Greenhouse Gas Emissions, of the Draft EIR.

Response 3-5

The commenter states that Morro Creek is omitted from Table 14.2, Impaired Water Bodies in the Planning Area.

This comment refers to Table 14.2 on page 14-15 of the Plan Morro Bay Community Baseline Assessment (May 2017), which is included in Appendix B of the Draft EIR. As discussed in the Community Baseline Assessment, the determination of impaired water bodies in that report was based on the 2010 Integrated Report on Water Quality and includes water bodies with one or more of 20 tracked pollutants listed in quantities above the allowed threshold. For that analysis, Morro Creek was assessed for a number of pollutants, but none were ultimately placed on the list. Information from the Community Baseline Assessment is included in Section 4.8, Hydrology and Water Quality, which includes a discussion of impaired water bodies in the project region based on the Clean Water Act 303(d) list, which is a register of impaired and threatened waters all states submit for Environmental Protection Agency approval every two years. The listing of impaired water bodies in the Draft EIR includes Morro Creek (refer to Section 4.8.1[c] of the Draft EIR). As discussed in Impact HWQ-1, compliance with NPDES permits requirements, Morro Bay Municipal Code requirements, and General Plan and LCP Update goals and policies would minimize erosion and siltation, and reduce the risk of discharge of pollutants to avoid violations of water quality standards or waste discharge requirements, minimizing potential impacts to water bodies.

Response 3-6

The commenter asks whether conditions allowing the use of wells for new water have changed since preparation of the Plan Morro Bay Community Baseline Assessment (May 2017), which states that “plans for additional water sources may be necessary to prevent seawater intrusion into the groundwater system” (refer to page 14-32 of Appendix B to the Draft EIR).

The conditions described by the commenter relate to use of injection wells to increase the City’s supply of potable water. As discussed in Section 4.14.1(a), Water Supply, of the Draft EIR, and in the City’s description of the WRF (available at: <https://morrobaywrf.com/about-the-project/>), the new Water Reclamation Facility (WRF) is designed to produce potable wastewater to augment the City’s water supply through groundwater injection and recovery. Wells to inject the purified water from the WRF into the groundwater aquifer will allow potable water to be extracted for reuse through the City’s existing infrastructure, while reducing saltwater intrusion (City of Morro Bay 2018a).

Response 3-7

The commenter asks whether the City will hear public comment on the General Plan and LCP Update and the EIR separately, so a public member can have three minutes per document. The General Plan and LCP Update has been reviewed by the Planning Commission, General Plan Advisory Committee (GPAC), and the Coastal Commission, with opportunities for public comment provided as part of the public hearing process. Comments received from the Planning Commission, GPAC, members of the public, and the Coastal Commission are provided on the City’s Plan Morro Bay website, including responses and revisions that have been made to the Draft General Plan and LCP Update (<https://www.morro-bay.ca.us/943/PlanMB>). At the time the Final EIR for the General Plan and LCP Update is considered by the Planning Commission for recommendation, the General Plan and LCP Update and EIR will be a single agenda item, with an opportunity for public comment. Similarly, at the time the General Plan and LCP Update is considered by the City Council for

adoption, the General Plan and LCP Update and EIR will be a single agenda item, with an opportunity for public comment.

The focus of the responses to comments is the disposition of environmental issues that are raised in the comments, as specified by Section 15088(c) of the State CEQA Guidelines. This comment does not raise any specific concerns with the methods or conclusions of the Draft EIR. However, the commenter's questions regarding the public hearing and approval process the General Plan and LCP Update will be forwarded to the appropriate decision-makers for review and consideration.



Eric Cherniss
Sr. Director, Corporate Development & Strategy

6555 Sierra Dr.
Irving, TX 75039
Cell: (408) 460-8200
Email: Eric.Cherniss@VistraCorp.com

December 3rd, 2020

City of Morro Bay
Attn: Scot Graham, Community Development Director
955 Shasta Avenue
Morro Bay, California 93442
Email: sgraham@morrobayca.gov

Re: DEIR and General Plan / Local Coastal Program / Zoning Code Update

Dear Mr. Graham:

We have reviewed the Draft EIR and General Plan/Local Coastal Program/Zoning Code Update documents, and support the City's commitment to renewable energy as set forth in the General Plan, including the following statements and policies:

- Future potential energy uses in Morro Bay will focus on renewable energy. (P. 3-30, Plan Morro Bay October Hearing Draft)
- Policy ED-1.4: Technology Resources. Make needed and desired renewable energy and modern technology resources readily available to businesses. (P. 3-80, Plan Morro Bay October Hearing Draft)
- Morro Bay does not currently have its own energy-producing uses, but it can explore options for renewable energy production and consumption. Options could be incentivized in new development projects like wind power or battery storage. (P. 4-35, Plan Morro Bay October Hearing Draft).

In order to best implement these policies, we recommend two modifications to the proposed Zoning Code. First, the proposed Zoning Code should permit "Public Works and Utilities" in the Visitor Serving Commercial (VSC) Zone. Public Works and Utilities are already proposed to be allowed in all other commercial zones - Neighborhood Commercial (NC); Community Commercial (CC); and District Commercial (DC). To be consistent with the other commercial zoning designations, Public Works and Utilities should be added to the uses permitted in the VSC Zone, which would modify Module 3: Use Regulations, of the April 2018 Zoning Code Update:

Modification to **TABLE TBD: LAND USE REGULATIONS – COMMERCIAL AND MIXED USE DISTRICTS** (P. 17):

Transportation, Communication, and Utility Uses					
Light Fleet-Based Services	-	-	P	-	
Public Works and Utilities	P	P	P	P	
Telecommunication Facilities	See Chapter TBD, Telecommunication Facilities				

17

Second, we recommend that the description of Public Works and Utilities in the Use Classifications section of the Draft Zoning Code be modified to add a reference to renewable and energy storage facilities, consistent with the statements and policies in the General Plan.

Modification to Use Classifications (P. 84):

17.40.050 Transportation, Communication, and Utility Uses

Public Works and Utilities. Generating plants, including renewable and energy storage facilities, electric substations, solid waste collection, including transfer stations and materials recovery facilities, solid waste treatment and disposal, water or wastewater treatment plants, corporation yards, equipment service centers, and similar facilities that primarily provide maintenance and repair services, storage facilities for vehicles and equipment, their associated offices, and similar facilities of public agencies or public utilities.

We appreciate your consideration of this matter and would be happy to discuss this further with you and members of the City staff.

Sincerely yours,

Eric Cherniss

Eric Cherniss
Sr. Director, Corporate Development & Strategy
Vistra Corp.

Letter 4

COMMENTER: Eric Cherniss, Vistra Corp

DATE: December 3, 2020

Response 4-1

The commenter states that they support the City’s commitment to renewable energy as set forth in the General Plan. To implement General Plan and LCP policies related to renewable energy, the commenter recommends that the zoning code be modified to permit “Public Works and Utilities” in the Visitor Serving Commercial (VSC) Zone and that the description of “Public Works and Utilities” in the Use Classifications section of the Draft Zoning Code be modified to add a reference to renewable and energy storage facilities, consistent with the statements and policies in the General Plan.

The focus of the responses to comments is the disposition of environmental issues that are raised in the comments, as specified by Section 15088(c) of the State CEQA Guidelines. Detailed responses are not provided to comments on the merits of the proposed General Plan and LCP Update. The commenter’s recommendations for the zoning code do not raise any specific concerns with the methods or conclusions of the Draft EIR. However, the commenter’s recommendations regarding the General Plan and LCP Update will be forwarded to the appropriate decision-makers for review and consideration.



State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Central Region
1234 East Shaw Avenue
Fresno, California 93710
(559) 243-4005
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director



January 7, 2021

Scot Graham
City of Morro Bay
955 Shasta Ave
Morro Bay, California 93442

Subject: City of Morro Bay Plan (Project)
Draft Environmental Impact Report (DEIR)
SCH No.: 2017111026

Dear Mr. Graham:

The California Department of Fish and Wildlife (CDFW) received a DEIR from the City of Morro Bay for the above-referenced Project pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.¹

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, CDFW appreciates the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under Fish and Game Code.

While the comment period may have ended, CDFW would appreciate if you will still consider our comments and recommendations.

CDFW ROLE

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all the people of the State (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a)). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (*Id.*, § 1802). Similarly, for

¹ CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

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purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a **Responsible Agency** under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), related authorization as provided by the Fish and Game Code may be required.

Fully Protected Species: CDFW has jurisdiction over fully protected species of birds, mammals, amphibians, reptiles, and fish, pursuant to Fish and Game Code sections 3511, 4700, 5050, and 5515. CDFW prohibits and cannot authorize take of any fully protected species.

Nesting Birds: CDFW has jurisdiction over actions with potential to result in the disturbance or destruction of active nest sites or the unauthorized take of birds. Fish and Game Code sections that protect birds, their eggs and nests include, sections 3503 (regarding unlawful take, possession or needless destruction of the nest or eggs of any bird), 3503.5 (regarding the take, possession or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory nongame bird).

PROJECT DESCRIPTION SUMMARY

Proponent: City of Morro Bay

Objective: The General Plan and LCP Update is a comprehensive update of the City's 1988 General Plan and 1984 LCP. The land use classifications included in the General Plan and LCP, also known as Plan Morro Bay, define the basic categories of land use allowed in the city and are the basis for the zoning districts established in the City Municipal Code, which contain more specific regulations and standards governing development on individual properties. To maintain consistency with the General Plan and LCP Update, the project also includes a comprehensive Zoning Code Update which includes the Coastal Implementation Plan.

Location: The Project site is the entire city of Morro Bay and its sphere of influence.

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COMMENTS AND RECOMMENDATIONS

CDFW offers the following comments and recommendations to assist the city of Morro Bay in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the CEQA document prepared for this Project.

There are several special-status species that have been documented in the Project vicinity and may be present at individual Project sites in the Project area. These resources may need to be evaluated and addressed prior to any approvals that would allow ground-disturbing activities or land use changes. The DEIR indicates there are potentially significant impacts unless mitigation measures are taken but some measures are either non-specific and potentially difficult to enforce or missing for some species.

CDFW is concerned regarding potential impacts to special-status species including, but not limited to, the State and Federally endangered Morro Bay kangaroo rat (*Dipodomys heermanni morroensis*); the Federally threatened California red-legged frog (*Rana draytonii*); the federally and State endangered and State fully protected California least tern (*Sterna antillarum browni*); the State and federally endangered least Bell's vireo (*Vireo bellii pusillus*); the State threatened tricolored blackbird (*Agelaius tricolor*); the Federally threatened western snowy plover (*Charadrius nivosus*); the State species of special concern western pond turtle (*Emys marmorata*), American badger (*Taxidea taxus*), Blainville's coast horned lizard (*Phrynosoma blainvillii*), northern legless lizard (*Anniella pulchra*), special-status pallid and western mastiff bats (*Antrozous pallidus*) & (*Eumops perotis*); and the State and Federally endangered saltmarsh birds beak (*Cordylanthus maritimus*), marsh sandwort (*Arenaria paludicola*), Indian knob mountainbalm (*Eriodictyon altissimum*), and Chorro Creek bog thistle (*Cirsium fontinale* var. *obispoense*), the Federally threatened Morro manzanita (*Arctostaphylos morroensis*) and California seablight (*Suaeda californica*), the State threatened beach spectaclepod (*Dithyrea maritima*) and other special status plants. In order to adequately assess any potential impact to biological resources, focused biological surveys should be conducted by a qualified wildlife biologist/botanist during the appropriate survey period(s) in order to determine whether any special-status species may be present within the Project area. Properly conducted biological surveys, and the information assembled from them, are essential to identify any mitigation, minimization, and avoidance measures and/or the need for additional or protocol-level surveys, especially in the areas not in irrigated agriculture, and to identify any Project-related impacts under CESA and other species of concern.

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I. Environmental Setting and Related Impact

Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or

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special-status species in local or regional plans, policies, or regulations, or by CDFW or the United States Fish and Wildlife Service (USFWS)?

COMMENT 1: Morro Bay Kangaroo Rat (MBKR)

Issue: MBKR occurs on old, stabilized sand dunes in the vicinity of Los Osos in San Luis Obispo County. The range of the species is restricted to an area of approximately 12.4 square kilometers – corresponding to the distribution of Baywood fine sand (a soil type) (USFWS 2011). The Project site is within this range and consists of potentially suitable habitat for MBKR. MBKR have been documented to occur in the Project vicinity (CDFW 2020).

Specific impact: Without appropriate avoidance and minimization measures for MBKR, potential significant impacts associated with the Project’s construction include burrow collapse, inadvertent entrapment, reduced reproductive success, reduction in health and vigor of young, and direct mortality of individuals.

Evidence impact is potentially significant: There are two primary causes for MBKR decline; (1) habitat loss resulting from development in the vicinity of Los Osos, including homes, shopping centers, and parking lots, and (2) absence of fire that has promoted the succession of dense mature plant communities, thus causing a lack in open spaces required for movement and their food plants (USFWS 2011). As a result, if the Project area is occupied by MBKR, Project activities have the potential to significantly impact this species.

Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential Project-related impacts to MBKR, CDFW recommends conducting the following evaluation of the Project site, incorporating the following mitigation measures into the EIR prepared for this Project, and that these measures be made conditions of approval for the Project.

Recommended Mitigation Measure 1: MBKR Habitat Assessment and Trapping Surveys

CDFW recommends that a qualified biologist conduct a habitat assessment in advance of Project implementation, to determine if an individual Project site contains suitable habitat for MBKR. To determine if MBKR occupies the potentially suitable habitat contained within the Project site, CDFW recommends that focused protocol-level trapping surveys be conducted by a qualified wildlife biologist with appropriate permits from both CDFW and USFWS. CDFW advises that these surveys be conducted in accordance with USFWS’s (1996) “*Survey Protocol for the Morro Bay Kangaroo Rat.*” CDFW recommends these surveys be conducted well in

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advance of ground-disturbing activities in order to determine if impacts to MBKR could occur.

Recommended Mitigation Measure 2: MBKR Avoidance

If suitable habitat is present and trapping is not feasible, CDFW advises full avoidance of MBKR through maintenance of a 50-foot minimum no-disturbance buffer around all small mammal burrows.

Recommended Mitigation Measure 3: MBKR Take Authorization

If MBKR is detected within an individual Project site during small mammal trapping, consultation with CDFW is warranted to determine if Project activities can avoid take. If full avoidance of habitat features is not feasible and take could potentially occur as a result of Project implementation, acquisition of a State Incidental Take Permit (ITP) pursuant to Fish and Game Code section 2081 subdivision (b) is necessary to comply with CESA prior to initiating ground-disturbing activities. Alternatively, the Project proponent has the option of assuming presence of MBKR and securing a State ITP.

COMMENT 2: California Red-Legged Frog (CRLF)

Issue: CRLF primarily inhabit ponds but can also be found in other waterways including marshes, streams, and lagoons, and the species will also breed in ephemeral waters (Thomson et al. 2016). CRLF have been documented to occur in the Project vicinity (CDFW 2020). The Project area contains riparian corridors and wetted areas that may provide suitable breeding and foraging habitat features as well adjacent upland habitat features that may provide dispersal corridors and refugia. Avoidance and minimization measures are necessary to reduce impacts to CRLF to a level that is less than significant.

Specific impact: Without appropriate avoidance and minimization measures for CRLF, potentially significant impacts associated with the Project's activities include burrow collapse, inadvertent entrapment, reduced reproductive success, reduction in health and vigor of eggs, larvae and/or young, and direct mortality of individuals.

Evidence impact would be significant: CRLF populations throughout the State have experienced ongoing and drastic declines and many have been extirpated. Habitat loss from growth of cities and suburbs, invasion of nonnative plants, impoundments, water diversions, stream maintenance for flood control, degraded water quality, and introduced predators, such as bullfrogs are the primary threats to CRLF (Thomson et al. 2016, USFWS 2017b). Project activities have the potential to significantly impact the species.

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Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential impacts to CRLF, CDFW recommends conducting the following evaluation of the Project site, incorporating the following mitigation measures into the EIR prepared for this Project, and that these measures be made conditions of approval for the Project.

Recommended Mitigation Measure 4: CRLF Surveys

CDFW recommends that a qualified wildlife biologist conduct surveys for CRLF in accordance with the USFWS “Revised Guidance on Site Assessment and Field Surveys for the California Red-legged Frog” (USFWS 2005) to determine if suitable habitat features are present within an individual Project site, and if present, subsequently determine if CRLF occur within or adjacent to that Project site.

Recommended Mitigation Measure 5: CRLF Avoidance

If any CRLF are found during pre-construction surveys or at any time during construction, CDFW recommends that initial ground-disturbing activities be timed to avoid the period when CRLF are most likely to be moving through upland areas (November 1 and March 31). When ground-disturbing activities must take place between November 1 and March 31, CDFW recommends a qualified biologist with appropriate take authorization monitor construction activity daily for CRLF and halt any activities that may result in take of CRLF or relocate individuals out of harm’s way.

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COMMENT 3: Least Bell’s Vireo (LBV)

Issue: LBV have been documented to occur within the Project area (CDFW 2020). Review of aerial imagery indicates the presence of riparian woodland vegetation, suitable to support LBV within the Project vicinity. Therefore, the Project has the potential to impact LBV.

Specific impact: Without appropriate avoidance and minimization measures for LBV, potential significant impacts associated with Project development include nest abandonment, reduced reproductive success, and reduced health and vigor of eggs and/or young.

Evidence impact is potentially significant: LBV were abundant and widespread in the United States until the 1950s (Grinnell and Miller 1944). By the 1960s, they were considered scarce (Monson 1960), and by 1980, there were fewer than 50 pairs remaining (Edwards 1980), although this number had increased to 2,500 by 2004 (Kus and Whitfield 2005). The primary cause of decline for this species has been the loss and alteration of riparian woodland habitats (USFWS 2006).

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Fragmentation of their preferred habitat has also increased their exposure to brown-headed cowbird (*Molothrus ater*) parasitism (Kus 2002). Current threats to their preferred habitat include colonization by non-native plants and altered hydrology (diversion, channelization, etc.) (USFWS 2006).

Recommended Potentially Feasible Mitigation Measure(s) (Regarding Environmental Setting and Related Impact)

To evaluate potential impacts to LBV, CDFW recommends conducting the following evaluation of the Project site, incorporating the following mitigation measures into the EIR prepared for this Project, and that these measures be made conditions of approval for the Project.

Recommended Mitigation Measure 6: LBV Habitat Assessment

CDFW recommends that a qualified biologist conduct a habitat assessment in advance of Project implementation, to determine if an individual Project site or its immediate vicinity contains suitable habitat for LBV. Although LBV inhabit riparian woodlands, the species has also been found to benefit from non-riparian systems including brushy fields, second-growth forest or woodland, scrub oak, coastal chaparral, and mesquite brushlands (Kus and Miner 1989 in Poulin et al. 2011).

Recommended Mitigation Measure 7: LBV Avoidance

CDFW recommends that nesting birds be avoided if possible thus, Project activities should be timed to avoid the typical bird breeding season (February 1 through September 15).

Recommended Mitigation Measure 8: LBV Surveys

If Project activities must take place during the typical bird breeding season, and suitable LBV habitat is detected during habitat assessments at or adjacent to Project sites, CDFW recommends assessing presence/absence of LBV by conducting surveys following the USFWS' "Least Bell's Vireo Survey Guidelines" (2001) well in advance of the start of Project implementation to evaluate presence/absence of LBV nesting in proximity to Project activities, and to evaluate potential Project-related impacts and permitting needs. Additionally, CDFW advises conducting focused pre-construction surveys for LBV in all areas of potentially suitable habitat within 10 days of Project implementation, when initiated during the bird breeding season to ensure LBV have not begun nesting activities between the completion of surveys and the start of Project activities.

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Recommended Mitigation Measure 9: LBV Take Authorization

LBV detection warrants consultation with CDFW to discuss how to avoid take, or if avoidance is not feasible, to acquire an ITP prior to ground-disturbing activities, pursuant to Fish and Game Code section 2081 subdivision (b).

COMMENT 4: Tricolored Blackbird (TRBL)

Issue: TRBL occur within or near the Project area (CDFW 2020). Review of aerial imagery indicates that the Project area has or is near to dense low vegetation fields that may serve as nest colony sites.

Specific impact: Without appropriate avoidance and minimization measures for TRBL, potential significant impacts include nest and/or colony abandonment, reduced reproductive success, and reduced health and vigor of eggs and/or young.

Evidence impact would be significant: As mentioned above, aerial imagery indicates that the Project encompasses low vegetation fields that may serve as nest colony sites. TRBL aggregate and nest colonially, forming colonies of up to 100,000 nests (Meese et al. 2014). Increasingly, TRBL are forming larger colonies that contain progressively larger proportions of the species' total population (Kelsey 2008). In 2008, for example, 55% of the species' global population nested in only two colonies, which were in silage fields (Kelsey 2008). In 2017, approximately 30,000 TRBL were distributed among only 16 colonies in Merced County (Meese 2017). Nesting can occur synchronously, with all eggs laid within one week (Orians 1961). For these reasons, depending on timing, disturbance to nesting colonies can cause abandonment, significantly impacting TRBL populations (Meese et al. 2014).

Recommended Potentially Feasible Mitigation Measure(s)

CDFW recommends conducting the following evaluation of the Project site, editing the EIR to include the following measures specific to TRBL, and that these measures be made conditions of approval for the Project.

Recommended Mitigation Measure 10: TRBL Habitat Assessment

CDFW recommends that a qualified biologist conduct a habitat assessment of the Project site in advance of Project implementation, to determine if an individual Project site or its vicinity contains suitable habitat for TRBL.

Recommended Mitigation Measure 11: TRBL Surveys

If an individual Project site contains suitable habitat for TRBL, CDFW recommends that Project activities be timed to avoid the typical bird breeding season (February 1

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through September 15). However, if Project activities must take place during that time, CDFW recommends that a qualified wildlife biologist conduct surveys for nesting TRBL no more than 10 days prior to the start of implementation to evaluate presence/absence of TRBL nesting colonies in proximity to Project activities and to evaluate potential Project-related impacts.

Recommended Mitigation Measure 12: TRBL Avoidance

If an active TRBL nesting colony is found during pre-activity surveys, CDFW recommends implementation of a minimum 300-foot no-disturbance buffer in accordance with CDFW's "Staff Guidance Regarding Avoidance of Impacts to Tricolored Blackbird Breeding Colonies on Agricultural Fields in 2015" (CDFW 2015b). CDFW advises that this buffer remain in place until the breeding season has ended or until a qualified biologist has determined that nesting has ceased, the birds have fledged, and are no longer reliant upon the colony or parental care for survival. It is important to note that TRBL colonies can expand over time and for this reason, the colony may need to be reassessed to determine the extent of the breeding colony within 10 days prior to Project initiation.

Recommended Mitigation Measure 13: TRBL Take Authorization

In the event that a TRBL nesting colony is detected during surveys, consultation with CDFW is warranted to discuss how to implement the Project and avoid take, or if avoidance is not feasible, to acquire an ITP, pursuant to Fish and Game Code section 2081 subdivision (b), prior to any ground-disturbing activities.

COMMENT 5: California Least Tern

Issue: California least tern have been documented to occur in the Project vicinity (CDFW 2020). Ground- and vegetation-disturbing activities have the potential to result in take of the species. California least tern is a fully protected species and unauthorized take of California least tern is a violation of Fish and Game Code.

Specific impact: Without appropriate avoidance and minimization measures for California least tern, potential significant impacts associated with Project development include nest abandonment, reduced reproductive success, and reduced health and vigor of eggs and/or young.

Evidence impact would be significant: As a result, ground-disturbance resulting from development of individual Project sites has the potential to impact habitat that supports California least tern, which may result in significant impacts to local populations of the species.

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Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential Project-related impacts to special-status species, CDFW recommends conducting the following assessment of the Project area, including the following mitigation measures, and requiring them as conditions of approval in the Project's EIR.

Recommended Mitigation Measure 14: Habitat Assessment

CDFW recommends that a qualified biologist conduct a habitat assessment for individual Project sites, well in advance of Project implementation, to determine if the Project area or its immediate vicinity contain habitat suitable to support California least tern.

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Recommended Mitigation Measure 15: Species-Specific Surveys

If suitable habitat is present, CDFW recommends that a qualified biologist conduct surveys for California least tern and their nest locations during the appropriate time of year.

Recommended Mitigation Measure 16: Take Avoidance

Detection of California least tern within or in the vicinity of individual project areas, warrants consultation with CDFW to discuss how to implement ground-disturbing activities and avoid take. CDFW prohibits and cannot authorize take, incidental or otherwise, of any fully protected species, including California least tern. Therefore, detection of fully protected species requires full avoidance.

COMMENT 6: Special-Status Bat Species

Issue: Pallid bat and western mastiff bat have been documented to occur in the Project vicinity (CDFW 2020). In addition, habitat features that have the potential to support species may be present within the Project area. However, the DEIR does not include specific measures to mitigate impacts to special-status bat species.

Specific impact: Without appropriate avoidance and minimization measures for special-status bat species, potential significant impacts resulting from ground- and vegetation-disturbing activities associated with Project construction include habitat loss, inadvertent entrapment, roost abandonment, reduced reproductive success, reduction in health and vigor of young, and direct mortality of individuals.

5-3

Evidence impact is potentially significant: Pallid bat and other bats are known to roost under bridges (Lewis 1994 and Gruver 2006). Project activities on or around bridges have the potential to affect habitat upon which special-status bat species

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depend on for successful breeding, and the potential to impact individuals and local populations.

Recommended Potentially Feasible Mitigation Measure(s)

CDFW recommends editing the EIR to include the following measures and that these be made conditions of approval for the Project.

Recommended Mitigation Measure 17: Habitat Assessment

CDFW recommends that a qualified biologist conduct a habitat assessment well in advance of Project implementation to determine if an individual Project site or its immediate vicinity contains suitable habitat for special-status bat species.

Recommended Mitigation Measure 18: Focused Surveys

If suitable habitat is present, CDFW recommends assessing presence/absence of special-status bats by conducting protocol-level surveys during the appropriate seasonal period of bat activity.

Recommended Mitigation Measure 19: Consultation

Detection of special-status bat species warrants consultation with CDFW prior to any activity that may disturb bats. CDFW recommends submitting a Bat Eviction Plan to CDFW for written approval prior to project implementation, and that the Eviction Plan include details for excluding bats from the roost site, and a monitoring plan to ensure that all bats have exited the roost prior to the start of activity and will be unable to re-enter the roost until activity is completed. CDFW also recommends that Project or bat eviction activities be timed to avoid lactation and young-rearing.

COMMENT 7: Western pond turtle (WPT)

Issue: WPT are known to occur in the Project area (CDFW 2020). WPT are known to nest in the spring or early summer within 100 meters of a water body, although nest sites as far away as 500 meter have also been reported (Thomson et al. 2016).

Specific impact: Without appropriate avoidance and minimization measures for WPT, potentially significant impacts associated with Project activities could include nest reduction, inadvertent entrapment, reduced reproductive success, reduction in health or vigor of eggs and/or young, and direct mortality.

Evidence impact is potentially significant: The Project area has potential WPT habitat. Noise, vegetation removal, movement of workers, and ground disturbance

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cont'd

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as a result of Project activities have the potential to significantly impact WPT populations.

Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential impacts to WPT, CDFW recommends conducting the following evaluation of the Project site, editing the EIR to include the following measures specific to WPT, and that these measures be made conditions of approval for the Project.

Recommended Mitigation Measure 20: WPT Surveys

CDFW recommends a qualified biologist determine if suitable habitat for WPT occurs at an individual Project site. If suitable habitat is determined to occur on at an individual Project site, CDFW recommends that a qualified biologist conduct focused surveys for WPT ten days prior to Project implementation. In addition, CDFW recommends that focused surveys for nests occur during the egg-laying season (March through August) and that any nests discovered remain undisturbed until the eggs have hatched.

Recommended Mitigation Measure 21: WPT Relocation

CDFW recommends that if any WPT are discovered at an individual Project site immediately prior to or during Project activities, they be allowed to move out of the area on their own. Alternatively, WPT may be relocated out of harm's way into a nearby area with suitable habitat by a qualified biologist with the appropriate handling permit.

COMMENT 8: American Badger

Issue: American badger are known to occur in the Project area (CDFW 2020). Badgers occupy sparsely vegetated land cover with dry, friable soils to excavate dens, which they use for cover, and that support fossorial rodent prey populations (i.e. ground squirrels, pocket gophers, etc.) (Zeiner et. al 1990). The Project area supports these requisite habitat features. Therefore, the Project has the potential to impact American badger.

Specific impact: Without appropriate avoidance and minimization measures for American badger, potentially significant impacts associated with ground disturbance include direct mortality or natal den abandonment, which may result in reduced health or vigor of young.

Evidence impact is potentially significant: Habitat loss is a primary threat to American badger (Gittleman et al. 2001). The Project has the expectation to

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promote the growth of the City of Morro Bay, resulting in a high degree of land conversion and potential habitat fragmentation. As a result, ground-disturbing activities have the potential to significantly impact local populations of American badger.

Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential impacts to American badger associated with the Project, CDFW recommends conducting the following evaluation of individual Project sites, incorporating the following mitigation measures into the EIR prepared for this Project, and that these measures be made conditions of approval for the Project.

Recommended Mitigation Measure 22: American Badger Surveys

If suitable habitat is present, CDFW recommends that a qualified biologist conduct focused surveys for American badger and their requisite habitat features (dens) to evaluate potential impacts resulting from ground- and vegetation-disturbance.

Recommended Mitigation Measure 23: American Badger Avoidance

If suitable habitat is present, avoidance whenever possible is encouraged via delineation and observation of a 50-foot no-disturbance buffer around dens until it is determined through non-invasive means that individuals occupying the den have dispersed.

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COMMENT 9: Legless Lizard (LL)

Issue: LL have been documented in the Project vicinity (CDFW 2020). Northern California legless lizard are found primarily in areas with sandy or loose organic soils or where there is plenty of leaf litter (Zeiner et al., 1990d).

Specific impact: Without appropriate avoidance and minimization measures for LL potentially significant impacts associated with the Project's activities could include site abandonment which may result in reduced health or vigor of eggs and/or young, and/or direct mortality.

Evidence impact is potentially significant: Habitat loss is a primary threat to LL (Zeiner et al., 1990d). The Project area has the capacity to support the species and thus, the Project has potential to impact the species.

Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential impacts to LL, CDFW recommends conducting the following evaluation of the Project site, incorporating the following mitigation measures into the EIR prepared for this Project, and that these measures be made conditions of approval for the Project.

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Recommended Mitigation Measure 24: LL Surveys

If suitable habitat is present, CDFW recommends that a qualified biologist conduct focused surveys for LL and their requisite habitat features to evaluate potential impacts resulting from ground-disturbance.

Recommended Mitigation Measure 25: LL Avoidance

Avoidance whenever possible is encouraged via delineation however, a qualified biologist with the appropriate handling permit may relocate LL out of the project area into a nearby area with suitable habitat.

COMMENT 10: Coast Horned Lizard

Issue: Coast horned lizard has been documented to occur within and/or near the Project area (CDFW 2020). CDFW recommends that the EIR includes an impact analysis for coast horned lizard.

Specific impact: Without appropriate avoidance and minimization measures for the species mentioned above, potential significant impacts associated with the Project's construction include burrow or den collapse, inadvertent entrapment, reduced reproductive success, reduction in health and vigor of eggs and/or young, and direct mortality of individual coast horned lizard.

Evidence impact would be significant: As a result, ground disturbance resulting from development of the Project has the potential to impact habitat that supports special-status species, which may result in significant impacts to local populations of coast horned lizard.

Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential impacts of the Project to special-status species, CDFW recommends conducting the following assessment of the Project area, including the following mitigation measures, and requiring them as conditions of approval in the Project's EIR.

Recommended Mitigation Measure 26: Habitat Assessment

CDFW recommends that a qualified biologist conduct a habitat assessment, well in advance of Project implementation, to determine if individual Project sites or their immediate vicinity contain habitat suitable for coast horned lizard.

Recommended Mitigation Measure 27: Coast Horned Lizard Surveys

If suitable habitat is present, CDFW recommends assessing presence/absence of

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coast horned lizards by conducting surveys following recommended protocols or protocol-equivalent surveys. Recommended protocols vary by species. More information on survey and monitoring protocols for sensitive species can be found at CDFW's website (<https://www.wildlife.ca.gov/Conservation/Survey-Protocols>).

Recommended Mitigation Measure 28: Take Avoidance

CDFW recommends that if any coast horned lizards are discovered at an individual Project site immediately prior to or during Project activities, they be allowed to move out of the area on their own. Alternatively, coast horned lizards may be relocated out of harm's way into a nearby area with suitable habitat by a qualified biologist with the appropriate handling permit.

COMMENT 11: Special-Status Plant species

Issue: Plants listed pursuant to federal Endangered Species Act, CESA, and the Native Plant Protection Act, as well as other special status plants such California Rare Plant Rank (CRPR) plant species have been documented in and around the Project area (CDFW 2020).

Specific impact: Without appropriate avoidance and minimization measures potential impacts to special-status plant species include inability to reproduce and direct mortality. Unauthorized take of species listed as threatened, endangered, or rare pursuant to CESA or the Native Plant Protection Act is a violation of Fish and Game Code.

Evidence impact would be significant: Special-status plant species plant species are threatened with habitat loss and habitat fragmentation resulting from development, vehicle and foot traffic, and introduction of non-native plant species (CNPS 2020), all of which may be unintended impacts of the Project. Therefore, impacts of the Project have the potential to significantly impact populations of the species mentioned above.

Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential impacts to special-status plants associated with the Project, CDFW recommends conducting the following evaluation of the Project area and including the following mitigation measures as conditions of Project approval in the Project's EIR.

5-3
cont'd

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Recommended Mitigation Measure 29: Special-Status Plant Habitat Assessment

CDFW recommends that a qualified botanist conduct a habitat assessment of individual Project sites well in advance of Project implementation, to determine if the Project area or its vicinity contains suitable habitat for special-status plant species.

Recommended Mitigation Measure 30: Focused Surveys

If suitable habitat is present, CDFW recommends that individual Project sites be surveyed for special-status plants by a qualified botanist following the “Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities” (CDFW 2018). This protocol, which is intended to maximize detectability, includes identification of reference populations to facilitate the likelihood of field investigations occurring during the appropriate floristic period. In the absence of protocol-level surveys being performed, additional surveys may be necessary.

Recommended Mitigation Measure 31: Special-Status Plant Avoidance

CDFW recommends special-status plant species be avoided whenever possible by delineation and observing a no-disturbance buffer of at least 50 feet from the outer edge of the plant population(s) or specific habitat type(s) required by special-status plant species. If buffers cannot be maintained, then consultation with CDFW is warranted to determine appropriate minimization and mitigation measures for impacts to special-status plant species.

Recommended Mitigation Measure 32: Special-Status Plant Take Authorization

If a State-listed plant species is identified during botanical surveys, consultation with CDFW is warranted to determine if the Project can avoid take. However, if take cannot be avoided, take authorization would need to occur through issuance of an ITP by CDFW to comply with CESA and/or Fish and Game Code section 1900 and California Code of Regulations, title 14, section 786.9, subdivision (b).

II. Editorial Comments and/or Suggestions

Federally Listed Species: CDFW recommends consulting with the USFWS on potential impacts to federally listed species including, but not limited to, MBKR, CRLF, LBV, California least tern, saltmarsh birds beak, marsh sandwort, Indian knob mountainbalm, Chorro Creek bog thistle, Morro manzanita, California seablight, the federally threatened vernal pool fairy shrimp (*Branchinecta lynchi*), the federally

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5-4

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endangered tidewater goby (*Eucyclogobius newberryi*), the federally endangered Morro shoulderband snail (*Helminthoglypta walkeriana*), and the federally threatened western snowy plover (*Charadrius nivosus*). Take under FESA is more broadly defined than CESA; take under FESA also includes significant habitat modification or degradation that could result in death or injury to a listed species by interfering with essential behavioral patterns such as breeding, foraging, or nesting. Consultation with the USFWS in order to comply with FESA is advised well in advance of any ground-disturbing activities.

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cont'd

Lake and Streambed Alteration: The Project contains features that may result in Project activities at individual Project sites being subject to CDFW's regulatory authority pursuant Fish and Game Code section 1600 et seq. Fish and Game Code section 1602 requires an entity to notify CDFW prior to commencing any activity that may (a) substantially divert or obstruct the natural flow of any river, stream, or lake; (b) substantially change or use any material from the bed, bank, or channel of any river, stream, or lake; or (c) deposit debris, waste or other materials that could pass into any river, stream, or lake. "Any river, stream, or lake" includes those that are ephemeral or intermittent, such as the unnamed stream within the Project site, as well as those that are perennial in nature.

5-5

For additional information on notification requirements, please contact our staff in the Lake and Streambed Alteration Program at (559) 243-4593. It is important to note, CDFW is required to comply with CEQA, as a Responsible Agency, when issuing a Lake or Streambed Alteration Agreement (LSAA). If inadequate, or no environmental review, has occurred, for the Project activities that are subject to notification under Fish and Game Code section 1602, CDFW will not be able to issue the Final LSAA until CEQA analysis for the project is complete. This may lead to considerable Project delays.

Nesting birds: CDFW encourages Project implementation at individual Project sites occur during the bird non-nesting season if suitable nesting bird habitat is present. However, if ground-disturbing activities must occur during the breeding season (February through mid-September), the Project's applicant is responsible for ensuring that implementation of the Project does not result in violation of the Migratory Bird Treaty Act or relevant Fish and Game Codes as referenced above.

5-6

To evaluate Project-related impacts on nesting birds if suitable habitat is present, CDFW recommends that a qualified wildlife biologist conduct pre-activity surveys for active nests no more than 10 days prior to the start of ground disturbance to maximize the probability that nests that could potentially be impacted are detected. CDFW also recommends that surveys cover a sufficient area around the work site to identify nests and determine their status. A sufficient area means any area potentially affected by the Project. In addition to direct impacts (i.e. nest destruction), noise, vibration, and

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movement of workers or equipment could also affect nests. Prior to initiation of construction activities, CDFW recommends a qualified biologist conduct a survey to establish a behavioral baseline of all identified nests. Once construction begins, CDFW recommends a qualified biologist continuously monitor nests to detect behavioral changes resulting from the Project. If behavioral changes occur, CDFW recommends the work causing that change cease and CDFW consulted for additional avoidance and minimization measures.

5-6
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If continuous monitoring of identified nests by a qualified wildlife biologist is not feasible, CDFW recommends a minimum no-disturbance buffer of 250 feet around active nests of non-listed bird species and a 500-foot no-disturbance buffer around active nests of non-listed raptors. These buffers are advised to remain in place until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival. Variance from these no disturbance buffers is possible when there is compelling biological or ecological reason to do so, such as when the construction area would be concealed from a nest site by topography. CDFW recommends that a qualified wildlife biologist advise and support any variance from these buffers and notify CDFW in advance of implementing a variance.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations (Pub. Resources Code, § 21003, subd. (e)). Accordingly, please report any special-status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDDB). The CNDDDB field survey form can be found at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Submitting-Data>. The completed form can be mailed electronically to CNDDDB at the following email address: CNDDDB@wildlife.ca.gov. The types of information reported to CNDDDB can be found at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>.

5-7

FILING FEES

If it is determined that the Project has the potential to impact biological resources, an assessment of filing fees will be necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required for the underlying project approval to be operative, vested, and final (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089).

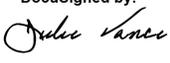
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CDFW appreciates the opportunity to comment on the Project to assist the City of Morro Bay in identifying and mitigating the Project's impacts on biological resources.

More information on survey and monitoring protocols for sensitive species can be found at CDFW's website (<https://www.wildlife.ca.gov/Conservation/Survey-Protocols>). If you have any questions, please contact Jaime Marquez, Environmental Scientist, at the address provided on this letterhead, by telephone at (559) 243-4014, extension 291, or by electronic mail at Jaime.Marquez@wildlife.ca.gov.

5-7
cont'd

Sincerely,

DocuSigned by:

FA83F09FE08945A...
Julie A. Vance
Regional Manager

cc: United States Fish and Wildlife Service
2800 Cottage Way, Suite W-2605
Sacramento, California 95825

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Attachment 1

**MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)
FOR CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
RECOMMENDED MITIGATION MEASURES**

**PROJECT: City of Morro Bay General Plan
SCH No.: 2017111026**

RECOMMENDED MITIGATION MEASURE	STATUS/DATE/INITIALS
<i>Before Disturbing Soil or Vegetation</i>	
Mitigation Measure 1: MBKR Habitat Assessment and Trapping Surveys	
Mitigation Measure 3: MBKR Take Authorization	
Mitigation Measure 4: CRLF Surveys	
Mitigation Measure 6: LBV Habitat Assessment	
Mitigation Measure 8: LBV Surveys	
Mitigation Measure 9: LBV Take Authorization	
Mitigation Measure 10: TRBL Habitat Assessment	
Mitigation Measure 11: TRBL Surveys	
Mitigation Measure 13: TRBL Take Authorization	
Mitigation Measure 14: Habitat Assessment	
Mitigation Measure 15: Species-Specific Surveys	
Mitigation Measure 17: Habitat Assessment	
Mitigation Measure 18: Focused Surveys	
Mitigation Measure 19: Consultation	
Mitigation Measure 20: WPT Surveys	
Mitigation Measure 21: WPT Relocation	
Mitigation Measure 22: American Badger Surveys	
Mitigation Measure 24: LL Surveys	
Mitigation Measure 26: Habitat Assessment	
Mitigation Measure 27: Coast Horned Lizard Surveys	
Mitigation Measure 29: Special-Status Plant Habitat Assessment	
Mitigation Measure 30: Focused Surveys	
Mitigation Measure 32: Special-Status Plant Take Authorization	
<i>During Construction</i>	
Mitigation Measure 2: MBKR Avoidance	
Mitigation Measure 5: CRLF Avoidance	
Mitigation Measure 7: LBV Avoidance	
Mitigation Measure 12: TRBL Avoidance	
Mitigation Measure 16: Take Avoidance	
Mitigation Measure 23: American Badger Avoidance	

Mitigation Measure 25: LL Avoidance	
Mitigation Measure 28: Take Avoidance	
Mitigation Measure 31: Special-Status Plant Avoidance	

Letter 5

COMMENTER: Julie A. Vance, California Department of Fish and Wildlife

DATE: December 8, 2020

Response 5-1

The commenter notes that special status species have been documented in the project vicinity and that potential impacts to these resources should be evaluated prior to any approvals that would allow ground-disturbing activities or land use changes. The commenter states that some required mitigation measures are non-specific, potentially difficult to enforce, or are missing for some species. The commenter lists special status species to which their specific comments apply, which are discussed in additional detail in their Comments 5-2 and 5-3. The commenter states the opinion of the California Department of Fish and Wildlife (CDFW) that focused biological surveys should be conducted by a qualified wildlife biologist/botanist during the appropriate survey periods to determine whether any special status species are present within the project area. This comment is generally introductory in nature, and the concerns raised are addressed in Response 5-2 through Response 5-7.

Response 5-2

The commenter summarizes the potential for Morro Bay kangaroo rat (*Dipodomys heermanni morroensis*, Federal and State Endangered and CDFW Fully Protected) to occur within the General Plan and Local Coastal Plan (LCP) area and states that potential impacts include burrow collapse, inadvertent entrapment, reduced reproductive success, reduction in health and vigor of young, and direct mortality of individuals. The commenter concludes that impacts to Morro Bay kangaroo rat are potentially significant and provides recommended mitigation measures including habitat assessment and trapping surveys, avoidance strategies, and permitting requirements under Section 2081 of the California Fish and Game Code.

The commenter summarizes the potential for California red-legged frog (*Rana draytonii*, Federal Threatened and Species of Special Concern) to occur within the General Plan and LCP area and states that potential impacts include burrow collapse, inadvertent entrapment, reduced reproductive success, reduction in health and vigor of eggs, larvae and/or young, and direct mortality of individuals. The commenter concludes that impacts to California red-legged frog are potentially significant and provides recommended mitigation measures including surveys and avoidance strategies.

The commenter summarizes the potential for least Bell's vireo (*Vireo bellii pusillus*, Federal and State Endangered) to occur within the General Plan and LCP area and states that potential impacts include nest abandonment, reduced reproductive success, and reduced health and vigor of eggs and/or young. The commenter concludes that impacts to least Bell's vireo are potentially significant and provides recommended mitigation measures including habitat assessments and surveys, avoidance strategies, and permitting requirements under Section 2081 of the California Fish and Game Code.

The commenter summarizes the potential for tri-colored blackbird (*Agelaius tricolor*, State Threatened) to occur within the General Plan and LCP area and states that potential impacts include nest and/or colony abandonment, reduced reproductive success, and reduced health and vigor of eggs and/or young. The commenter concludes that impacts to tri-colored blackbirds are potentially

significant and provides recommended mitigation measures including habitat assessments, surveys, avoidance strategies, and permitting requirements under Section 2081 of the California Fish and Game Code.

The commenter summarizes the potential for California least tern (*Sterna antillarum browni*, Federal Endangered and CDFW Fully Protected) to occur within the General Plan and LCP area and states that potential impacts include nest abandonment, reduced reproductive success, and reduced health and vigor of eggs and/or young. The commenter concludes that impacts to California least tern are potentially significant and provides recommended mitigation measures including habitat assessments, surveys, and avoidance strategies.

The Draft EIR discusses special status species in Section 4.3, Biological Resources, and evaluates potential impacts that would be facilitated by the development under the General Plan and LCP. Although the policies included in the General Plan and LCP promote infill development and avoidance of special status species and habitats, the Draft EIR determined that without policy modification, impacts to special status species, including those mentioned above, from development facilitated by the General Plan and LCP would be significant because the policy language does not address avoidance, minimization, and mitigation of effects to special status species individuals or address impacts to special status species in future SOI areas. Mitigation Measures BIO-1(a) and BIO-1(b) modify Policy C-1.3 and Policy OS-7.1. Policy C-1.3 requires individual development projects on sites that include or are within 100 feet of mapped ESHA to conduct a Biological Site Assessment. Policy OS-7.1 requires infrastructure plans to be prepared for areas outside the city limits that would be included in the City's SOI in the future to include policies for the protection of natural resources. Mitigation Measure BIO-1(a) requires applicants for future development to provide avoidance, minimization, and compensatory mitigation measures based on the listed species that would be impacted and also requires applicants to identify consultation and permitting pathways for listed species that would be impacted.

The mitigation measures recommended by the commenter are typical measures designed to address potential project-level impacts to special status species and habitats. However, the Draft EIR analysis is based on the programmatic effects of the General Plan and LCP. As a result, programmatic mitigation measures have been developed to address potentially significant impacts from reasonably-foreseeable future development at the policy level. Individual development projects under the updated General Plan and LCP would be required to conduct project-level environmental review of potential impacts to special status species consistent with the requirements of CEQA, and would be required to comply with all applicable federal, State, and local regulations. At that time, required project-level avoidance, minimization, and compensatory mitigation measures would be developed depending on the specific biological resources identified to be present or potentially present. No changes to the Draft EIR are required in response to this comment.

Response 5-3

The commenter summarizes the potential for special status bat species, specifically pallid bat (*Antrozous pallidus*, Species of Special Concern) and western mastiff bat (*Eumops perotis californicus*, Species of Special Concern), to occur within the General Plan and LCP area and states that potential impacts include habitat loss, inadvertent entrapment, roost abandonment, reduced reproductive success, reduction in health and vigor of young, and direct mortality of individuals. The commenter concludes that impacts to special status bat species are potentially significant and

provides recommended mitigation measures including habitat assessments, surveys, and agency consultation.

The commenter summarizes the potential for western pond turtle (*Emys marmorata* [= *Actinemys pallida*], Species of Special Concern) to occur within the Project area and states that potential impacts include nest reduction, inadvertent entrapment, reduced reproductive success, reduction in health or vigor of eggs and/or young, and direct mortality. The commenter concludes that impacts to western pond turtle are potentially significant and provides recommended mitigation measures including surveys and relocation.

The commenter summarizes the potential for American badger (*Taxidea taxus*, Species of Special Concern) to occur within the General Plan and LCP area and states that potential impacts include direct mortality or natal den abandonment, which may result in reduced health or vigor of young. The commenter concludes that impacts to American badger are potentially significant and provides recommended mitigation measures including surveys and avoidance strategies.

The commenter summarizes the potential for silvery [=northern California] legless lizard (*Anniella pulchra*, Species of Special Concern) to occur within the General Plan and LCP area and states that potential impacts include site abandonment which may result in reduced health or vigor of eggs and/or young, and/or direct mortality. The commenter concludes that impacts to legless lizards are potentially significant and provides recommended mitigation measures including surveys and avoidance strategies.

The commenter summarizes the potential for Blainville's [=coast] horned lizard (*Phrynosoma blainvillii*, Species of Special Concern) to occur within the General Plan and LCP area and states that potential impacts include burrow or den collapse, inadvertent entrapment, reduced reproductive success, reduction in health and vigor of eggs and/or young, and direct mortality. The commenter concludes that impacts to coast horned lizards are potentially significant and provides recommended mitigation measures including habitat assessments, surveys and avoidance strategies.

The commenter notes that plant species protected by the federal Endangered Species Act, California Endangered Species Act, and Native Plant Protection Act, and other special status plant species are documented within the General Plan and LCP area. The commenter states that potential impacts to special status plant species include inability to reproduce and direct mortality. The commenter also states that unauthorized take of species listed as threatened, endangered, or rare pursuant to the California Endangered Species Act or the Native Plant Protection Act is a violation of California Fish and Game Code. The commenter concludes that impacts to special status plants are potentially significant and provides recommended mitigation measures including habitat assessments, surveys, avoidance strategies, and permitting requirements for State listed species.

Response 5-2 discusses the Draft EIR evaluation of special status species, including the rationale for providing programmatic, rather than project-level, mitigation for potentially impacted biological resources. In addition, Mitigation Measure BIO-1(a) is modified as follows to add clarity regarding Species of Special Concern which includes pallid bat, western mastiff bat, western pond turtle, American badger, silvery legless lizard, and Blainville's horned lizard, as well as special status plant species (modifications to Mitigation Measure BIO-1[a] are shown in **bold**; ~~strikethrough~~ and underline updates are part of the original Mitigation Measure BIO-1[a] included in the Draft EIR):

BIO-1(a) Avoidance and Minimization during Development

Policy C-1.3 shall be updated to read:

Policy C-1.3 Biological Site Assessments. A biological assessment shall be required for any development proposed on sites that include or are within 100 feet of mapped ESHA in Figure C-2, and all other sites with natural vegetation regardless of whether ESHA has been mapped in Figure C-2, and for all other projects for which evidence indicates that ESHA may be present either on or adjacent to the site. The best available information about the location of ESHA in the City shall be used. Such assessment shall be prepared at the owner's expense by a qualified biologist approved by the City and shall, at minimum:

- a. Identify and confirm the extent of the ESHA,
- b. Document any site constraints and the presence of **or potential for** sensitive plant or animal species,
- c. Recommend buffers and development setbacks and standards to protect the ESHA,
- d. ~~Recommend mitigation measures to address any allowable impacts~~ If listed species, other special status species, or nesting birds are present or have potential to occur, specify avoidance and minimization measures, including compensatory mitigation, to be implemented to avoid or minimize take of individuals and loss of occupied habitat, and specify the necessary consultation pathway(s) with USFWS, NMFS, and/or CDFW to obtain incidental take coverage, where necessary, and
- e. Include any other information and analyses necessary to understand potential ESHA impacts as well as measures necessary to protect the resource as required by the Local Coastal Program.

If the site contains the potential for monarch overwintering or rookeries due to the presence of appropriately sized trees and groves, a seasonally timed survey appropriate for detecting the target species must also be included in the study.

Response 5-4

The commenter recommends consultation with the U.S. Fish and Wildlife Service (USFWS) in advance of ground disturbance in order to comply with the federal Endangered Species Act and address potential impacts to federally listed species including, but not limited to, California red-legged frog, saltmarsh bird's beak (*Chloropyron maritimum* ssp. *maritimum* [=*Cordylanthus maritimus* ssp. *maritimus*]), Indian knob mountainbalm (*Eriodictyon altissimum*), Chorro Creek bog thistle [=San Luis Obispo fountain thistle] (*Cirsium fontinale* var. *obispoense*), Morro manzanita (*Arctostaphylos morroensis*), California seablight (*Suaeda californica*), vernal pool fairy shrimp (*Branchinecta lynchi*), tidewater goby (*Eucyclogobius newberryi*), western snowy plover (*Charadrius alexandrinus nivosus*), Morro shoulderband snail (*Helminthoglypta walkeriana*), Morro Bay kangaroo rat, marsh sandwort (*Arenaria paludicola*), least Bell's vireo and California least tern. The commenter also summarizes the definition of "take" in the context of the federal Endangered Species Act.

The Draft EIR discusses federally listed species in Section 4.3, Biological Resources, and analyzes the potential impacts that would be facilitated by the development under the General Plan and LCP to

federally listed species. The General Plan and LCP includes goals and policies which would avoid or reduce direct and indirect impacts to federally listed and other special status species and habitats. Applicants for individual development projects under the updated General Plan and LCP would be required to conduct project-level environmental review of potential impacts to federally listed and other special status species consistent with the requirements of CEQA, as well as be required to comply with all applicable federal, State, and local regulations. At that time, required project-level avoidance, minimization, and compensatory mitigation measures would be developed depending on the specific biological resources identified to be present or potentially present. In addition, Mitigation Measure BIO-1(a) would modify General Plan Policy C-1.3, as it relates to listed species, to require applicants to “...specify the necessary consultation pathway(s) with USFWS, NMFS, and/or CDFW to obtain incidental take coverage, where necessary...”. No changes to the Draft EIR are required in response to this comment.

Response 5-5

The commenter notes that the General Plan and LCP area contains features that may result in project activities at individual sites being subject to CDFW’s regulatory authority pursuant to Fish and Game Code section 1600 et seq. The commenter summarizes the regulatory context and permitting process as it relates to Section 1602 of the Fish and Game Code.

The Draft EIR discusses riparian areas and wetlands subject to CDFW jurisdiction in Section 4.3, Biological Resources, and evaluates potential impacts that would be facilitated by the development under the General Plan and LCP to CDFW jurisdictional areas. The General Plan and LCP includes goals and policies which would ensure direct and indirect impacts to drainages would remain less than significant. The Draft EIR analysis is consistent with the commenter’s recommendation that individual development projects under the updated General Plan and LCP would be required to comply with California Fish and Game Code as it relates to features that are subject to CDFW jurisdiction. No changes to the Draft EIR are required in response to this comment.

Response 5-6

The commenter provides recommendations regarding nesting birds that are protected by the Migratory Bird Treaty Act and Fish and Game Code. These recommendations include implementing individual project activities during the non-breeding season, pre-activity surveys, as well as establishing avoidance buffers and conducting nest monitoring for active nests during construction. The commenter also states that, in addition to direct impacts, noise, vibration, and movement of workers and equipment could also affect nesting birds. The commenter notes that if individual project activities occur during the avian breeding season (February through mid-September), applicants are responsible for ensuring that implementation does not result in violation of the Migratory Bird Treaty Act and Fish and Game Codes as referenced above.

Response 5-2 discusses the Draft EIR evaluation of special status species, including the rationale for providing programmatic, rather than project-level, mitigation for potentially impacted biological resources. In addition, Response 5-3 includes modification to mitigation measure BIO-1(a) which includes nesting birds.

Response 5-7

The commenter notes CEQA requirements related to documentation and reporting of information in EIRs and recommends reporting special status species and natural communities detected during project surveys to the California Natural Diversity Database (CNDDDB). The commenter also notes

applicable CDFW filing fees which are payable upon filing of Notices of Determination by the Lead Agency.

The Draft EIR was prepared utilizing biological resources information from desktop resources as well as the descriptions of baseline conditions from the General Plan and LCP, the Community Baseline Assessment (Appendix B), and the Environmentally Sensitive Habitat Area (ESHA) Review and Current Conditions Mapping Report (Appendix D) as well as the County of San Luis Obispo 2007 vegetation map (San Luis Obispo County 2007 and 2009), California Department of Fish and Wildlife (CDFW) California Wildlife Habitat Relationship (CWHR) classification system (CDFW 2014), A Manual of California Vegetation, Second Edition (Sawyer et al. 2009), Atlas of Sensitive Species of the Morro Bay Area (Sims 2010), topographic maps, and recent aerial photographs (Google Earth 2018). Reconnaissance-level surveys were conducted in the City to support the ESHA Review and Current Conditions Mapping Report. No special status species were observed during the reconnaissance surveys conducted in support of the ESHA Review and Current Conditions Mapping Report. Habitat mapping was conducted at a scale suitable to support the City's ESHA and CEQA analyses but did not include individual project-level surveys.

As described in Response 5-1 through Response 5-6 above, the Draft EIR includes programmatic mitigation for identified potential impacts, and General Plan and LCP Policy C-1.3 and Policy OS-7.1 require an assessment of individual projects as they relate to sensitive biological resources. Mitigation Measure BIO-1(a) requires applicants for future development to provide avoidance, minimization, and compensatory mitigation measures based on the listed species that would be impacted as well as requires applicants to identify consultation and/or permitting pathway(s) for listed species that would be impacted. If special status species or sensitive natural communities are detected during individual project-level environmental review, applicants would submit CNDDDB forms as applicable.

Applicable CDFW filing fees would be paid upon filing the Notice of Determination for the General Plan and LCP Update EIR by the City of Morro Bay, which is the lead agency for the project. Applicable CDFW filing fees for future development projects completed under the updated General Plan and LCP would be paid upon filing of Notices of Determination by the applicable lead agency. No changes to the Draft EIR are required in response to this comment.

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