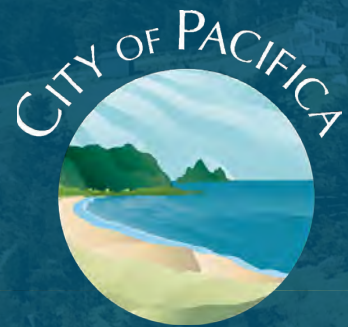




Pacifica Housing Element (6th Cycle) Targeted General
Plan Amendments, Rezoning, and Objective Development
Standards Program

Draft Environmental Impact Report (EIR)

December 13, 2024

SCH#: 2024050168

Volume 1

City of Pacifica

Environmental Impact Report (EIR)

December 13, 2024

Volume 1

Prepared for the City of Pacifica

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Table of Contents

0. Executive Summary	ES-I
Proposed Project	ES-I
Alternatives to the Proposed Project	ES-9
Areas of Known Controversy	ES-10
Significant and Unavoidable Impacts	ES-10
Impacts Summary	ES-11
1. Introduction.....	1-I
1.1 Purpose of the EIR	1-I
1.2 Approach and Scope of the EIR.....	1-2
1.3 Planning Issues and Public Involvement.....	1-4
1.4 Other Relevant Plans and Environmental Studies	1-6
1.5 Organization of the EIR	1-7
2. Project Description	2-I
2.1 Location and Setting	2-I
2.2 Planning Context and Process	2-6
2.3 Purpose and Objectives of the Proposed Project.....	2-6
2.4 Proposed Project Components	2-7
2.5 Intended Uses of the EIR.....	2-22
3.1 Aesthetics	3.1-I
Environmental Setting	3.1-I
Impact Analysis	3.1-13
3.2 Air Quality	3.2-I
Environmental Setting	3.2-I
Impact Analysis	3.2-33
3.3 Biological Resources.....	3.3-I
Environmental Setting	3.3-I

Impact Analysis	3.3-29
3.4 Cultural and Tribal Cultural Resources	3.4-1
Environmental Setting	3.4-1
Impact Analysis	3.4-14
3.5 Energy and Greenhouse Gas Emissions	3.5-1
Environmental Setting	3.5-1
Impact Analysis	3.5-23
3.6 Aesthetics	3.6-1
Environmental Setting	3.6-1
Impact Analysis	3.6-27
3.7 Hydrology and Water Quality.....	3.7-1
Environmental Setting	3.7-1
Impact Analysis	3.7-26
3.8 Land Use, Population, and Housing.....	3.8-1
Environmental Setting	3.8-1
Impact Analysis	3.8-16
3.9 Noise	3.9-1
Environmental Setting	3.9-1
Impact Analysis	3.9-16
3.10 Public Services and Recreation	3.10-1
Environmental Setting	3.10-1
Impact Analysis	3.10-25
3.11 Transportation.....	3.11-1
Environmental Setting	3.11-1
Impact Analysis	3.11-23
3.12 Utilities and Service Systems	3.12-1
Environmental Setting	3.12-1
Impact Analysis	3.12-16
3.13 Wildfire	3.13-1

Environmental Setting	3.13-1
Impact Analysis	3.13-14
3.14 Effects Found Not to Be Significant.....	3.14-1
Agriculture and Forestry Resources	3.14-1
Hazards and Hazardous Materials.....	3.14-2
Mineral Resources	3.14-3
4. Alternatives Analysis	4-1
4.1 Objectives of the Project	4-1
4.2 Alternatives Considered but not Evaluated in Detail in this EIR	4-2
4.3 Alternatives Analyzed in this EIR.....	4-3
4.4 Impact Analysis	4-7
4.5 Environmentally Superior Alternative	4-20
5. CEQA Required Conclusions.....	5-1
5.1 Growth-Inducing Impacts.....	5-1
5.2 Cumulative Impacts	5-5
5.3 Significant and Unavoidable Impacts	5-14
5.4 Significant Irreversible Environmental Changes	5-15
6. Bibliography.....	6-1
7. Persons and Organizations Consulted	7-1
8. Report Authors	8-1

List of Tables

Table ES-1: Sites that Require Rezoning to Meet RHNA Capacity.....	ES-5
Table ES-2: Population, Housing Units and Jobs and Buildout	ES-8
Table ES-3: Summary of Impacts and Mitigation Measures	ES-12
Table 2-1: Sites that Require Rezoning to Meet RHNA Capacity.....	2-9
Table 2-2: Population, Housing Units and Jobs and Buildout	2-12
Table 2-3: Objective Development Standards	2-13

Table 3.2-1: Ambient Air Quality Sources, Standards and Attainment Status in the Bay Area	3.2-9
Table 3.2-2: Ambient Air Quality Data at the Arkansas Street Monitoring Station (2021-2023).....	3.2-11
Table 3.2-3: Summary of Sources of Air Pollutants in San Mateo County 2020	3.2-12
Table 3.2-4: Permitted Stationary Sources of TACs in the Planning Area	3.2-14
Table 3.2-5: National and California Ambient Air Quality Standards.....	3.2-18
Table 3.2-6: BAAQMD 2017 Clean Air Plan Control Measures Applicable to Proposed Project.....	3.2-36
Table 3.2-7: Estimated Maximum Daily Unmitigated Proposed Project Operational Emissions (pounds per day)	3.2-50
Table 3.3-1: Rezoning Sites Classification.....	3.3-2
Table 3.3-2: Special-Status Plant Species with the Potential to Occur in the Planning Area	3.3-5
Table 3.3-3: Special-Status Plant Species that are Unlikely or Have No Potential to Occur in the Planning Area.....	3.3-8
Table 3.3-4: Special-Status Animal Species with the Potential to Occur in the Rezoning Sites.....	3.3-11
Table 3.3-5: Federally Listed Animal Species documented in the City of Pacifica with No Potential or Unlikely to Occur in the Rezoning Sites.....	3.3-14
Table 3.5-1: Recent Global, National, State, and Regional Greenhouse Gas Emission Inventories.....	3.5-5
Table 3.5-2: Unmitigated Proposed Project Operational Emissions (Annual).....	3.5-29
Table 3.5-3: Mitigated Proposed Project Operational Emissions (Annual)	3.5-33
Table 3.5-4: Additional GHG Emissions Reduction from General Plan Policies.....	3.5-34
Table 3.5-5: City of Pacifica GHG Reduction Targets and Performance-Based Metrics ..	3.5-35
Table 3.5-6: Consistency with CARB 2022 Scoping Plan Key Residential and Mixed-Use Project Attributes to Reduce GHGs.....	3.5-40
Table 3.5-7: Estimated Operational Energy Consumption.....	3.5-44
Table 3.6-1: Modified Mercalli Intensity Scale	3.6-6
Table 3.7-1: Section 303(d) List of Impaired Water Bodies	3.7-11
Table 3.7-2: Designated Beneficial Uses	3.7-13
Table 3.8-1: Existing Land Use Summary.....	3.8-4
Table 3.8-2: Plan Bay Area 2050 North San Mateo County Job Growth and Housing Projections, 2015–2050	3.8-5

Table 3.8-3: Household Percentage Distribution for Jurisdictions in North San Mateo County, 2020 and 2024.....	3.8-5
Table 3.8-4: Jobs Percentage Distribution for Jurisdictions in North San Mateo County, 2020 and 2040.....	3.8-6
Table 3.8-5: Planning Area Population, Housing, and Growth Projections, 2024-2040.....	3.8-7
Table 3.8-6: Plan Bay Area 2050 Strategies Applicable to the Proposed Project.....	3.8-21
Table 3.9-1: Traffic Noise Analysis Summary- Projected Increase.....	3.9-6
Table 3.9-2: Typical Noise Levels for Construction Equipment.....	3.9-8
Table 3.9-3: Allowable Noise Exposure	3.9-12
Table 3.9-4: Noise Level Performance Standards for Stationary Noise Sources.....	3.9-13
Table 3.9-5: Proposed Land Use Compatibility for Community Noise Environments	3.9-21
Table 3.9-6: Existing and Proposed Exposure to Noise by General Plan Noise Standards	3.9-22
Table 3.10-1: Existing Public Schools by Enrollment Capacity	3.10-4
Table 3.10-2: Existing Parks and Open Space.....	3.10-9
Table 3.10-3: Police Officers Needed at Buildout.....	3.10-27
Table 3.10-4: Future School Enrollment by District.....	3.10-28
Table 3.10-5: Pacifica Public School District Enrollment Trends.....	3.10-29
Table 3.11-1: Daily Travel Patterns	3.11-11
Table 3.11-2: Transit Mode Share of All Trips.....	3.11-12
Table 3.11-3: Intersection Operational Analysis Results Summary	3.11-13
Table 3.11-4: Roadway Segment Analysis Results Summary.....	3.11-17
Table 3.11-5: Pacifica VMT Metrics.....	3.11-27
Table 3.12-1: Historical Water Demand and Supply 2016-2023.....	3.12-2
Table 3.12-2: Pacifica Integrated Waste Management Authority Diversion Rates.....	3.12-7
Table 3.12-3: Estimated Base Wastewater Flow (BWF) Projections	3.12-19
Table 3.12-4: Estimated Base Wastewater Flow (BWF) Projections under the Proposed Project.....	3.12-19
Table 3.12-5: Estimated Water Demand and Supply.....	3.12-22
Table 4-1: Summary of Impacts for Alternatives	4-21
Table 5-1: Planning Area Population, Housing, and Growth Projections, 2024-2040	5-2

List of Figures

Figure 2-1: Regional Location.....	2-4
Figure 2-2: Planning Area and Context.....	2-5
Figure 2-3: Current Zoning	2-18
Figure 2-4: Existing Land Use	2-19
Figure 2-5: Sites Available for Housing	2-20
Figure 2-6: Subject Sites.....	2-21
Figure 3.1-1: Visual Resources	3.1-5
Figure 3.2-1: Existing Air Quality Sensitive Receptors and Emissions Sources	3.2-15
Figure 3.3-1: Sensitive and Critical Habitat.....	3.3-17
Figure 3.4-1: NWIC Historic Resources.....	3.4-6
Figure 3.6-1: Seismic Hazard Zones	3.6-9
Figure 3.6-2: Liquefaction	3.6-10
Figure 3.6-3: Slope Failure and Coastal Erosion	3.6-13
Figure 3.7-1: Hydrology and Flood Zones	3.7-3
Figure 3.8-1: Existing Land Use.....	3.8-3
Figure 3.8-2: Proposed General Plan Designations and Zoning Changes.....	3.8-18
Figure 3.9-1: Typical Sound Levels	3.9-2
Figure 3.9-2: Existing Noise Contours.....	3.9-9
Figure 3.9-3: Future Noise Contours.....	3.9-18
Figure 3.10-1: Educational Institutions and Public Facilities	3.10-8
Figure 3.10-2: Parks and Recreation Facilities	3.10-16
Figure 3.11-1: Roadway Network and Planned Improvements.....	3.11-4
Figure 3.11-2: Existing Transit Routes	3.11-6
Figure 3.11-3: Existing and Proposed Bicycle Network.....	3.11-9
Figure 3.13-1: Fire Hazards.....	3.13-3
Figure 3.13-2: Wildland Urban Interface (WUI) In Pacifica.....	3.13-4
Figure 4-1: Alternative 1: No Project.....	4-5
Figure 4-2: Alternative 2: High Density Shopping Centers	4-6

Executive Summary

The Environmental Impact Report (EIR) analyzes the potential environmental impacts of the Proposed Project (as defined in Chapter 2), a Housing Element program that will create the regulatory framework to accommodate the City's regional housing need within the approximately 13.5-square-mile area that encompasses the entire city. Implementation will include amendments to the City's Zoning Code, zoning map, targeted general plan amendments, and development of objective development standards. This EIR has been prepared on behalf of the City of Pacifica, in accordance with the California Environmental Quality Act (CEQA). The City of Pacifica is the lead agency for this EIR, as defined by the California Environmental Quality Act, Public Resources Code Section 21000, *et seq.* (CEQA).

An EIR is intended to inform decision-makers and the general public of the potential significant environmental impacts of a proposed project. The EIR also considers the availability of mitigation measures to minimize significant impacts and evaluates reasonable alternatives to the Proposed Project that may reduce or avoid one or more significant environmental effects. Based on the alternatives analysis, an environmentally superior alternative is identified.

This EIR is a program EIR that examines the potential effects resulting from implementing designated programs including land use and zoning changes, and objective design standards in the Proposed Project. As a programmatic document, this EIR does not assess project-specific impacts that may result from developments pursuant to the Proposed Project. To the extent that any future development project made possible by the Proposed Project may have individual, site-specific impacts not addressed in this program EIR, such projects would be subject to separate, project-level environmental review, as required by State law. Projects consistent with the Proposed Project and the findings of this EIR may also be eligible for streamlined environmental review as permitted under CEQA. This EIR represents the City's best effort to evaluate the implementation and buildout of the Proposed Project, which will be implemented to 2031, which coincides with cumulative General Plan development through the year 2040. While it is anticipated that conditions may change, the assumptions used are the best available at the time of preparation and reflect existing knowledge of patterns of development.

Proposed Project

The Proposed Project is the Pacifica Housing Element (6th Cycle) Targeted General Plan Amendments, Rezoning, and Objective Development Standards Program. The City of Pacifica has prepared an update to the Housing Element of the General Plan. This Housing Element covers a planning period from January 31, 2023 to January 31, 2031 (also referred to as the "6th Cycle"). The State Review Draft Housing Element was released for review on May 10, 2023 and adopted by the

Pacifica City Council on January 22, 2024 (Adopted Housing Element). The document is now pending certification from the California Department of Housing and Community Development. The Proposed Project is required by Program HE-I-1: General Plan and Zoning Amendments to Achieve RHNA (Rezoning Program), of the Housing Element.

General Plan Amendments and Rezoning

Three new general plan land use designations and corresponding zones are proposed, with each type containing associated densities that match densities in the Housing Site Inventory in the Housing Element (30, 40, 50, or 60 dwelling units/acre):

- Multifamily Residential (R-#). This use is intended for multi-family apartments.
- Mixed Use (MU-#). This use is intended for high-density mixed-use development. Allowable uses would include ground-floor retail, restaurant or personal service uses and housing or offices. Ground floor commercial uses must be constructed along the street frontage but are not required on the interior of a site.
- Mixed use Institutional (MU-I-#). This use is intended for high-density mixed-use development that includes institutional uses, such as government facilities/infrastructure, schools, religious institutions, etc.

Objective Development Standards

State law requires adoption of objective development standards for multifamily sites that enable ministerial project review and approval. The Objective Development Standards component of Program HE-I-1 will create or revise objective development standards (“ODS”) applicable to the sites identified to achieve Housing Element densities and meet the City’s RHNA. The Proposed Project creates six ODS addressing the following: height; setbacks from property lines; lot coverage; floor area ratio (“FAR”); open space per dwelling unit; and off-street parking. In many cases, the objective development standards increase allowable height and lot coverage, decrease minimum usable open space, and decrease parking requirements from the existing zone.

Planning Area

The Planning Area encompasses 13.5 square miles including the incorporated City of Pacifica (8,019 acres) as well as 606 acres of unincorporated land south of city limits on the slope of San Pedro Mountain. The cities of Daly City, South San Francisco, and San Bruno border the city on the north and east and are developed up to city’s borders. Much of the land to the southeast and south is preserved as part of the Golden Gate National Recreation Area, State and County parks, and protected San Francisco watershed areas. Rural and agricultural land is prevalent to the south. The Pacific Ocean borders Pacifica to the west. Land west of Coast Highway, as well as the Sheldance Nursery property, is part of the Coastal Zone, subject to Pacifica’s Local Coastal Land Use Plan (LCLUP) and the policies of the California Coastal Act. Pacifica’s Coastal Zone comprises approximately 1,286 acres of land, or about 15 percent of the city. Access to Pacifica is primarily via Coast Highway (also known as State Route 1, “SR 1,” “1,” Cabrillo Highway, and Highway 1) and State Route 35 (SR 35, or Skyline Boulevard.)

Purpose

Under State law, all California cities, towns, and counties are required to adopt a General Plan Housing Element which establishes housing objectives, policies, and programs in response to community housing conditions and needs. Pacifica's Sixth Cycle Housing Element has been prepared to respond to current and near-term future housing needs in the City of Pacifica and provide a framework for the community's longer-term approach to addressing its housing needs.

The Housing Element contains goals, updated information and strategic directions (programs and implementing actions) that the City of Pacifica is committed to undertaking. Program HE-I-1, General Plan and Zoning Amendments to Achieve RHNA, aims to create the regulatory framework to accommodate the Regional Housing Needs Allocation (RHNA) sites inventory and promote development of multi-family housing, including rental housing, missing middle housing, and mixed-use development. Along with rezoning specific sites in order to develop housing, the Proposed Project will also involve General Plan amendments to existing land use designations and proposed objective development standards for the proposed zoning and land use designations. As such, the Proposed Project considered land use constraints to make the production of housing more likely. It reflects the priority given in the General Plan overall and Housing Element specifically to focus development in infill locations, including existing commercial shopping centers.

Objectives

As required under CEQA Section 15124, the following specific objectives have been established for the Proposed Project:

1. Address land use constraints to make the production of housing more likely;
2. Affirmatively further fair housing;
3. Facilitate production of affordable housing and remove constraints to housing development, which limits housing choices of households who have lower incomes and disproportionate housing needs;
4. Facilitate development of publicly owned sites, which the City will prioritize for development of housing that meets special needs;
5. Maintain consistency with the General Plan and strategically add capacity for housing in areas with existing access to services and transit;
6. Reflect the priority given in the General Plan and Housing Element to focus redevelopment in existing commercial shopping centers; and
7. Ensure compliance with State housing law(s), including demonstration of capacity to meet Pacifica's RHNA allocation.

Estimated Buildout of the Proposed General Plan

The Proposed Project includes rezoning, and in some cases General Plan redesignation, to allow an additional 2,042 units, in order for the City to accommodate its share of regional housing. The Proposed Project also anticipates mixed-use development at some of the sites, with a total capacity

of approximately 353,751 square feet of non-residential development, and a net square footage (e.g., total capacity less existing building square footage) of 202,058 square feet.

Some of the Proposed Project capacity (including residential units and nonresidential square footage) on housing sites was anticipated in the 2040 General Plan. To accurately capture the net increase in capacity and provide a buildout horizon consistent with the 2040 General Plan, this EIR describes cumulative effects to the year 2040. The Proposed Project buildout accounts for the total number of housing units and nonresidential square footage on these sites beyond that previously accounted for in the 2040 General Plan and Environmental Impact Report, in addition to estimated ADU potential.

As shown in Table ES-1, the Housing Element includes an inventory of properties that are intended to be redesignated and/or rezoned under the Proposed Project in order to meet the City's RHNA allocation. These redesignated and/or rezoned properties would allow residential uses or higher density residential as standalone residential or mixed-use development to plan for the potential development of low- and moderate-income units.

Table ES-1: Sites that Require Rezoning to Meet RHNA Capacity

Site #	Location	Existing Use	Existing GP Land Use Designation	Existing Zoning Designation ¹	Existing Allowed Density (DUIA)	Proposed GP Land Use	Proposed Zoning	Proposed Density (DUIA)	Total Capacity	Gross New Commercial (Sq. Ft.)	Net New Commercial (Sq. Ft.) ²
2	751 Oceana	Vacant	High Density Residential	R-3	30	R-40	R-40	40	81	0	0
10	Lumberyard, 4275 Coast Hwy	Building Materials, Equipment Storage	Mixed Use Neighborhood & Open Space /Agriculture/Residential	C-2	30	MU-60	MU-60	60	49	15,246	6,238
11	Vacant, Coast Hwy	Vacant	Mixed Use Neighborhood	C-2	30	MU-60	MU-60	60	69	21,802	21,802
12	Vacant, Former Caltrans between 4300-4400 Coast Hwy	Vacant	Mixed Use Neighborhood	C-2/HPD	30	MU-60/HPD	MU-60/HPD	60	169	53,056	53,056
18	Caltrans Park and Ride, Linda Mar Blvd	Caltrans Park and Ride	Mixed Use Neighborhood	N/A	30	MU-60	MU-60	60	53	16,771	16,771
19	7 th Day Adventist, 533 Hickey Blvd	Religious- Filipino 7 th Day Adventist	Low Density Residential	P-D	15	MU-I-30	MU-I-30	30	15	0	0
20	Public Works Corp Yard, 155 Milagra Dr	Pacifica Public Works Corp Yard	Retail Commercial	C-2	0	MU-I-60	MU-I-60	60	39	0	0
21	Oceana HS, 401 Paloma Ave	Oceana HS; vacant portion	Public and Semi Public	R-1/B-1	0	R-40	R-40	40	178	0	0
22	Terra Nova HS, 1450 Terra Nova Blvd	Terra Nova HS; vacant portion	Public and Semi Public	R-1	0	R-40	R-40	40	129	0	0
23	Sanchez Art Center, 1220 Linda Mar Blvd	Institutional- Art Center	Public and Semi Public/Park	A/B-5	0	MU-I-40	No Change	40	130	0	0
24	Sanchez Library, 1111 Terra Nova Blvd	Institutional- Library	Public and Semi Public	C-1	0	MU-I-50	MU-I-50	50	65	0	0
25	Caltrans ROW, Skyline Blvd	Vacant ROW	N/A	N/A	N/A	R-40	R-40	40	165	0	0
28	Fairmont Shopping Center, 777 Hickey Blvd	Fairmont Shopping Center retail portion and parking lot	Retail Commercial	P-D	0	MU-50	MU-50	50	41	15,246	9,605
29	Linda Mar Shopping Center,	Linda Mar Shopping Center	Low Density Residential/Re	C-1, C-2	0	MU-50	MU-50	50	182	68,607	0 ³

Table ES-1: Sites that Require Rezoning to Meet RHNA Capacity

Site #	Location	Existing Use	Existing GP Land Use Designation	Existing Zoning Designation ¹	Existing Allowed Density (DU/A)	Proposed GP Land Use	Proposed Zoning	Proposed Density (DU/A)	Total Capacity	Gross New Commercial (Sq. Ft.)	Net New Commercial ¹ (Sq. Ft.) ²
	500 Linda Mar Blvd	retail portion and parking lot	tail Commercial								
30	Builders Exchange, 520 San Pedro Ave	General commercial-Builder's Exchange	Retail Commercial	C-2/C-Z	0	MU-30	MU-30/CZ	30	23	10,454	-8,892
31	Ace Hardware, 560 San Pedro Ave	General commercial- Ace	Retail Commercial	C-2/C-Z	0	MU-30	MU-30/CZ	30	30	13,504	5,322
32	Brentwood Shopping Center, Oceana/Manor	Brentwood Shopping Center retail portion and parking lot	Retail Commercial	C-1, C-2	0	MU-60	MU-60	60	97	30,492	29,596
38	Vacant, Coast Hwy/San Marlo	Vacant	Mixed Use Neighborhood	C-1	30	R-60	R-60	60	61	19,210	19,210
16A	Park Mall, 1055 Terra Nova Blvd	Vacant/Park Mall Neighborhood Shopping Center	Mixed Use Neighborhood	C-1	26	MU-50	MU-50	50	17	6,251	6,251
16B	Park Mall, 1035 Terra Nova Blvd	Park Mall Neighborhood Shopping Center	Mixed Use Neighborhood	C-1	26	MU-50	MU-50	50	44	22,869	0 ³
27A	Pacific Manor Parking Lot, Palmetto Ave	Pacifica Manor Shopping Center Parking Lot	Retail Commercial	P/C-Z, C-1	0	MU-60	MU-60/CZ	60	37	11,587	11,587
27B	Pacific Manor Parking Lot, Palmetto Ave	Pacifica Manor Shopping Center Parking Lot	Retail Commercial	P/C-Z, C-1	0	MU-60	MU-60/CZ	60	53	16,771	16,771
A	Latter Day Saints, 730 Sharp Park Rd	Religious- Latter Day Saints and Parking Lot	Public and Semi Public	P-F+	0	MU-1-40	No Change	40	52	0	0
B	Ramallah Plaza, 24800 Skyline Blvd	Shopping Center	Retail Commercial	C-1	0	MU-30	MU-30	30	11	5,009	-1,491
D	Vacant, 340 Waterford St	Vacant	Retail Commercial	C-1	0	MU-40	MU-40	40	6	2,178	2,178

Table ES-1: Sites that Require Rezoning to Meet RHNA Capacity

Site #	Location	Existing Use	Existing GP Land Use Designation	Existing Zoning Designation ¹	Existing Allowed Density (DU/A)	Proposed GP Land Use	Proposed Zoning	Proposed Density (DU/A)	Total Capacity	Gross New Commercial (Sq. Ft.)	Net New Commercial (Sq. Ft.) ²
E	Car Wash, 340 Waterford St	Car Wash	Retail Commercial	C-1	0	MU-40	MU-40	40	11	5,031	1,881
F	Oddstad Blvd	Vacant with accessory structure	Mixed Use Neighborhood	C-1	30	R-40	R-40	40	16	0	0
G	Skyline Water Tank, Skyline Blvd	Vacant/Skyline Water Tank	Utilities	P-D	0	R-40	R-40	40	55	0	0
H	Pavilion of Flowers, 801 Oceana Blvd	Commercial-Florist	Office Commercial	C-1, O	0	MU-40	MU-40	40	42	19,667	12,167
I	Vacant, Coast Hwy	Vacant	Low Density Residential	R-1/B-3	9	R-60	R-60	60	73	0	0
J	Lutheran Church, 4400 Coast Hwy	Lutheran Church	Retail Commercial/High Density Residential	C-1	30	MU-I-60	MU-I-60	60	49	0	0
A. Redesignation/Rezone Subtotal:									2,042	353,751	202,058
B. Projected ADUs									187	-	-
C. Capacity accounted for in existing 2040 General Plan buildout on sites to be rezoned									133		100,054
D. GRAND TOTAL: PROPOSED PROJECT BUILDOUT (A+B-C)									2,175		102,004
1. Zoning Designations: R-1 = Single-Family Residential; R-3 = Multiple-Family Residential; C-1 = Neighborhood Commercial; C-2 = Community Commercial; C-3 = Service Commercial; P-F Public Facilities; P-D = Planned Development; A = Agricultural; B- = Lot Overlay; CZ = Coastal Zone Combining; P = Parking District; O = Professional Office 2. Net new commercial represents existing building square footage subtracted from gross new commercial square footage.											

Source: City of Pacifica; 2024; Dyett & Bhatia, 2024

Pacifica's existing 2040 General Plan anticipated a total of 990 housing units; 2,720 people; and 1,470 additional jobs from baseline year 2020 to 2040. The Proposed Project would add an additional 2,175 housing units, 5,400 people, and 250 jobs upon buildout. When the net change expected as part of implementation of the Proposed Project from years 2023-2031 is added to this growth, citywide buildout in 2040 is expected to include 17,685 housing units; 46,450 people; and 7,560 jobs, shown in Table ES-2.

Table ES-2: Population, Housing Units and Jobs and Buildout

	<i>2040 General Plan Baseline (2020) ¹</i>	<i>2040 General Plan Net Change²</i>	<i>Previous General Plan Buildout (2040) ³</i>	<i>Proposed Project Net Change⁴</i>	<i>New General Plan Buildout (2040)⁵</i>
Housing Units	14,520	990	15,510	2,175	17,685
Population	38,330	2,720	41,050	5,400	46,450
Non-Residential Square Feet	2,054,000	620,300	2,675,300	102,000	2,777,300
Jobs	5,840	1,470	7,310	250	7,560

¹ C/CAG2040 Travel Demand Model estimates are used for 2020 estimates of jobs by sector. Existing non-residential square feet is based on San Mateo County Assessor data, and does not include schools or other public facilities. Housing units are from the 2020 DOF Population and Housing Estimates, Table E-5.

² Net new development for the existing 2040 General Plan assumed the following job generation ratios by land use classification: 400 s.f./job in Mixed Use, Retail, Office/Commercial, and Visitor-Serving Commercial classifications; 800 s.f./job in Service Commercial and Public/Institutional classifications; and 1,200 s.f./job in Low Intensity Visitor-Serving Commercial.

³ Numbers may not add up due to rounding.

⁴ Net new development for the Proposed Project uses job generation ratios as described in footnote 2. Population assumes 2.58 people per household and housing vacancy rate of 3.8% (California Department of Finance, 2024)

⁵ Numbers may not add up due to rounding

Source: San Mateo County Assessor's Office, 2019; ABAG, 2018; City of Pacifica, 2022; Dyett & Bhatia, 2024.

Alternatives to the Proposed Project

This section is provided consistent with CEQA Guidelines which state that the EIR needs to examine in detail only a reasonable range of alternatives that the lead agency determines could feasibly attain most of the basic objectives of the project. Further, the EIR should identify any alternatives that were considered by the lead agency but were rejected and briefly explain the reasons underlying the lead agency's determination. Among factors used to eliminate alternatives from detailed consideration in the EIR includes the alternative's failure to meet most of the basic project objectives or inability to avoid significant environmental effects (CEQA Guidelines 15126.6(c)).

The alternatives described in this EIR include the substantial proposals (Alternative 1: No Project Alternative and Alternative 2: High Density Shopping Centers) considered by the City of Pacifica during the alternatives stage of the planning process.

ALTERNATIVE 1: NO PROJECT ALTERNATIVE

Consistent with Section 15126.6(e)(2) of the CEQA Guidelines, the No Project Alternative represents what would be reasonably expected to occur in the foreseeable future if the Proposed Project were not implemented. Under this scenario, implementation of the existing Pacifica General Plan 2040 would continue, excluding the implementation of Program HE-I-1 which is Proposed Project's General Plan Amendments and Rezoning Program and Objective Development Standards. Under this Alternative, there would be no changes to the current zoning and General Plan land use designations (see **Figure 4-1**) in order for the City to accommodate its share of regional housing. The No Project Alternative is infeasible, as it would not meet the project objective of achieving the RHNA and would not be compliant with State law. However, the alternatives analysis will still include and assess the No Project Alternative.

ALTERNATIVE 2: HIGH DENSITY SHOPPING CENTERS ALTERNATIVES

In order to reduce the Proposed Project's significant and unavoidable impact on vehicle miles traveled (VMT), the High Density Shopping Centers Alternative was designed. This Alternative aims to focus housing within Pacifica's existing commercial centers and promote a more intense mixed-use development pattern. The Alternative would modify objective development standards to increase density and heights on parcels located in the Linda Mar, Fairmont, Brentwood, Pacifica Manor, and Park Mall shopping centers, and decrease the amount of development on largely vacant sites, including the Caltrans right-of-way to the northeast, and the area between Reina Del Mar Ave and Rockaway Beach Ave. Alternative 2 would still contain approximately the same amount of residential development as the Proposed Project, but less commercial development.

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The No Project Alternative reduces the greatest number of environmental impacts. Since the CEQA guidelines require another environmentally superior alternative other than the No Project Alternative to be identified, the High Density Shopping Center Alternative would be the environmentally superior alternative. However, the Alternative does not meet the Project's objective of reflecting community priorities that value coastal views and scenic vistas.

Areas of Known Controversy

Section 15123 of the State CEQA Guidelines states that an EIR shall identify areas of controversy known to the lead agency, including issues raised by the agency and the public during the scoping process. The issues listed below have been identified for the Project and may be controversial:

- Biological resources
- Aesthetics and impacts to scenic vistas/proximity to Highway 1
- Noise, particularly from construction
- Transportation and evacuation
- Geology, soils, and seismicity, including steep slopes
- Wildfires
- Utilities, particularly infiltration of water in sewage

In addition, the lead agency received comment letters from three public agencies during the 30-day public review period in response to the NOP. In general, these comment letters recommended that the proposed General Plan update take into consideration potential impacts to the following environmental resources: multimodal transportation planning; biological resources, including lake and streambed alteration, birds and raptors, and other special status species; and requirements of tribal consultation. Nine letters from individuals were received, the topics of which are described in bullets above.

Significant and Unavoidable Impacts

State CEQA Guidelines Section 15126 requires that an EIR describe any significant impacts that cannot be avoided, even with implementation of feasible mitigation measures. As indicated in Chapter 3, Environmental Setting, Impacts, and Mitigation Measures, of this Draft EIR, the Project would result in significant unavoidable impacts associated with greenhouse gas emissions and transportation. The significant and unavoidable impacts are listed below and summarized in Chapter 5, Other CEQA Considerations:

GREENHOUSE GAS EMISSIONS

Impact 3.5-1: Development under the Proposed Project would generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

Impact 3.5-2: Development under the Proposed Project would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

TRANSPORTATION

Impact 3.12-2: Implementation of the Proposed Project would conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).

Impacts Summary

Table ES-3: Summary of Impacts and Mitigation Measures presents the summary of the significant impacts of the Proposed Project identified in the EIR and the Proposed Project mitigation measures that reduce these impacts. Detailed discussions of the impacts and proposed policies that would reduce impacts are in Chapter 3.

Table ES-3: Summary of Impacts and Mitigation Measures

<i>Impact</i>	<i>Mitigation Measures</i>	<i>Significance before Mitigation</i>	<i>Significance after Mitigation</i>
3.1 Aesthetics			
3.1-1 Implementation of the Proposed Project would not have a substantial adverse effect on scenic vistas.	None required	Less than Significant	N/A
3.1-2 Implementation of the Proposed Project would not substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway.	None required	Less than Significant	N/A
3.1-3 Implementation of the Proposed Project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings in a non-urbanized area or conflict with applicable zoning and other regulations governing scenic quality in an urbanized area.	None required	Less than Significant	N/A
3.1-4 Implementation of the Proposed Project would not create new sources of substantial light or glare that could adversely affect day or nighttime views in the area.	None required	Less than Significant	N/A
3.2 Air Quality			
3.2-1: Implementation of the Proposed Project would not conflict with or obstruct implementation of the applicable air quality plan.	None required	Less than Significant	N/A

Table ES-3: Summary of Impacts and Mitigation Measures

<i>Impact</i>	<i>Mitigation Measures</i>	<i>Significance before Mitigation</i>	<i>Significance after Mitigation</i>
3.2-2: Implementation of the Proposed Project would not result in a cumulatively considerable net increase in any criteria pollutant for which the project region is classified as a nonattainment area under an applicable federal or state ambient air quality standard.	MM-AQ-1: Prepare Project-level Construction Emissions Assessment. The City shall require new development projects to submit a quantitative project-level construction criteria air pollutant and toxic air contaminant emissions analysis prior to the start of construction activities that shows project construction activities would not exceed BAAQMD project-level thresholds of significance to the satisfaction of the City. The analysis may rely on BAAQMD construction screening criteria to demonstrate that a detailed assessment of criteria air pollutant and toxic air contaminant construction emissions is not required for the project. If the project does not satisfy all BAAQMD construction screening criteria, the analysis shall estimate and compare construction criteria air pollutant and toxic air contaminant emissions against the project-level thresholds of significance maintained by BAAQMD and, if emissions are	Less than Significant with Mitigation Incorporated	Less than Significant

Table ES-3: Summary of Impacts and Mitigation Measures

<i>Impact</i>	<i>Mitigation Measures</i>	<i>Significance before Mitigation</i>	<i>Significance after Mitigation</i>
	shown to be above BAAQMD thresholds, then the project must implement measures to reduce emissions below BAAQMD thresholds. Mitigation measures to reduce emissions could include, but are not limited to: a) Watering exposed surfaces at a frequency adequate to maintain a minimum soil moisture content of 12 percent, as verified by moisture probe or lab sampling; b) Suspending excavation, grading, and/or demolition activities when average wind speeds exceed 20 miles per hour; c) Selection of specific construction equipment (e.g., specialized pieces of equipment with smaller engines or equipment that will be more efficient and reduce engine runtime);		

Table ES-3: Summary of Impacts and Mitigation Measures

<i>Impact</i>	<i>Mitigation Measures</i>	<i>Significance before Mitigation</i>	<i>Significance after Mitigation</i>
	d) Installing wind breaks that have a maximum 50 percent air porosity; e) Restoring disturbed areas with vegetative ground cover as soon as possible; f) Limiting simultaneous ground-disturbing activities in the same area at any one time (e.g., excavation and grading); g) Scheduling/phasing activities to reduce the amount of disturbed surface area at any one time; h) Installing wheel washers to wash truck and equipment tires prior to leaving the site; i) Minimizing idling time of diesel-powered construction equipment to no more than two minutes or the shortest time interval permitted by manufacturer's specifications and specific working conditions;		

Table ES-3: Summary of Impacts and Mitigation Measures

<i>Impact</i>	<i>Mitigation Measures</i>	<i>Significance before Mitigation</i>	<i>Significance after Mitigation</i>
	j) Requiring equipment to use alternative fuel sources (e.g., electric-powered and liquefied or compressed natural gas), meet cleaner emission standards (e.g., U.S. EPA Tier IV Final emissions standards for equipment greater than 50-horsepower), and/or utilizing added exhaust devices (e.g., Level 3 Diesel Particular Filter); k) Requiring that all construction equipment, diesel trucks, and generators be equipped with Best Available Control Technology for emission reductions of NOx and PM; l) Requiring all contractors use equipment that meets CARB's most recent certification standard for off-road heavy-duty diesel engines; and m) Applying coatings with a volatile organic compound (VOC) that exceeds the current regulatory		

Table ES-3: Summary of Impacts and Mitigation Measures

<i>Impact</i>	<i>Mitigation Measures</i>	<i>Significance before Mitigation</i>	<i>Significance after Mitigation</i>
	requirements set forth in BAAQMD regulation 8, Rule 3 (Architectural Coatings).		
3.2-3: Implementation of the Proposed Project would not expose sensitive receptors to substantial pollutant concentrations.	MM-AQ-1: Prepare Construction Assessment. Project-level Emissions MM-AQ-2: Review Air Quality Risks to New Housing Sites. The City shall require new residential development projects to conduct a screening analysis in accordance with the Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines. Projects must also review and identify, using the BAAQMD's publicly available Stationary Source Screening Map or another standard methodology (e.g., BAAQMD public records request), permitted stationary sources within 1,000 feet of the project that may result in risks and hazards to new receptors. If screening-level information indicates potential stationary source risks and hazards would exceed the BAAQMD's thresholds, the project applicant shall: 1)	Less than Significant with Mitigation Incorporated	Less than Significant

Table ES-3: Summary of Impacts and Mitigation Measures

<i>Impact</i>	<i>Mitigation Measures</i>	<i>Significance before Mitigation</i>	<i>Significance after Mitigation</i>
	incorporate site and building design measures into the project that reduce exposure to pollutants as to not exceed BAAQMD thresholds for new receptors; or 2) conduct refined, site-specific modeling, using the latest information and guidance from the BAAQMD, demonstrating sources risks and hazards would not exceed BAAQMD thresholds for new receptors. Site and building design measures that may reduce potential exposure to pollutants would include, but are not limited to, buffering/increasing the distance between sources and receptors, designing the site to limit exposure to the highest pollutant concentrations, and incorporating enhanced filter systems into heating, ventilation, and air conditioning equipment. MM-AQ-3: Exposure to Air Pollution (Toxic Air Contaminants). Mitigation Measure AQ-3 would apply if the project involves any		

Table ES-3: Summary of Impacts and Mitigation Measures

<i>Impact</i>	<i>Mitigation Measures</i>	<i>Significance before Mitigation</i>	<i>Significance after Mitigation</i>
	residential uses (new dwelling units, excluding accessory dwelling units); and The project is located within 500 feet (or other distance as specified below) of one or more of the following sources of air pollution: • Freeway; • Roadway with significant traffic (at least 10,000 vehicles per day); • Railyards or rail lines using diesel locomotives; and The project exceeds the health risk screening criteria after a screening analysis is conducted in accordance with the Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines. If the above three criteria are met, the following reduction measures are required. a) Health Risk Reduction Measures		

Table ES-3: Summary of Impacts and Mitigation Measures

<i>Impact</i>	<i>Mitigation Measures</i>	<i>Significance before Mitigation</i>	<i>Significance after Mitigation</i>
	<u>Requirement:</u> The Project applicant shall incorporate appropriate measures into the project design in order to reduce the potential health risk due to exposure of toxic air contaminants. The project applicant shall choose one of the following methods: i. The project applicant shall retain a qualified air quality consultant to prepare a Health Risk Assessment (HRA) in accordance with California Air Resources Board (CARB) and Office of Environmental Health and Hazard Assessment requirements to determine the health risk of exposure of project residents/occupants/users to air pollutants. The HRA shall be submitted to the City for review and approval. If the HRA concludes that the health risk is at or below acceptable levels, then health risk reduction measures are not required. If the HRA		

Table ES-3: Summary of Impacts and Mitigation Measures

<i>Impact</i>	<i>Mitigation Measures</i>	<i>Significance before Mitigation</i>	<i>Significance after Mitigation</i>
	concludes that the health risk exceeds acceptable levels, health risk reduction measures shall be identified to reduce the health risk to acceptable levels. Identified risk reduction measures shall be submitted to the City for review and approval and be included on the project drawings submitted for the construction-related permit or on other documentation submitted to the City. The approved risk reduction measures shall be implemented during construction and/or operations as applicable. -OR- ii. The project applicant shall incorporate health risk reduction measures, including but not limited to the following measures detailed below. The project applicant must retain a qualified air quality consultant to conclude that such chosen measures		

Table ES-3: Summary of Impacts and Mitigation Measures

<i>Impact</i>	<i>Mitigation Measures</i>	<i>Significance before Mitigation</i>	<i>Significance after Mitigation</i>
	shall reduce the health risk to acceptable levels. These features shall be submitted to the City for review and approval and be included on the project drawings submitted for the construction-related permit or on other documentation submitted to the City: a. Installation of air filtration to reduce cancer risks and Particulate Matter (PM) exposure for residents and other sensitive populations in the project that are in close proximity to sources of air pollution. Air filter devices shall be rated MERV-13 or higher. As part of implementing this measure, an ongoing maintenance plan for the building's HVAC air filtration system shall be required. b. Where appropriate, install passive		

Table ES-3: Summary of Impacts and Mitigation Measures

<i>Impact</i>	<i>Mitigation Measures</i>	<i>Significance before Mitigation</i>	<i>Significance after Mitigation</i>
	electrostatic filtering systems, especially those with low air velocities (i.e., 1 mph). c. Phasing of residential developments when proposed within 500 feet of freeways such that homes nearest the freeway are built last, if feasible. d. The project shall be designed to locate sensitive receptors as far away as feasible from the source(s) of air pollution. Operable windows, balconies, and building air intakes shall be located as far away from these sources as feasible. e. Sensitive receptors shall be located on the upper floors of buildings, if feasible. f. Planting trees and/or vegetation between sensitive receptors and pollution source, if feasible. Trees that are best suited to trapping		

Table ES-3: Summary of Impacts and Mitigation Measures

<i>Impact</i>	<i>Mitigation Measures</i>	<i>Significance before Mitigation</i>	<i>Significance after Mitigation</i>
	PM shall be planted, including one or more of the following: Pine (<i>Pinus nigra</i> var. <i>maritima</i>), Cypress (<i>X Cupressocyparis leylandii</i>), Hybrid poplar (<i>Populus deltoids</i> <i>X trichocarpa</i>), and Redwood (<i>Sequoia sempervirens</i>). g. Sensitive receptors shall be located as far away from truck activity areas, such as loading docks and delivery areas, as feasible. h. Existing and new diesel generators shall meet CARB's Tier 4 emission standards, if feasible. i. Emissions from diesel trucks shall be reduced through implementing the following measures, if feasible: i. Installing electrical hook-ups for diesel trucks at loading docks.		

Table ES-3: Summary of Impacts and Mitigation Measures

<i>Impact</i>	<i>Mitigation Measures</i>	<i>Significance before Mitigation</i>	<i>Significance after Mitigation</i>
	ii. Requiring trucks to use Transportation Refrigeration Units (TRUs) that meet Tier 4 emission standards. iii. Requiring truck-intensive projects to use advanced exhaust technology (e.g., hybrid) or alternative fuels. iv. Prohibiting trucks from idling for more than two minutes. v. Establishing truck routes to avoid sensitive receptors in the project. A truck route program, along with truck calming, parking, and delivery restrictions, shall be implemented. b) Maintenance of Health Risk Reduction Measures		

Table ES-3: Summary of Impacts and Mitigation Measures

<i>Impact</i>	<i>Mitigation Measures</i>	<i>Significance before Mitigation</i>	<i>Significance after Mitigation</i>
	<u>Requirement:</u> The project applicant shall maintain, repair, and/or replace installed health risk reduction measures, including but not limited to the HVAC system (if applicable), on an ongoing and as-needed basis. Prior to occupancy, the project applicant shall prepare and then distribute to the building manager/operator an operation and maintenance manual for the HVAC system and filter including the maintenance and replacement schedule for the filter.		
3.3 Biological Resources			
3.3-1 Implementation of the Proposed Project would not have a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.	None required	Less than Significant	N/A
3.3-2 Implementation of the Proposed Project would not have a substantial adverse effect	None required	Less than Significant	N/A

Table ES-3: Summary of Impacts and Mitigation Measures

<i>Impact</i>	<i>Mitigation Measures</i>	<i>Significance before Mitigation</i>	<i>Significance after Mitigation</i>
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.			
3.3-3 Implementation of the Proposed Project would not have a substantial adverse effect on federally protected wetlands, as defined by Section 404 of the Clean Water Act (including, but not limited to, marshes, vernal pools, coastal areas, etc.) through direct removal, filling, hydrological interruption, or other means.	None required	Less than Significant	N/A
3.3-4 Implementation of the Proposed Project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.	None required	Less than Significant	N/A
3.3-5 Implementation of the Proposed Project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	None required	Less than Significant	N/A
3.3-6 Implementation of the Proposed Project would not conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other	None required	Less than Significant	N/A

Table ES-3: Summary of Impacts and Mitigation Measures

<i>Impact</i>	<i>Mitigation Measures</i>	<i>Significance before Mitigation</i>	<i>Significance after Mitigation</i>
approved local, regional, or State habitat conservation plan. (Less than Significant)			
3.4 Cultural and Tribal Resources			
3.4-1 Implementation of the Proposed Project would not cause a substantial adverse change in the significance of a historical resource, as defined as physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historic resource would be materially impaired (Guidelines Section 15064.5).	None required	Less than Significant	N/A
3.4-2 Implementation of the Proposed Project would not cause an adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5.	MM-CUL-1: Conduct Cultural Resources Awareness Training. Prior to the start of any ground disturbance or construction activities, the developer shall retain a qualified professional archaeologist to conduct cultural resource awareness training for construction personnel. This training shall include an overview of what cultural resources are and why they are important, archaeological terms (such as site, feature, deposit), project site history, types of cultural resources likely to be uncovered	Less than Significant with Mitigation Incorporated	Less than Significant

Table ES-3: Summary of Impacts and Mitigation Measures

<i>Impact</i>	<i>Mitigation Measures</i>	<i>Significance before Mitigation</i>	<i>Significance after Mitigation</i>
	during excavation, laws that protect cultural resources, and the unanticipated discovery protocol.		
3.4-3 Implementation of the Proposed Project would not have the potential to disturb human remains, including those interred outside of formal cemeteries.	MM-CUL-1: Conduct Cultural Resources Awareness Training.	Less than Significant with Mitigation Incorporated	Less than Significant
3.4-4 Implementation of the Proposed Project would not cause an 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 California Register of Historical Resources, 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	MM-CUL-1: Conduct Cultural Resources Awareness Training.	Less than Significant with Mitigation Incorporated	Less than Significant

Table ES-3: Summary of Impacts and Mitigation Measures

<i>Impact</i>	<i>Mitigation Measures</i>	<i>Significance before Mitigation</i>	<i>Significance after Mitigation</i>
consider the significance of the resource to a California Native American tribe			
3.5 Energy and Greenhouse Gases			
3.5-1 Development under the Proposed Project would generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.	MM-GHG-1: For new residential and commercial development, require installation of the electric vehicle recharging station network and other alternative fuel vehicle support infrastructure and adopt requirements for electric vehicle parking in new developments, consistent with Title 24 requirements, with the goal of increasing electric vehicle ownership by 20 percent. MM-GHG-2: Require installation of photovoltaic systems in new single family residential, multifamily residential, and commercial to increase solar capacity per the requirements of State law, with a target of an equivalent of 15 percent of projected electricity by 2040. Photovoltaic panel installation is required for new low-rise	Significant and Unavoidable with Mitigation Incorporated	Significant and Unavoidable.

Table ES-3: Summary of Impacts and Mitigation Measures

<i>Impact</i>	<i>Mitigation Measures</i>	<i>Significance before Mitigation</i>	<i>Significance after Mitigation</i>
	residential buildings which include single-family dwellings, and multi-family dwellings with three habitable stories or less pursuant to California Energy Code section 150.1.c.14. Photovoltaic panel installation is also required for new nonresidential buildings with three habitable stories or fewer, other than health care facilities; hotel/motel occupancies; and high-rise multi-family buildings with 10 habitable stories or fewer, pursuant to a local amendment to the California Energy Code codified in PMC section 8-6.08. MM-GHG-3: Develop and implement a program to encourage the use of available grants for residential and commercial efficiency retrofits and voluntary cool roofing practices in new development with the goal of a 50 percent energy reduction compared to baseline in 30 percent of the total existing residential units and non-residential square feet		

Table ES-3: Summary of Impacts and Mitigation Measures

<i>Impact</i>	<i>Mitigation Measures</i>	<i>Significance before Mitigation</i>	<i>Significance after Mitigation</i>
	citywide by 2040. This measure is voluntary.		
3.5-2 Development under the Proposed Project would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.	See Mitigation Measures MM-GHG-1, MM-GHG-2, and MM-GHG-3 under Impact 3.5-1.	Significant and Unavoidable with Mitigation Incorporated	Significant and Unavoidable.
3.5-3 Implementation of the Proposed Project would not cause wasteful, inefficient, and unnecessary consumption of energy during project construction, operation, and/or maintenance.	None required	Less than Significant	N/A
3.5-4 Implementation of the Proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	None required	Less than Significant	N/A
3.6 Geology, Soils, and Seismicity			
3.6-1 Implementation of the Proposed Project would not expose residents, visitors, and employees, as well as public and private structures, to substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault; strong seismic ground shaking; seismically related ground failure, including liquefaction; or landslides.	None required	Less than Significant	N/A

Table ES-3: Summary of Impacts and Mitigation Measures

<i>Impact</i>	<i>Mitigation Measures</i>	<i>Significance before Mitigation</i>	<i>Significance after Mitigation</i>
3.6-2 Implementation of the Proposed Project would not result in substantial soil erosion or the loss of topsoil.	None required	Less than Significant	N/A
3.6-3 Implementation of the Proposed Project would not locate structures on expansive soils or on a geologic unit or soil that is unstable, or that would become unstable as a result of new development under the Proposed Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse, or create substantial risks to life or property.	None required	Less than Significant	N/A
3.6-4 Implementation of the Proposed Project would not 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.	None required	No Impact	No Impact
3.6-5 Implementation of the Proposed Project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	None required	Less than Significant	N/A
Hydrology and Water Quality			
3.7-1 Implementation of the Proposed Project would not violate any federal, state, or local water quality standards or waste discharge requirements.	None required	Less than Significant	N/A
3.7-2 Implementation of the Proposed Project would not substantially deplete groundwater	None required	Less than Significant	N/A

Table ES-3: Summary of Impacts and Mitigation Measures

<i>Impact</i>	<i>Mitigation Measures</i>	<i>Significance before Mitigation</i>	<i>Significance after Mitigation</i>
supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.			
3.7-3 Implementation of the Proposed Project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces in a manner which would result in substantial erosion, siltation, or flooding on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or impede or redirect flood flows.	None required	Less than Significant	N/A
3.7-4 In flood hazard, tsunami, or seiche zones, implementation of the Proposed Project would not risk release of pollutants due to project inundation.	None required	Less than Significant	N/A
3.7-5 Implementation of the Proposed Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.	None required	Less than Significant	N/A

Table ES-3: Summary of Impacts and Mitigation Measures

<i>Impact</i>	<i>Mitigation Measures</i>	<i>Significance before Mitigation</i>	<i>Significance after Mitigation</i>
3.8 Land Use, Population, and Housing			
3.8-1 Development under the Proposed Project would not physically divide an established community.	None required	No Impact	No Impact
3.8-2 Development under the Proposed Project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.	None required	No Impact	No Impact
3.8-3 Development under the Proposed Project would not 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).	None required	Less than Significant	N/A
3.8-4 Development under the Proposed Project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.	None required	Less than Significant	N/A
3.9 Noise			
3.9-1 New development under the Proposed Project would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local	MM-NO-1: Acoustical Noise Analysis and Mitigation. Prior to the construction of sites 10, 11, 12, 18, 24, 38, and J, an acoustical noise analysis shall be prepared prior to the submittal of final tentative tract	Less than Significant with Mitigation Incorporated	Less than Significant

Table ES-3: Summary of Impacts and Mitigation Measures

<i>Impact</i>	<i>Mitigation Measures</i>	<i>Significance before Mitigation</i>	<i>Significance after Mitigation</i>
general plan or noise ordinance, or applicable standards of other agencies	maps to ensure that exterior and interior noise levels are met. The acoustical analysis shall demonstrate that the buildings have been designed to limit interior noise levels to 45 dBA CNEL and exterior noise (backyards and habitable balconies and patios) to less than 65 dBA CNEL. Individual developments shall, to the extent feasible, implement site planning techniques which include but are not limited to the following: • Increase the distance between the noise source and the receiver; • Use non-noise sensitive structures such as garages to shield noise-sensitive areas; • Orienting buildings to shield outdoor spaces from a noise source; • Individual developments shall incorporate architectural		

Table ES-3: Summary of Impacts and Mitigation Measures

<i>Impact</i>	<i>Mitigation Measures</i>	<i>Significance before Mitigation</i>	<i>Significance after Mitigation</i>
	design strategies, which reduce the exposure of noise sensitive spaces to stationary noise sources (i.e., placing bedrooms or balconies on the side of the structure facing away from noise sources). These design strategies shall be implemented based on recommendations of acoustical analysis for individual developments as required by the City to comply with City noise standards; • Individual developments shall incorporate noise barriers, walls, or other sound attenuation techniques, based on recommendations of acoustical analysis for individual developments as required by the City to comply with City noise standards; and • Elements of building construction (i.e., walls, roof, ceiling, windows, and other penetrations) shall be modified as necessary to provide sound		

Table ES-3: Summary of Impacts and Mitigation Measures

<i>Impact</i>	<i>Mitigation Measures</i>	<i>Significance before Mitigation</i>	<i>Significance after Mitigation</i>
	attenuation. This may include sealing windows, installing thicker or double-glazed windows, locating doors on the opposite side of a building from the noise source, or installing solid core doors equipped with appropriate acoustical gaskets The City shall require that the noise attenuation measures be installed and be verified as effective in meeting the 45 (interior) and 65 (exterior) dBA CNEL requirement by an acoustical engineer prior to the issuance of certificates of occupancy.		
3.9-2 Implementation of the Proposed Project would not result in a generation of excessive groundborne vibration or groundborne noise levels.	None required	Less than Significant	N/A
3.9-3 Implementation of the Proposed Project would not expose people residing or working in the project area to excessive noise levels within the vicinity of a private	None required	Less than Significant	N/A

Table ES-3: Summary of Impacts and Mitigation Measures

<i>Impact</i>	<i>Mitigation Measures</i>	<i>Significance before Mitigation</i>	<i>Significance after Mitigation</i>
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.			
3.10 Public Services and Recreation			
3.10-1 Development under the Proposed Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: fire protection, police protection, schools, parks, or other public facilities.	None required	Less than Significant	N/A
3.10-2 Development under the Proposed Project would not 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	None required	Less than Significant	N/A
3.10-3 Development under the Proposed Project would not require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.	None required	Less than Significant	N/A
3.11 Transportation			

Table ES-3: Summary of Impacts and Mitigation Measures

<i>Impact</i>	<i>Mitigation Measures</i>	<i>Significance before Mitigation</i>	<i>Significance after Mitigation</i>
3.11-1 Implementation of the Proposed Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, and bicycle and pedestrian facilities	None required	Less than Significant	N/A
3.11-2 Implementation of the Proposed Project would conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).	None available	Significant and Unavoidable	Significant and Unavoidable
3.11-3 Implementation of the Proposed Project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment)	None required	Less than Significant	N/A
3.12 Utilities and Service Systems			
3.12-1 Development under the Proposed Project would not require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.	MM-UTIL-1: Infiltration/Inflow Reductions in Rockaway Area. (I/I) Developers of any project served by the Rockaway Pump Station are required to have a study performed to determine the capacity of the pump station to serve proposed development, which study would be subject to review and approval by the City's Public Works Department. In the event that it is determined that the Rockaway	Less than Significant with Mitigation Incorporated	Less than Significant

Table ES-3: Summary of Impacts and Mitigation Measures

<i>Impact</i>	<i>Mitigation Measures</i>	<i>Significance before Mitigation</i>	<i>Significance after Mitigation</i>
	Pump Station does not have sufficient capacity to serve the proposed development, the developer must pursue one or more of the following options, to the satisfaction of the Public Works Department, to either reduce I/I or pursue alternative methods of conveyance: • Installation of systemwide upgrades to infrastructure for the purposes of eliminating sanitary sewer spills and reducing I/I. • Rerouting of sewer flows such that the development does not negatively impact the Rockaway Pump Station. • Installation of a new pump station facility. • Installation of new infrastructure improvements to contribute to the necessary reduction of I/I.		
3.12-2 Development under the Proposed Project would have sufficient water supplies available	None required	Less than Significant	N/A

Table ES-3: Summary of Impacts and Mitigation Measures

<i>Impact</i>	<i>Mitigation Measures</i>	<i>Significance before Mitigation</i>	<i>Significance after Mitigation</i>
to serve the Planning Area and reasonably foreseeable future development during normal, dry and multiple dry years.			
3.12-3 Development under the Proposed Project would not 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.	None required	Less than Significant	N/A
3.12-4 Development under the Proposed Project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.	None required	Less than Significant	N/A
3.12-5 Development under the Proposed Project would not conflict with federal, state, and local management and reduction statutes and regulations related to solid waste.	None required	Less than Significant	N/A
3.13 Wildfire			
3.13-1 Implementation of the Proposed Project would not substantially impair an adopted emergency response plan or emergency evacuation plan.	None required	Less than Significant	N/A
3.13-2 Implementation of the Proposed Project would not exacerbate wildfire risks, and thereby expose project occupants to	None required	Less than Significant	N/A

Table ES-3: Summary of Impacts and Mitigation Measures

<i>Impact</i>	<i>Mitigation Measures</i>	<i>Significance before Mitigation</i>	<i>Significance after Mitigation</i>
pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.			
3.13-3 Implementation of the Proposed Project would not 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.	None required	Less than Significant	N/A
3.13-4 Implementation of the Proposed Project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.	None required	Less than Significant	N/A

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I Introduction

This Draft Environmental Impact Report (EIR) has been prepared on behalf of the City of Pacifica (City) in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000, *et seq.*). This EIR analyzes potential environmental impacts of the adoption and implementation of the proposed City of Pacifica Housing Element Targeted General Plan Amendments and Rezoning Program (6th Cycle), referred to as the “Proposed Project.” This chapter outlines the purpose and overall approach to the preparation of the EIR. The City is the lead agency responsible for ensuring that the Proposed Project complies with CEQA. “Lead agency” is defined by Section 21067 of CEQA as “the public agency which has the principal responsibility for carrying out or approving a project which may have a significant effect upon the environment.”

I.1 Purpose of the EIR

The primary intent of CEQA is to ensure that public agency decision-makers document and consider the environmental implications of their actions in order to avoid or minimize environmental damage that could result from the implementation of a project wherever feasible, and to balance environmental, economic, and social objectives. The purpose of an EIR is to identify the significant effects on the environment of a project, to identify alternatives to the project, and to indicate the manner in which those significant effects can be mitigated or avoided (CEQA Section 21002.1).

PURPOSE

This EIR serves the following purposes:

- To satisfy CEQA requirements for analysis of environmental impacts by including a complete and comprehensive programmatic evaluation of the physical impacts of adopting and implementing the Proposed Project;
- To recommend a set of measures to mitigate any significant adverse impacts;
- To analyze a range of reasonable alternatives to the Proposed Project;
- To inform decision-makers and the public of the potential environmental impacts of the Proposed Project prior to taking action on the Proposed Project, and to assist City officials in reviewing and adopting the Proposed Project; and

- To provide a basis for the review of subsequent development projects and public improvements proposed within the city. Subsequent environmental documents may be tiered from the Final EIR.

The Proposed Project consists of a regulatory framework to accommodate the future development of the city to accommodate its RHNA, consistent with the City's Housing Element, as described in Chapter 2: Project Description. This EIR contains analysis of all potential environmental impacts expected to result from implementation of the various actions identified as part of the Proposed Project, including those that serve to avoid or minimize adverse environmental impacts. In accordance with CEQA requirements, this EIR also identifies and evaluates alternatives to the Proposed Project, including the No Project Alternative and the High Density Shopping Centers Alternative. An environmentally superior alternative is identified as part of the Alternatives analysis.

This EIR evaluates at a programmatic level the potential environmental impacts of the Proposed Project. While the Proposed Project covers actions consistent with the 6th Cycle Housing Element timeline of 2023-2031, this EIR analyzes effects to 2040 in order to be consistent with the timeline of implementation of the Pacifica General Plan planning horizon and to understand the cumulative impacts of both projects. It can be anticipated that conditions will change; however, the assumptions used are the best data and information available at the time of EIR preparation and reflect existing knowledge of patterns of development.

INTENDED USES OF THE EIR

The California Environmental Quality Act, Public Resources Code Section 21000, *et seq.* (CEQA) Guidelines (Section 15124(d)) require EIRs to identify the agencies that are expected to use the EIR in their decision-making, and the approvals for which the EIR will be used. This EIR will inform the City, in addition to other responsible agencies, persons, and the general public, of the potential environmental effects of the Proposed Project and the identified alternatives. The City will use the EIR as part of its review and approval of the Proposed Project. Other agencies that may use the EIR include local and regional agencies such as the Pacifica School District, the North County Fire Authority, San Francisco Regional Water Quality Control Board, and the Association of Bay Area Governments (ABAG); and State agencies such as the California Department of Transportation (Caltrans).

1.2 Approach and Scope of the EIR

TYPE OF EIR

This EIR is a program EIR, defined in Section 15168 of the CEQA Guidelines as: “[An EIR addressing a] series of actions that can be characterized as one large project and are related either: (1) Geographically; (2) A[s] logical parts in the chain of contemplated actions; (3) In connection with the 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 impacts which can be mitigated in similar ways.”

Program EIRs can be used as the basic, general environmental assessment for an overall program of future projects, policies, and related implementation actions, such as the Proposed Project. A program EIR has several advantages. First, it provides a basic reference document to avoid unnecessary repetition of facts or analysis in subsequent project-specific assessments. Second, it allows the lead agency to look at the broad, regional impacts of a program of actions before its adoption, and eliminates redundant or contradictory approaches to the consideration of regional and cumulative effects.

As a programmatic document, this EIR presents an assessment of the potential impacts of the Proposed Project on the 31 sites that would be redesignated and/or rezoned, shown on Figure 2-6. It does not separately evaluate subcomponents of the Proposed Project, nor does it assess project-specific impacts of potential future developments under the Proposed Project, all of which are required to comply with CEQA and/or the National Environmental Policy Act (NEPA) as applicable.

As a program EIR, the preparation of this document does not relieve the sponsors of specific projects from the responsibility of complying with the requirements of CEQA (and/or NEPA for projects requiring federal funding or approvals). As noted, individual projects are required to prepare a more precise, project-level analysis to fulfill CEQA and/or NEPA requirements. The lead agency responsible for reviewing these projects shall determine the level of review needed, and the scope of that analysis will depend on the specifics of the particular project. These projects may, however, use the discussion of impacts in this EIR as a basis of their assessment of these regional, citywide, or cumulative impacts, provided that the projects are consistent with the Proposed Project and the data and assumptions used in this EIR remain current and valid.

ENVIRONMENTAL ISSUE AREAS

Information gathered about the environmental setting is used to define relevant planning issues, determine thresholds of significance, and evaluate potential impacts. Based on the initial analysis of environmental setting and baseline conditions, and comments on the Notice of Preparation (NOP), the following issues are analyzed in this program EIR:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural and Tribal Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hydrology and Water Quality
- Land Use, Population, and Housing
- Noise

- Public Services and Recreation
- Transportation
- Utilities and Service Systems
- Wildfire

PLANNING HORIZON

For analytic purposes in this EIR, the base year is 2023, and the horizon year of 2031 represents the target year of the Proposed Project when projects and programs are anticipated to be fully implemented (the end of the 6th Housing Element cycle). However, to accurately capture the net increase in capacity and provide a buildout horizon consistent with the 2040 General Plan, this EIR describes cumulative effects to the year 2040.

ALTERNATIVES

CEQA requires EIRs to evaluate a reasonable range of alternatives to the Proposed Project that could feasibly attain most of the basic project objectives and would avoid or substantially lessen any of the significant environmental impacts. This EIR evaluates two alternatives, including a No Project Alternative, and High Density Shopping Centers Alternative. While the No Project Alternative was evaluated, this Alternative is infeasible, given that State law requires each city and county in California adopt an updated Housing Element every eight years and plan to accommodate its share of the regional housing need. The Proposed Project will create the regulatory framework to accommodate the city's regional housing need.

1.3 Planning Process and Public Involvement

NOTICE OF PREPARATION AND PUBLIC PARTICIPATION

The NOP for the EIR on the Proposed Project was submitted to the State Clearinghouse on July 11, 2023 and circulated among relevant State and local agencies, as well as to members of the public. After the first initial review period, the sites to be analyzed under the Proposed Project changed, and an additional NOP was issued and circulated on May 3, 2024. The City received a total of 3 comment letters from State public agencies and 9 comment letters from individuals during both of the NOP's 30-day review periods, which ended on June 3, 2024. The NOP and comments on the NOP received by the City are included as Appendix A of this EIR. Consistent with legal requirements and State guidance, an EIR Scoping Meeting was held via Zoom teleconference on May 22, 2024, to receive suggestions on scope and content for the EIR; solicit input on potential impacts, mitigation measures, and alternatives to consider; and consult with public agencies responsible for natural resources, other regulatory bodies, neighboring communities, and members of the public. Comments on the NOP, along with input received during public workshops and meetings over the course of the Proposed Project's process, have helped to identify the major planning and environmental issues and concerns and establish the framework of this EIR.

TRIBAL CONSULTATION (SB 18 AND AB 52)

Senate Bill (SB) 18, codified in California Government Code (CGC) Section 65352.3, requires local governments to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose of protecting, and/or mitigating impacts to cultural places prior to the adoption or amendment of a general plan. Additionally, Assembly Bill (AB) 52 requires tribal cultural resources to be addressed under CEQA and established requirements for consultation with Native American tribes as part of the CEQA process, providing both federal and non-federally recognized tribes the right to formal consultation with project lead agencies (California Public Resources Code [PRC] Section 21080.3.1). In accordance with SB 18 and AB 52, the City contacted the NAHC on July 21, 2023 to request a consultation list of tribes traditionally and culturally affiliated with the city. As of 2024, the City of Pacifica has received no formal notification requests from tribes traditionally and culturally affiliated in the area for AB 52 consultation. Upon receipt of a list of tribal contacts, the City contacted tribal representatives in August 2023, providing information about the planning process and inviting them to initiate consultation under SB 18 if desired. One response was received from the Amah Mutsun Tribal Band of San Juan Bautista, however, the response was not a formal request for tribal consultation. Correspondence with the NAHC and tribal contacts is included in Appendix B.

The record search of the NAHC Sacred Lands File (SLF) was completed and the results were positive.

DRAFT EIR REVIEW

The CEQA Guidelines establish that the public review period for a draft EIR shall be no shorter than 30 days and no longer than 60 days. The public review period for a draft EIR that has been submitted to the State Clearinghouse for review by State agencies shall be no shorter than 45 days (CCR 15105). This Draft EIR is available for review to the public and interested and affected agencies for a period of 45 days. The purpose of the review period is to obtain comments “on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided and mitigated” (CCR Section 15204). The EIR and appendices are available for public review in person at the Community Development Department located at 1800 Francisco Avenue in Pacifica, California 94044, during normal business hours of Monday, Tuesday, and Thursday from 8 am – 5 pm (except 12:30-1:30 pm); Wednesday from 8 am – 7:30 pm (except 12:30-1:30 pm); and Friday from 8 am – 1 pm. Hours exclude public holidays observed by the City of Pacifica. The EIR and appendices are also available at both libraries within the City of Pacifica: Sharp Park Library (104 Hilton Way) and Sanchez Library (1111 Terra Nova Boulevard). Or available online at <https://www.planpacific.org/project-docs>.

Please submit comments on this Draft EIR in writing or via email to:

Attn: Justin Shiu, Contract Senior Planner
City of Pacifica
170 Santa Maria Avenue
Pacifica, CA 94044
Email: planningdivision@pacificagov

After the close of the public review period, City staff and CEQA consultants will review the comments, respond to the comments received, and determine whether any changes are required to the EIR. The City Council will then consider certification of the Final EIR. Subsequent to certification of the Final EIR, the City Council may approve the Proposed Project. If the City Council approves the Proposed Project, a Notice of Determination will be filed with the State Office of Planning and Research and the Clerk of San Mateo County.

I.4 Other Relevant Plans and Environmental Studies

Plans and studies relevant to the Proposed Project include the following:

- City of Pacifica 6th Cycle Housing Element 2023-2031 (2024)
- City of Pacifica General Plan 2040 (2022)
- City of Pacifica Sharp Park Specific Plan (2022)
- County of San Mateo 2021 Multijurisdictional Local Hazard Mitigation Plan (2021)
- City of Pacifica Bicycle & Pedestrian Master Plan (2020)
- City of Pacifica Climate Action Plan (2014)
- City of Pacifica Local Coastal Land Use Plan (1980)¹

¹ The 1980 Local Coastal Land Use Plan is currently in effect. However, the City is currently in the process of updating its Local Coastal Land Use Plan. The updated plan is anticipated to be certified by the Coastal Commission in 2025.

1.5 Organization of the EIR

This Draft EIR is organized into the following chapters, plus appendices:

- ES. **Executive Summary.** Summarizes the EIR by providing an overview of the Proposed Project, the potentially significant environmental impacts that could result from the Proposed Project, the mitigation measures identified to reduce or avoid these impacts, alternatives to the Proposed Project, and identification of the environmentally superior Alternative.
- 1. **Introduction.** Introduces the purpose of the EIR, explains the EIR process and intended uses of the EIR, and describes the overall organization of this EIR.
- 2. **Project Description.** Describes in detail the Proposed Project, including its location and boundaries, purpose and objectives, and projected buildout.
- 3. **Environmental Analysis.** Analyzes the environmental impacts of the Proposed Project. Impacts are organized by major topic. Each topic area includes a description of the environmental setting, significance criteria, methodology, and potential impacts.
- 4. **Analysis of Alternatives.** Presents a reasonable range of alternatives to the Proposed Project, provides discussion of environmental impacts associated with each alternative, compares the relative impacts of each alternative to those of the Proposed Project and other alternatives, discusses the relationship of each alternative to the Proposed Project's objectives, and identifies the environmentally superior alternative.
- 5. **CEQA Required Conclusions.** Summarizes significant environmental impacts, including growth-inducing, cumulative, and significant and unavoidable impacts; significant irreversible environmental change; and impacts found not to be significant.
- 6. **List of Preparers.** Identifies the persons and organizations that contributed to the preparation of the EIR.
- 7. **Appendices.** Includes the NOP and compilation of agency and public comments received on the NOP, as well as other technical appendices including data used for environmental analysis in this EIR.

City of Pacifica

Draft Environmental Impact Report for the Housing Element GP Amendments and Rezoning Program

Chapter 1: Introduction

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2 Project Description

The project analyzed in this Environmental Impact Report (EIR) is the adopted Housing Element's (6th Cycle) Targeted General Plan Amendments, Rezoning, and Objective Development Standards Program (Proposed Project) in the City of Pacifica (City). The Proposed Project is a Housing Element program (HE-I-1) that will create the regulatory framework to accommodate the city's regional housing need within the approximately 13.5-square-mile area that encompasses the entire city. Implementation will include amendments to the City's Zoning Code and map, targeted general plan amendments, and development of objective development standards. The City is the Lead Agency for environmental review. This chapter summarizes the key components of the Proposed Project, including a description of its location and setting; an overview of the planning process and the Proposed Project's relationship to other past and ongoing planning efforts; a summary of the Proposed Project's key components; a statement of project buildout; a summary of regulatory mechanisms anticipated to implement the Proposed Project; and a description of intended uses of this EIR.

2.1 Location and Setting

REGIONAL LOCATION AND CONTEXT

Located in San Mateo County along the Pacific Ocean between San Francisco and Half Moon Bay, Pacifica has a distinct physical identity, characterized as a stretch of dramatic coastline punctuated by ridges. Its boundaries include the Ocean to the west, the crest of Sweeney Ridge and Skyline Boulevard to the east, and San Pedro Mountain to the south. Highway 1 provides a gateway to the city's narrow northern edge. Pacifica possesses a large proportion of both parks and permanent open space; about two thirds of the city is undeveloped, and nearly half is protected open space. Pacifica's clustered urban development pattern of coastal and valley neighborhoods and rugged, open ridges alternate along the length of the city. In addition to large areas of preserved open space along ridgelines, Pacifica has over six miles of coastline and beaches, offering recreation opportunities that include isolated beach experiences, outstanding fishing, surfing, tide-pooling and diving.

CITY OF PACIFICA SETTING

Pacifica is within the San Francisco-Oakland-San Jose metropolitan area, and its northern end is less than 10 miles from downtown San Francisco. The cities of Daly City, South San Francisco, and San Bruno border the city on the north and east and are developed up to city's borders. Much of the land to the southeast and south is preserved as part of the Golden Gate National Recreation Area, State and County parks, and protected San Francisco watershed areas. Rural and agricultural

land is prevalent to the south. The Pacific Ocean borders Pacifica to the west. Land west of Coast Highway, as well as the Sheldance Nursery property, is part of the Coastal Zone, subject to Pacifica's Local Coastal Land Use Plan (LCLUP) and the policies of the California Coastal Act. Pacifica's Coastal Zone comprises approximately 1,286 acres of land, or about 15 percent of the city. Access to Pacifica is primarily via Coast Highway (also known as State Route-1, "SR 1," "1," Cabrillo Highway, and Highway 1) and State Route 35 (SR 35, or Skyline Boulevard.) Pacifica's regional location and city setting is shown in Figure 2-1 and Figure 2-2.

Existing Land Uses

The Planning Area comprises 8,625 acres, or about 13.5 square miles, including all of the incorporated City of Pacifica (8,019 acres) as well as 606 acres of unincorporated land south of city limits on the slope of San Pedro Mountain. Nearly half (47 percent) of the city is preserved as open space. Most of Pacifica's rugged ridges are part of the Golden Gate National Recreation Area (GGNRA) or Sharp Park. Sharp Park Golf Course, San Pedro Valley County Park, and Pacifica State Beach represent other important public open spaces. Another 16 percent of the city is vacant or undeveloped, and five percent is agricultural. Urban uses make up 32 percent of the city, 70 percent of which is residential. Residential land is the predominant land use in the neighborhoods that occupy Pacifica's five valleys, along the coast, and in the highlands bordering Daly City and South San Francisco. Most residential land in Pacifica (90 percent) contains single-family housing, which is typical in nearly all neighborhoods. Pacifica also has 125 acres of commercial uses, including a small amount of mixed-use development. Commercial land is located at the city's shopping centers (Linda Mar, Pacific Manor, Fairmont, Eureka Square, Park Mall, Pedro Point) and at smaller shopping centers and districts at Rockaway Beach, Crespi Drive, Palmetto Avenue, and along the Highway 1 corridor.

However, the Proposed Project itself focuses on 31 sites that would be redesignated and/or rezoned, as shown in Table 2-1 and Figure 2-6. Existing land uses at these sites are primarily comprised of retail and commercial spaces, with several public and vacant parcels as well.

Transportation

Three major routes connect Pacifica to the rest of the region. State Route (SR) 1 (Coast Highway) traverses the city from north to south, connecting Pacifica to Daly City and San Francisco to the north, and to Half Moon Bay and the San Mateo County coastline to the south, and providing continuous access to the Pacifica coast. SR 35 (Skyline Boulevard) generally runs along the eastern edge of Pacifica, and is a major north-south route connecting to Santa Clara County and San Francisco. Sharp Park Road follows a southwest-northeast route through the center of Pacifica, connecting SR 1 with SR 35. It continues east of SR 35 in South San Francisco as Westborough Boulevard. Each of these major roadways intersects with I-280, an eight-lane major regional freeway on the Peninsula located between one-half and two miles from the city.

Locally, arterials such as Linda Mar Blvd, Sharp Park Rd, Palmetto Ave, and Oceana Blvd accommodate higher volumes of traffic and provide access to the state highway system. Collector streets that are intended to carry traffic from collector and minor residential streets to an arterial, include San Pedro Ave, Crespi Dr, and Gateway Dr, among others. There are also several minor residential streets throughout the city which are low-capacity streets primarily serving low density residential uses.

The San Mateo County Transit District (SamTrans) provides bus service throughout San Mateo County and into San Francisco and Palo Alto. SamTrans provides local service in Pacifica as well as service to and from BART and Caltrain stations. Bay Area Rapid Transit (BART) provides rail rapid transit to Alameda, Contra Costa, San Francisco, and San Mateo Counties. The Colma, Daly City, San Bruno, and South San Francisco BART stations are accessible to Pacifica residents via bus connections or by car. Caltrain provides commuter service over a 77-mile route between downtown San Francisco and Gilroy, through San Jose and along the San Francisco Peninsula. The San Bruno station is approximately eight miles east of Pacifica, while the South San Francisco station is approximately six miles east.

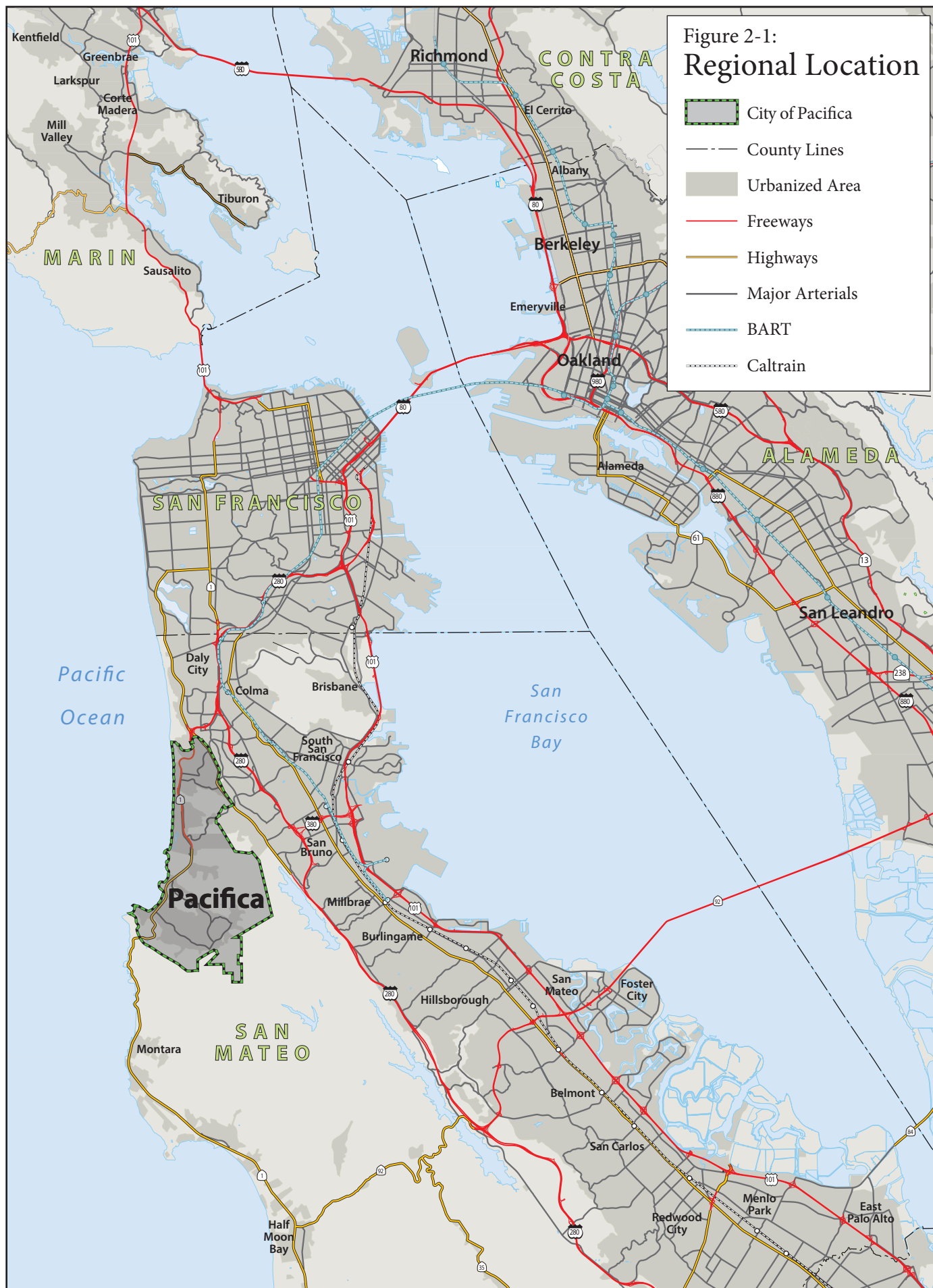
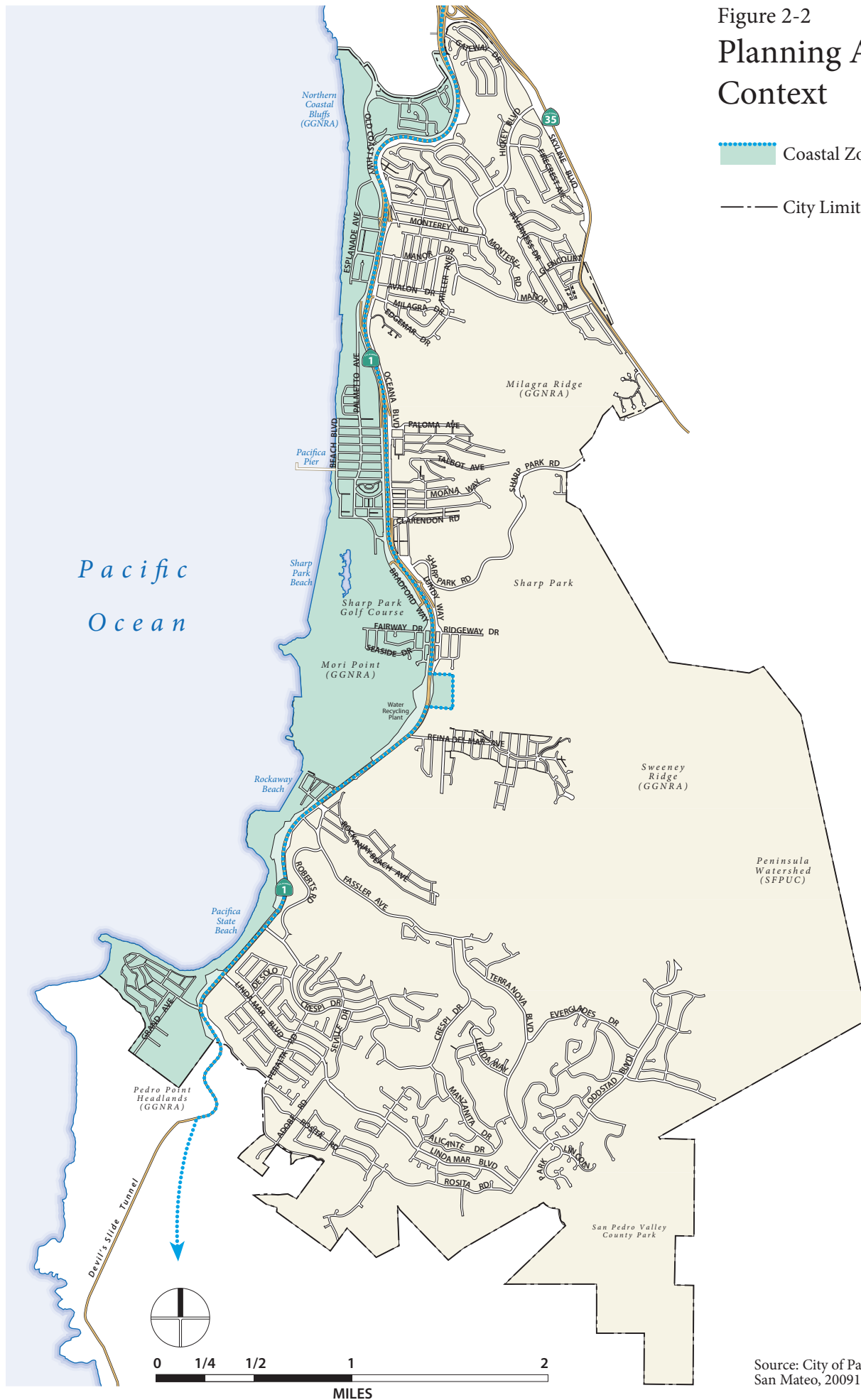


Figure 2-2
Planning Area and
Context

 Coastal Zone

 City Limits



Source: City of Pacifica, 2019; County of San Mateo, 200919; Dyett & Bhatia, 2019.

Environmental Resources and Natural Setting

Nearly half of the land in Pacifica is protected open space or park land, providing for a wide variety of plant and animal species and natural communities. In addition to large areas of preserved open space along ridgelines, Pacifica has over six miles of coastline and beaches, offering economic value and recreation opportunities that include isolated beach experiences, outstanding fishing, surfing, tide-pooling, and diving. Trails provide public access along the city's ridges and coastline. The southern and eastern portions of Pacifica have been designated as Critical Habitat for the California red-legged frog (CRLF). In 2010, the most recent designation by the United States Fish and Wildlife Service (USFWS) identified approximately 2,900 acres of CRLF Critical Habitat in Pacifica. In addition, the city's water resources are unique and numerous, and they provide important benefits to the city, including wildlife habitat, scenic natural corridors, and flood control.

As noted in the Adopted Housing Element, environmental constraints to housing development include hillside erosion, coastal erosion, and seismic hazards. Bluff and coastal erosion is commonplace along much of the Pacifica coastline which could increase with sea level rise. Landslides and slope failures have also presented serious problems in the past. Steep slopes on Mori Point, Sweeney Ridge, Cattle Hill, Gypsy Hill, and San Pedro Mountain may be at risk for slope failures, as well as portions of Pedro Point and Fairmont neighborhoods.

2.2 Planning Context and Process

The Proposed Project is the Pacifica Housing Element (6th Cycle) Targeted General Plan Amendments, Rezoning, and Objective Development Standards Program. The City of Pacifica has prepared an update to the Housing Element of the General Plan. This Housing Element covers a planning period from January 31, 2023 to January 31, 2031 (also referred to as the "6th Cycle"). The State Review Draft Housing Element was released for review on May 10, 2023 and adopted by the Pacifica City Council on January 22, 2024 (Adopted Housing Element). The document is now pending certification from the California Department of Housing and Community Development. The Adopted Housing Element is posted on the City of Pacifica website, accessible at this link: <https://www.planpacific.org/project-docs>.

The implementation of Program HE-1-1: General Plan and Zoning Amendments to Achieve RHNA (Rezoning Program), of the Housing Element is the Proposed Project for the EIR. Key project components under the Rezoning Program are summarized below.

2.3 Purpose and Objectives of the Proposed Project

Under State law, all California cities, towns, and counties are required to adopt a General Plan Housing Element which establishes housing objectives, policies, and programs in response to community housing conditions and needs. Pacifica's Sixth Cycle Housing Element has been prepared to respond to current and near-term future housing needs in the City of Pacifica and provide a framework for the community's longer-term approach to addressing its housing needs.

The Housing Element contains goals, updated information and strategic directions (programs and implementing actions) that the City of Pacifica is committed to undertaking. Program HE-I-1, General Plan and Zoning Amendments to Achieve RHNA, aims to create the regulatory framework to accommodate the Regional Housing Needs Allocation (RHNA) sites inventory and promote development of multi-family housing, including rental housing, missing middle housing, and mixed-use development. Along with rezoning specific sites in order to develop housing, the Proposed Project will also involve General Plan amendments to existing land use designations and proposed objective development standards for the proposed zoning and land use designations. As such, the Proposed Project considered land use constraints to make the production of housing more likely. It reflects the priority given in the General Plan overall and Housing Element specifically to focus development in infill locations, including existing commercial shopping centers.

PROJECT OBJECTIVES

The following are some of the specific purposes of the Proposed Project:

1. Address land use constraints to make the production of housing more likely;
2. Affirmatively further fair housing;
3. Facilitate production of affordable housing and remove constraints to housing development, which limits housing choices of households who have lower incomes and disproportionate housing needs;
4. Facilitate development of publicly owned sites, which the City will prioritize for development of housing that meets special needs;
5. Maintain consistency with the General Plan and strategically add capacity for housing in areas with existing access to services and transit;
6. Reflect the priority given in the General Plan and Housing Element to focus redevelopment in existing commercial shopping centers; and
7. Ensure compliance with State housing law(s), including demonstration of capacity to meet Pacifica's RHNA allocation.

2.4 Proposed Project Components

GENERAL PLAN AMENDMENTS AND REZONING PROGRAM

Objectives

The General Plan Amendments and Rezoning Program will create the regulatory framework to accommodate the Regional Housing Needs Allocation (RHNA) sites inventory and promote development of multi-family housing, including rental housing, missing middle housing, and mixed-use development. Along with rezoning specific sites in order to develop housing, the Proposed Project will also involve General Plan amendments to existing land use designations. As such, the Proposed Project addresses land use constraints to make the production of housing more likely. It reflects the priority given in the General Plan and Housing Element to focus development in infill locations, including existing commercial shopping centers.

General Plan Amendments and Rezoning

Pacifica's RHNA allocation for the 6th Cycle is 1,892 housing units. The City's Housing Element provides for 2,578 housing units. Of these units, 122 units would be on sites already zoned for housing at appropriate densities, 227 units are submitted/approved projects, and 187 are projected ADUs. The General Plan Amendments and Rezoning component of Program HE-I-1 will redesignate and rezone sites within the City to allow the additional 2,042 housing units. After rezoning, the total RHNA capacity results in a 36 percent surplus of the required RHNA as a buffer against uncertainty in future actual development and to address the State's No Net Loss requirement (Government Code Section 65863).

The Proposed Project also anticipates mixed-use development at some of the sites, with a total capacity of approximately 353,751 square feet of non-residential development, and a net square footage (e.g., total capacity less existing building square footage) of 202,058 square feet. Some of the Proposed Project capacity (including residential units and nonresidential square footage) on housing sites was already anticipated in the 2040 General Plan and associated Environmental Impact Report. The Proposed Project buildout accounts for the total number of housing units and nonresidential square footage on these sites beyond that previously accounted for in the 2040 General Plan and Environmental Impact Report, in addition to estimated ADU potential. As such, total Proposed Project buildout is estimated at 2,175 additional housing units, and 102,004 nonresidential square feet.

As shown in Table 2-1, the Housing Element includes an inventory of properties that are intended to be redesignated and/or rezoned under the Proposed Project in order to meet the City's RHNA allocation. These redesignated and/or rezoned properties would allow residential uses or higher density residential as standalone residential or mixed-use development to plan for the potential development of low- and moderate-income units. In addition, Figure 2-3 and Figure 2-4 show the current zoning designations and existing land uses for the sites to be redesignated and rezoned. Figure 2-5 shows all sites identified as available for housing in the Housing Element, while Figure 2-6 shows specifically the sites to be rezoned or redesignated under the Proposed Project.

Three new general plan land use designations and corresponding zones are proposed, with each type containing associated densities that match densities in the Housing Site Inventory (30, 40, 50, or 60 dwelling units/acre):

- Multifamily Residential (R-#). This use is intended for multi-family apartments.
- Mixed Use (MU-#). This use is intended for high-density mixed-use development. Allowable uses would include ground-floor retail, restaurant or personal service uses and housing or offices. Ground floor commercial uses must be constructed along the street frontage but are not required on the interior of a site.
- Mixed use Institutional (MU-I-#). This use is intended for high-density mixed-use development that includes institutional uses, such as government facilities/infrastructure, schools, religious institutions, etc.

Table 2-1: Sites that Require Rezoning to Meet RHNA Capacity

Site #	Location	Existing Use	Existing GP Land Use Designation	Existing Zoning Designation ¹	Existing Allowed Density (DU/A)	Proposed GP Land Use	Proposed Zoning	Proposed Density (DU/A)	Total Capacity	Gross New Commercial (Sq. Ft.)	Net New Commercial (Sq. Ft.) ²
2	751 Oceana	Vacant	High Density Residential	R-3	30	R-40	R-40	40	81	0	0
10	Lumberyard, 4275 Coast Hwy	Building Materials, Equipment Storage	Mixed Use Neighborhood & Open Space /Agriculture/Residential	C-2	30	MU-60	MU-60	60	49	15,246	6,238
11	Vacant, Coast Hwy	Vacant	Mixed Use Neighborhood	C-2	30	MU-60	MU-60	60	69	21,802	21,802
12	Vacant, Former Caltrans between 4300-4400 Coast Hwy	Vacant	Mixed Use Neighborhood	C-2/HPD	30	MU-60/HPD	MU-60/HPD	60	169	53,056	53,056
18	Caltrans Park and Ride, Linda Mar Blvd	Caltrans Park and Ride	Mixed Use Neighborhood	N/A	30	MU-60	MU-60	60	53	16,771	16,771
19	7 th Day Adventist, 533 Hickey Blvd	Religious- Filipino 7 th Day Adventist	Low Density Residential	P-D	15	MU-I-30	MU-I-30	30	15	0	0
20	Public Works Corp Yard, 155 Milagra Dr	Pacifica Public Works Corp Yard	Retail Commercial	C-2	0	MU-I-60	MU-I-60	60	39	0	0
21	Oceana HS, 401 Paloma Ave	Oceana HS; vacant portion	Public and Semi Public	R-1/B-1	0	R-40	R-40	40	178	0	0
22	Terra Nova HS, 1450 Terra Nova Blvd	Terra Nova HS; vacant portion	Public and Semi Public	R-1	0	R-40	R-40	40	129	0	0
23	Sanchez Art Center, 1220 Linda Mar Blvd	Institutional- Art Center	Public and Semi Public/Park	A/B-5	0	MU-I-40	No Change	40	130	0	0
24	Sanchez Library, 1111 Terra Nova Blvd	Institutional- Library	Public and Semi Public	C-1	0	MU-I-50	MU-I-50	50	65	0	0
25	Caltrans ROW, Skyline Blvd	Vacant ROW	N/A	N/A	N/A	R-40	R-40	40	165	0	0
28	Fairmont Shopping Center, 777 Hickey Blvd	Fairmont Shopping Center retail portion and parking lot	Retail Commercial	P-D	0	MU-50	MU-50	50	41	15,246	9,605

Table 2-1: Sites that Require Rezoning to Meet RHNA Capacity

Site #	Location	Existing Use	Existing GP Land Use Designation	Existing Zoning Designation ¹	Existing Allowed Density (DU/A)	Proposed GP Land Use	Proposed Zoning	Proposed Density (DU/A)	Total Capacity	Gross New Commercial (Sq. Ft.)	Net New Commercial (Sq. Ft.) ²
29	Linda Mar Shopping Center, 500 Linda Mar Blvd	Linda Mar Shopping Center retail portion and parking lot	Low Density Residential/Retail Commercial	C-1, C-2	0	MU-50	MU-50	50	182	68,607	0 ³
30	Builders Exchange, 520 San Pedro Ave	General commercial-Builder's Exchange	Retail Commercial	C-2/C-Z	0	MU-30	MU-30/CZ	30	23	10,454	-8,892
31	Ace Hardware, 560 San Pedro Ave	General commercial- Ace	Retail Commercial	C-2/C-Z	0	MU-30	MU-30/CZ	30	30	13,504	5,322
32	Brentwood Shopping Center, Oceana/Manor	Brentwood Shopping Center retail portion and parking lot	Retail Commercial	C-1, C-2	0	MU-60	MU-60	60	97	30,492	29,596
38	Vacant, Coast Hwy/San Marlo	Vacant	Mixed Use Neighborhood	C-1	30	R-60	R-60	60	61	19,210	19,210
16A	Park Mall, 1055 Terra Nova Blvd	Vacant/Park Mall Neighborhood Shopping Center	Mixed Use Neighborhood	C-1	26	MU-50	MU-50	50	17	6,251	6,251
16B	Park Mall, 1035 Terra Nova Blvd	Park Mall Neighborhood Shopping Center	Mixed Use Neighborhood	C-1	26	MU-50	MU-50	50	44	22,869	0 ³
27A	Pacific Manor Parking Lot, Palmetto Ave	Pacific Manor Shopping Center Parking Lot	Retail Commercial	P/C-Z, C-1	0	MU-60	MU-60/CZ	60	37	11,587	11,587
27B	Pacific Manor Parking Lot, Palmetto Ave	Pacific Manor Shopping Center Parking Lot	Retail Commercial	P/C-Z, C-1	0	MU-60	MU-60/CZ	60	53	16,771	16,771
A	Latter Day Saints, 730 Sharp Park Rd	Religious- Latter Day Saints and Parking Lot	Public and Semi Public	P-F+	0	MU-1-40	No Change	40	52	0	0
B	Ramallah Plaza, 24800 Skyline Blvd	Shopping Center	Retail Commercial	C-1	0	MU-30	MU-30	30	11	5,009	-1,491

Table 2-1: Sites that Require Rezoning to Meet RHNA Capacity

Site #	Location	Existing Use	Existing GP Land Use Designation	Existing Zoning Designation ¹	Existing Allowed Density (DU/A)	Proposed GP Land Use	Proposed Zoning	Proposed Density (DU/A)	Total Capacity	Gross New Commercial (Sq. Ft.)	Net New Commercial (Sq. Ft.) ²
D	Vacant, 340 Waterford St	Vacant	Retail Commercial	C-I	0	MU-40	MU-40	40	6	2,178	2,178
E	Car Wash, 340 Waterford St	Car Wash	Retail Commercial	C-I	0	MU-40	MU-40	40	11	5,031	1,881
F	Oddstad Blvd	Vacant with accessory structure	Mixed Use Neighborhood	C-I	30	R-40	R-40	40	16	0	0
G	Skyline Water Tank, Skyline Blvd	Vacant/Skyline Water Tank	Utilities	P-D	0	R-40	R-40	40	55	0	0
H	Pavilion of Flowers, 801 Oceana Blvd	Commercial-Florist	Office Commercial	C-I, O	0	MU-40	MU-40	40	42	19,667	12,167
I	Vacant, Coast Hwy	Vacant	Low Density Residential	R-1/B-3	9	R-60	R-60	60	73	0	0
J	Lutheran Church, 4400 Coast Hwy	Lutheran Church	Retail Commercial/High Density Residential	C-I	30	MU-I-60	MU-I-60	60	49	0	0
A. Redesignation/Rezone Subtotal:									2,042	353,751	202,058
B. Projected ADUs									187	-	-
C. Capacity accounted for in existing 2040 General Plan buildout on sites to be rezoned									133		100,054
D. GRAND TOTAL: PROPOSED PROJECT BUILDOUT (A+B-C)									2,175		102,004
1. Zoning Designations: R-1 = Single-Family Residential; R-3 = Multiple-Family Residential; C-1 = Neighborhood Commercial; C-2 = Community Commercial; C-3 = Service Commercial; P-F Public Facilities; P-D = Planned Development; A = Agricultural; B- = Lot Overlay; CZ = Coastal Zone Combining; P = Parking District; O = Professional Office											
2. Net new commercial represents existing building square footage subtracted from gross new commercial square footage.											

Source: City of Pacifica; 2024; Dyett & Bhatia, 2024

To accurately capture the net increase in capacity and provide a buildout horizon consistent with the 2040 General Plan, this EIR describes cumulative effects to the year 2040. Pacifica’s existing 2040 General Plan anticipated a total of 990 housing units; 2,720 people; and 1,470 additional jobs from baseline year 2020 to 2040. When the net change expected as part of implementation of the Proposed Project from years 2023-2031 is added to this growth, citywide buildout at 2040 is expected to include 17,685 housing units; 46,450 people; and 7,560 jobs.

Table 2-2: Population, Housing Units and Jobs and Buildout

	<i>2040 General Plan Baseline (2020) ¹</i>	<i>2040 General Plan Net Change²</i>	<i>Previous General Plan Buildout (2040) ³</i>	<i>Proposed Project Net Change⁴</i>	<i>New General Plan Buildout (2040)⁵</i>
Housing Units	14,520	990	15,510	2,175	17,685
Population	38,330	2,720	41,050	5,400	46,450
Non-Residential Square Feet	2,054,000	620,300	2,675,300	102,000	2,777,300
Jobs	5,840	1,470	7,310	250	7,560

1 C/CAG2040 Travel Demand Model estimates are used for 2020 estimates of jobs by sector. Existing non-residential square feet is based on San Mateo County Assessor data, and does not include schools or other public facilities. Housing units are from the 2020 DOF Population and Housing Estimates, Table E-5.

2 Net new development for the existing 2040 General Plan assumed the following job generation ratios by land use classification: 400 s.f./job in Mixed Use, Retail, Office/Commercial, and Visitor-Serving Commercial classifications; 800 s.f./job in Service Commercial and Public/Institutional classifications; and 1,200 s.f./job in Low Intensity Visitor-Serving Commercial.

3 Numbers may not add up due to rounding.

4. Net new development for the Proposed Project uses job generation ratios as described in footnote 2. Population assumes 2.58 people per household and housing vacancy rate of 3.8% (California Department of Finance, 2024)

5 Numbers may not add up due to rounding

Source: San Mateo County Assessor's Office, 2019; ABAG, 2018; City of Pacifica, 2022; Dyett & Bhatia, 2024.

Objective Development Standards

State law requires adoption of objective development standards for multifamily sites that enable ministerial project review and approval. The Objective Development Standards component of Program HE-I-1 will create or revise objective development standards (“ODS”) applicable to the sites identified to achieve Housing Element densities and meet the City’s RHNA. The Proposed Project creates six ODS addressing the following: height; setbacks from property lines; lot coverage; floor area ratio (“FAR”); open space per dwelling unit; and, off-street parking. In many cases, the objective design standards increase allowable height and lot coverage, decrease minimum usable open space, and decrease parking requirements from the existing zone. The ODS for each proposed zoning designation are described in **Table 2-3**, below.

Table 2-3: Objective Development Standards

<i>Zone</i>	<i>Min. Setback</i>	<i>Max. Lot Coverage</i>	<i>FAR</i>	<i>Max. Height</i>	<i>Min. Usable Open Space/DU</i>	<i>Min. Parking</i>	<i>Footnotes Applicable</i>
R-30	Front: 15 ft Sides: 10 ft Rear: 10 ft Except that a minimum 30 ft setback shall be required from any property line abutting a zone where single-family residential use is a permitted use	60%	N/A	40 ft	220 sf/du (160 sf/du common, 60 sf/du private); 6 ftx 10 ft minimum dimension for private open space	1 space/studio 1 space/1 BR 2 spaces/ 2+ BR 1 guest space/4 units, excluding studio and 1 BR units	1: Sites with polygons may propose development (i.e. lot coverage) of up to 100% of the area enclosed with a polygon, although compliance with all other standards shall be required. 2: Upper story setbacks per Sharp Park Specific Plan (SPSP). 4: Where an ODS conflicts with the HPD and B lot zone standards, the HPD and B lot zoning standards will apply. 6: Any building located on a corner shall include a design consistent with Sharp Park Specific Plan Policy 5-I-47.
R-40	Front: 15 ft Sides: 5 ft Rear: 20 ft Except that a minimum 30 ft setback shall be required from any property line abutting a zone where single-family residential use is a permitted use	60%	N/A	45 ft Except that a maximum height of 40 feet shall apply to those portions of a site located within 50 feet of a property zoned for single-family residential use as a permitted use	220 sf/du (160 sf/du common, 60 sf/du private); 6 ft x 10 ft minimum dimension for private open space	1 space/studio 1 space/1 BR 2 spaces/ 2+ BR 1 guest space/4 units, excluding studio and 1 BR units	1: Sites with polygons may propose development (i.e. lot coverage) of up to 100% of the area enclosed with a polygon, although compliance with all other standards shall be required. 2: Upper story setbacks per SPSP. 4: Where an ODS conflicts with the HPD and B lot zone standards, the HPD and B lot zoning standards will apply. 6: Any building located on a corner shall include a design consistent with Sharp Park Specific Plan Policy 5-I-47.

Table 2-3: Objective Development Standards

Zone	Min. Setback	Max. Lot Coverage	FAR	Max. Height	Min. Usable Open Space/DU	Min. Parking	Footnotes Applicable
R-50	Front: 15 ft Sides: 5 ft Rear: 20 ft Except that a minimum 30 ft setback shall be required from any property line abutting a zone where single-family residential use is a permitted use	70%	N/A	50 ft Except that a maximum height of 40 feet shall apply to those portions of a site located within 50 feet of a property zoned for single-family residential use as a permitted use	220 sf/du (160 sf/du common, 60 sf/du private); 6 ft x 10 ft minimum dimension for private open space	1 space/studio 1 space/1 BR 2 spaces/ 2+ BR 1 guest space/4 units, excluding studio and 1 BR units	1: Sites with polygons may propose development (i.e. lot coverage) of up to 100% of the area enclosed with a polygon, although compliance with all other standards shall be required. 2: Upper story setbacks per SPSP. 4: Where an ODS conflicts with the HPD and B lot zone standards, the HPD and B lot zoning standards will apply. 6: Any building located on a corner shall include a design consistent with Sharp Park Specific Plan Policy 5-I-47.
R-60	Front: 15 ft Sides: 5 ft Rear: 20 ft Except that a minimum 30 ft setback shall be required from any property line abutting a zone where single-family residential use is a permitted use	70%	N/A	55 ft Except that a maximum height of 40 feet shall apply to those portions of a site located within 50 feet of a property zoned for single-family residential use as a permitted use	220 sf/du (160 sf/du common, 60 sf/du private); 6 ft x 10 ft minimum dimension for private open space	1 space/studio 1 space/1 BR 2 spaces/2+ BR 1 guest space/4 units, excluding studio and 1 BR units	1: Sites with polygons may propose development (i.e. lot coverage) of up to 100% of the area enclosed with a polygon, although compliance with all other standards shall be required. 2: Upper story setbacks per SPSP. 3: Lots less than 1 acre, maximum height shall be 50 ft. 4: Where an ODS conflicts with the HPD and B lot zone standards, the HPD and B lot zoning standards will apply. 6: Any building located on a corner shall include a design consistent with Sharp Park Specific Plan Policy 5-I-47.
MU-30	Front: 5 ft min/10 ft max	70%	0.1 min, 2.5 max	45 ft	220 sf/du (160 sf/du common, 60 sf/du private)	1 space/studio 1 space/1 BR	1: Sites with polygons may propose development (i.e. lot coverage) of up to 100% of the area enclosed with a

Table 2-3: Objective Development Standards

Zone	Min. Setback	Max. Lot Coverage	FAR	Max. Height	Min. Usable Open Space/DU	Min. Parking	Footnotes Applicable
	Sides: 10 ft Rear: 20 ft Except that a minimum 30 ft setback shall be required from any property line abutting a zone where single-family residential use is a permitted use			Except that a maximum height of 40 feet shall apply to those portions of a site located within 50 feet of a property zoned for single-family residential use as a permitted use	private); 6 ft x 10 ft minimum dimension for private open space	2 spaces/ 2+ BR 1 guest space/4 units, excluding studio & 1 BR units Standards for non-residential uses to match SPSP	polygon, although compliance with all other standards shall be required. 2: Upper story setbacks per SPSP. 4: Where an ODS conflicts with the HPD and B lot zone standards, the HPD and B lot zoning standards will apply. 5: Minimum 15 ft ceiling height for ground floor commercial area. 6: Any building located on a corner shall include a design consistent with Sharp Park Specific Plan Policy 5-I-47.
MU-40	Front: 5 ft min/10 ft max Sides: 10 ft Rear: 20 ft Except that a minimum 30 ft setback shall be required from any property line abutting a zone where single-family residential use is a permitted use	75%	0.1 min, 2.5 max	50 ft Except that a maximum height of 40 feet shall apply to those portions of a site located within 50 feet of a property zoned for single-family residential use as a permitted use	220 sf/du (160 sf/du common, 60 sf/du private); 6 ft x 10 ft minimum dimension for private open space	1 space/studio 1 space/1 BR 2 spaces/ 2+ BR 1 guest space/4 units, excluding studio & 1 BR units. Standards for non-residential uses to match SPSP	1: Sites with polygons may propose development (i.e. lot coverage) of up to 100% of the area enclosed with a polygon, although compliance with all other standards shall be required. 2: Upper story setbacks per SPSP. 3: Lots less than 1 acre, maximum height shall be 50 ft. 4: Where an ODS conflicts with the HPD and B lot zone standards, the HPD and B lot zoning standards will apply. 5: Minimum 15 ft ceiling height for ground floor commercial area.

Table 2-3: Objective Development Standards

Zone	Min. Setback	Max. Lot Coverage	FAR	Max. Height	Min. Usable Open Space/DU	Min. Parking	Footnotes Applicable
							6: Any building located on a corner shall include a design consistent with Sharp Park Specific Plan Policy 5-I-47.
MU-50	Front: 5 ft min/10 ft max Sides: 5 ft Rear: 15 ft Except that a minimum 30 ft setback shall be required from any property line abutting a zone where single-family residential use is a permitted use	70%	0.1 min, 2.5 max	55 ft Except that a maximum height of 40 feet shall apply to those portions of a site located within 50 feet of a property zoned for single-family residential use as a permitted use	220 sf/du (160 sf/du common, 60 sf/du private); 6 ft x 10 ft minimum dimension for private open space	1 space/studio 1 space/1 BR 2 spaces/ 2+ BR 1 guest space/4 units, excluding studio & 1 BR units. Standards for non-residential uses to match SPSP	1: Sites with polygons may propose development (i.e. lot coverage) of up to 100% of the area enclosed with a polygon, although compliance with all other standards shall be required. 2: Upper story stepbacks per SPSP. 3: Lots less than 1 acre in area, maximum height shall be 50 ft. 4: Where an ODS conflicts with the HPD and B lot zone standards, the HPD and B lot zoning standards will apply. 5: Minimum 15 ft ceiling height for ground floor commercial area.
MU-60	Front: 5 ft min/10 ft max Sides: 5 ft Rear: 10 ft Except that a minimum 30 ft setback shall be required from any property line abutting a zone where single-family residential use is a permitted use	70%	0.1 min, 3.0 max; Minimum 25 ft in width and 50 ft in depth	55 ft Except that a maximum height of 40 feet shall apply to those portions of a site located within 50 feet of a property zoned for single-family residential use	220 sf/du (160 sf/du common, 60 sf/du private); 6 ft x 10 ft minimum dimension for private open space	1 space/studio 1 space/1 BR 2 spaces/ 2+ BR 1 guest space/4 units, excluding studio & 1 BR units. Standards for non-residential uses to match SPSP	1: Sites with polygons may propose development (i.e. lot coverage) of up to 100% of the area enclosed with a polygon, although compliance with all other standards shall be required. 2: Upper story stepbacks per SPSP. 3: Lots less than 1 acre in area, maximum height shall be 50 ft. 4: Where an ODS conflicts with the HPD and B lot zone standards, the HPD and B lot zoning standards will apply. 5: Minimum 15 ft ceiling height for ground floor commercial area.

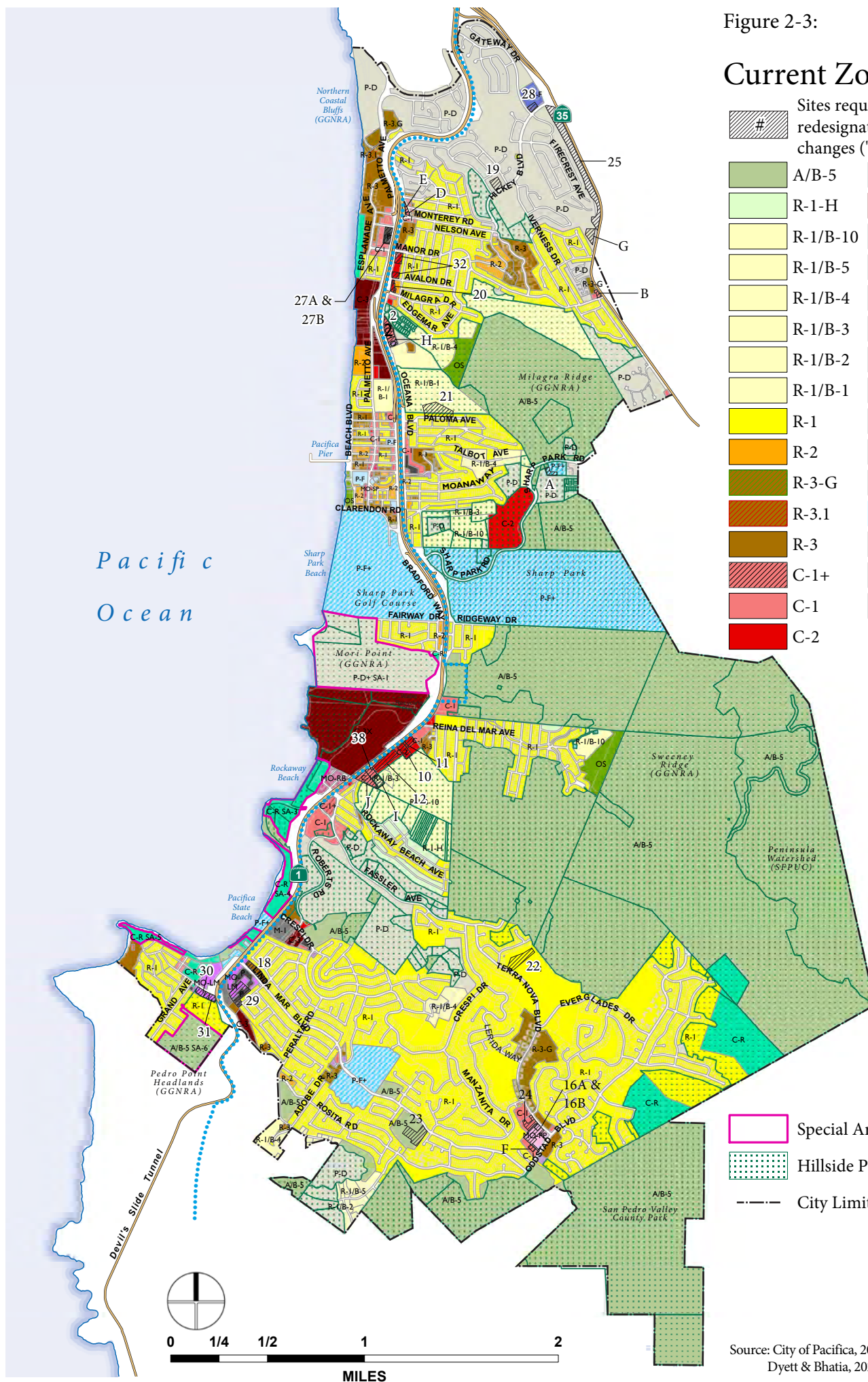
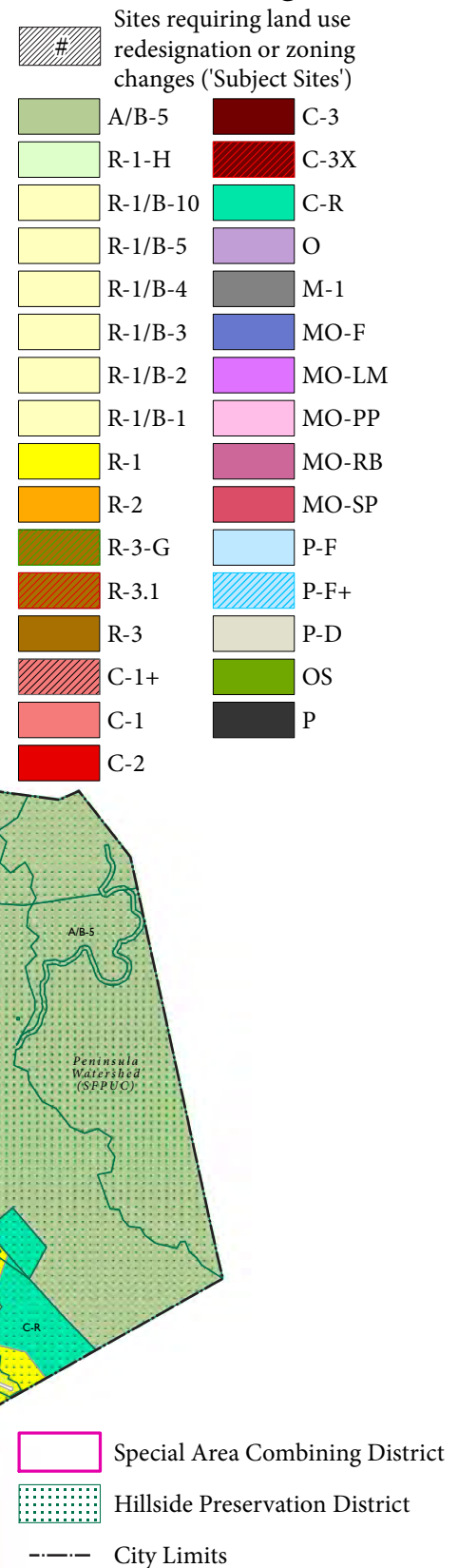
Table 2-3: Objective Development Standards

Zone	Min. Setback	Max. Lot Coverage	FAR	Max. Height	Min. Usable Open Space/DU	Min. Parking	Footnotes Applicable
				as a permitted use			6: Any building located on a corner shall include a design consistent with Sharp Park Specific Plan Policy 5-I-47.
MU-I-30	Same as R-30	Same as R-30	Same as R-30	Same as R-30	Same as R-30	Same as R-30	Same as R-30
MU-I-40	Same as R-40	Same as R-40	Same as R-40	Same as R-40	Same as R-40	Same as R-40	Same as R-40
MU-I-50	Same as R-50	Same as R-50	Same as R-50	Same as R-50	Same as R-50	Same as R-50	Same as R-50
MU-I-60	Same as R-60	Same as R-60	Same as R-60	Same as R-60	Same as R-60	Same as R-60	Same as R-60

Source: City of Pacifica, 2024; Dyett & Bhatia, 2024

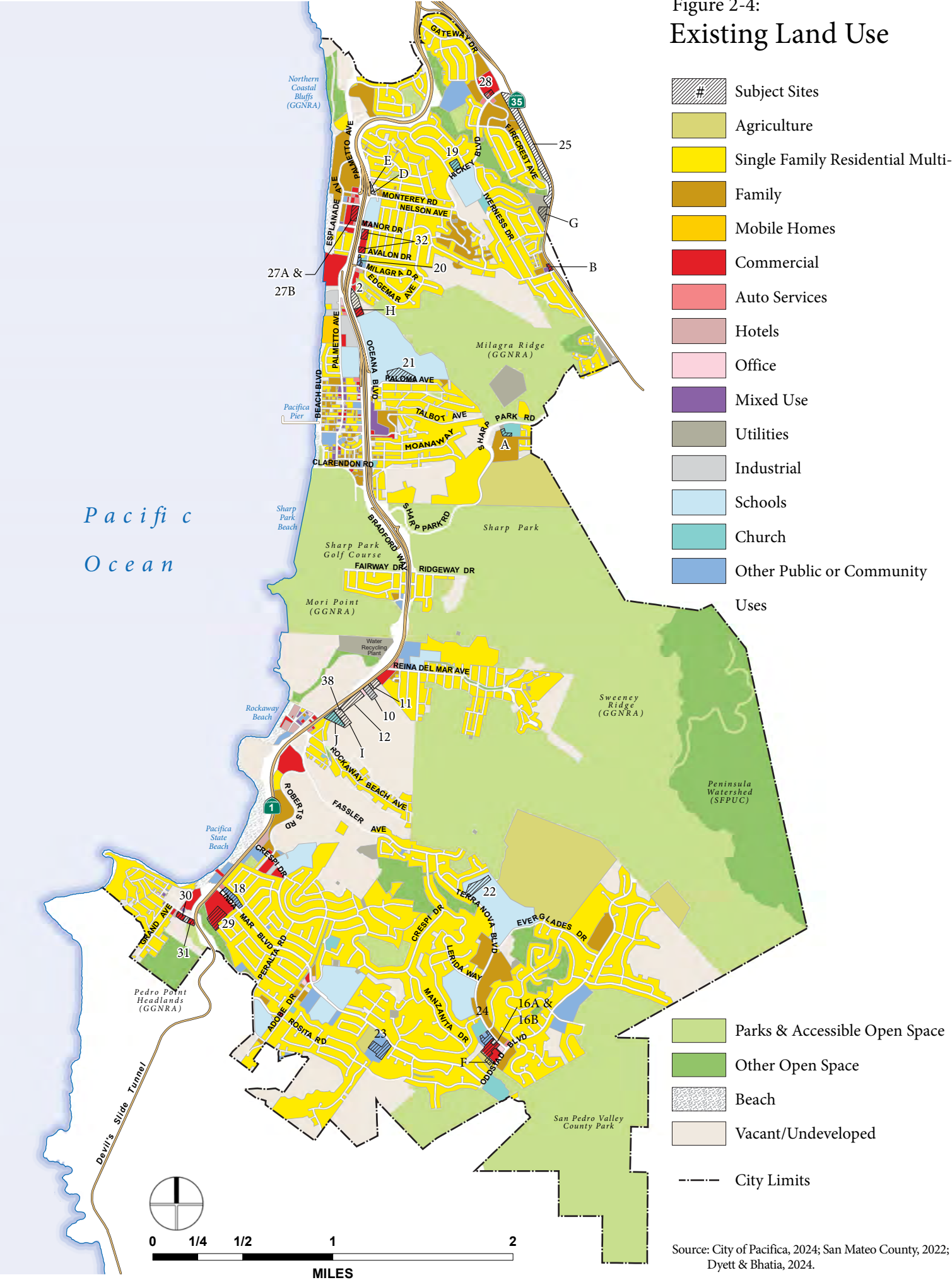
Figure 2-3:

Current Zoning



Source: City of Pacifica, 2021; San Mateo County, 2021; Dyett & Bhatia, 2022.

Figure 2-4:
Existing Land Use



Source: City of Pacifica, 2024; San Mateo County, 2022; Dyett & Bhatia, 2024.

Figure 2-5:

Sites Available for Housing

-  Sites with Existing Capacity
-  Sites Undergoing Land Use Designation or Zoning Change ('Subject Site')
-  City Limits

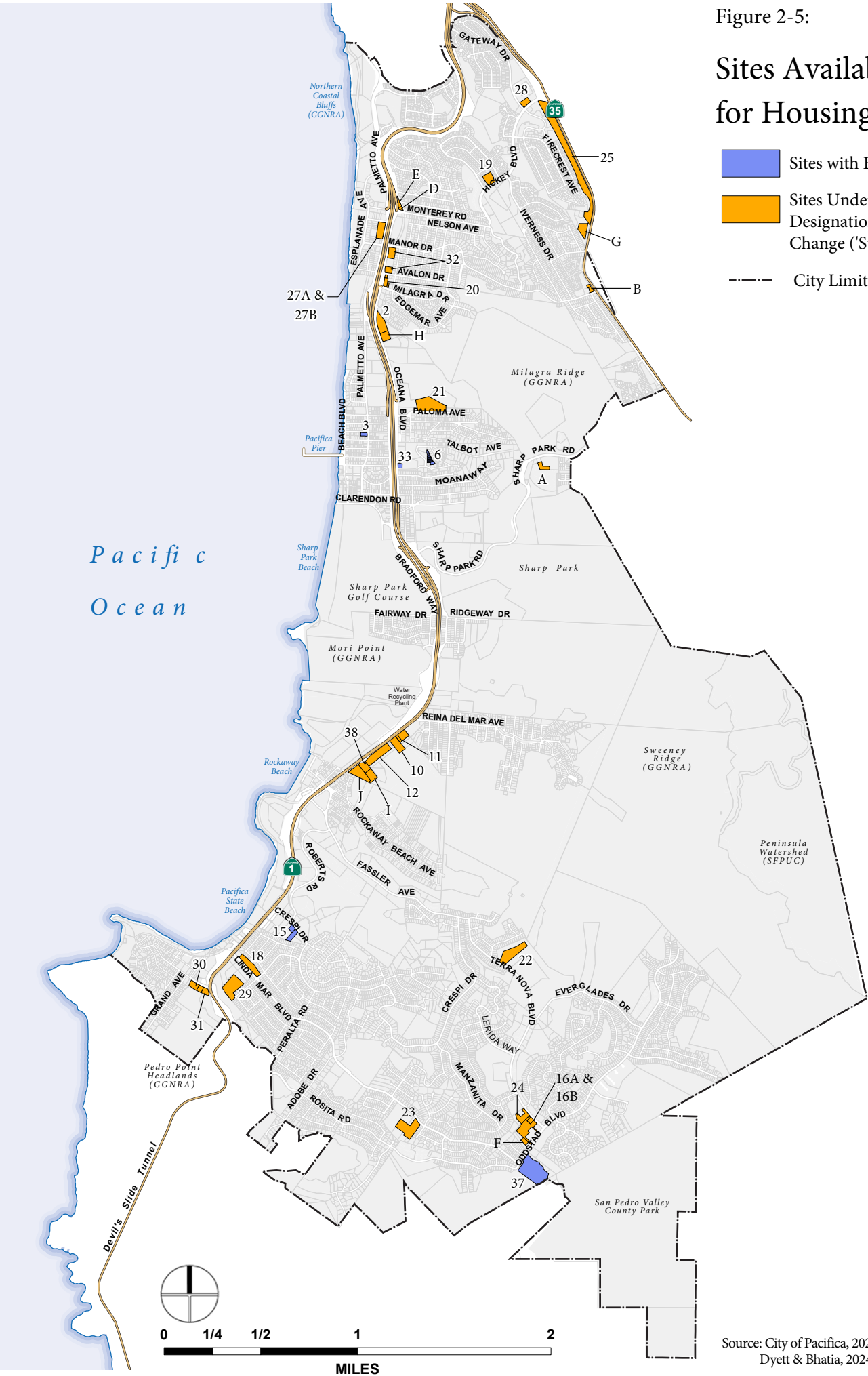
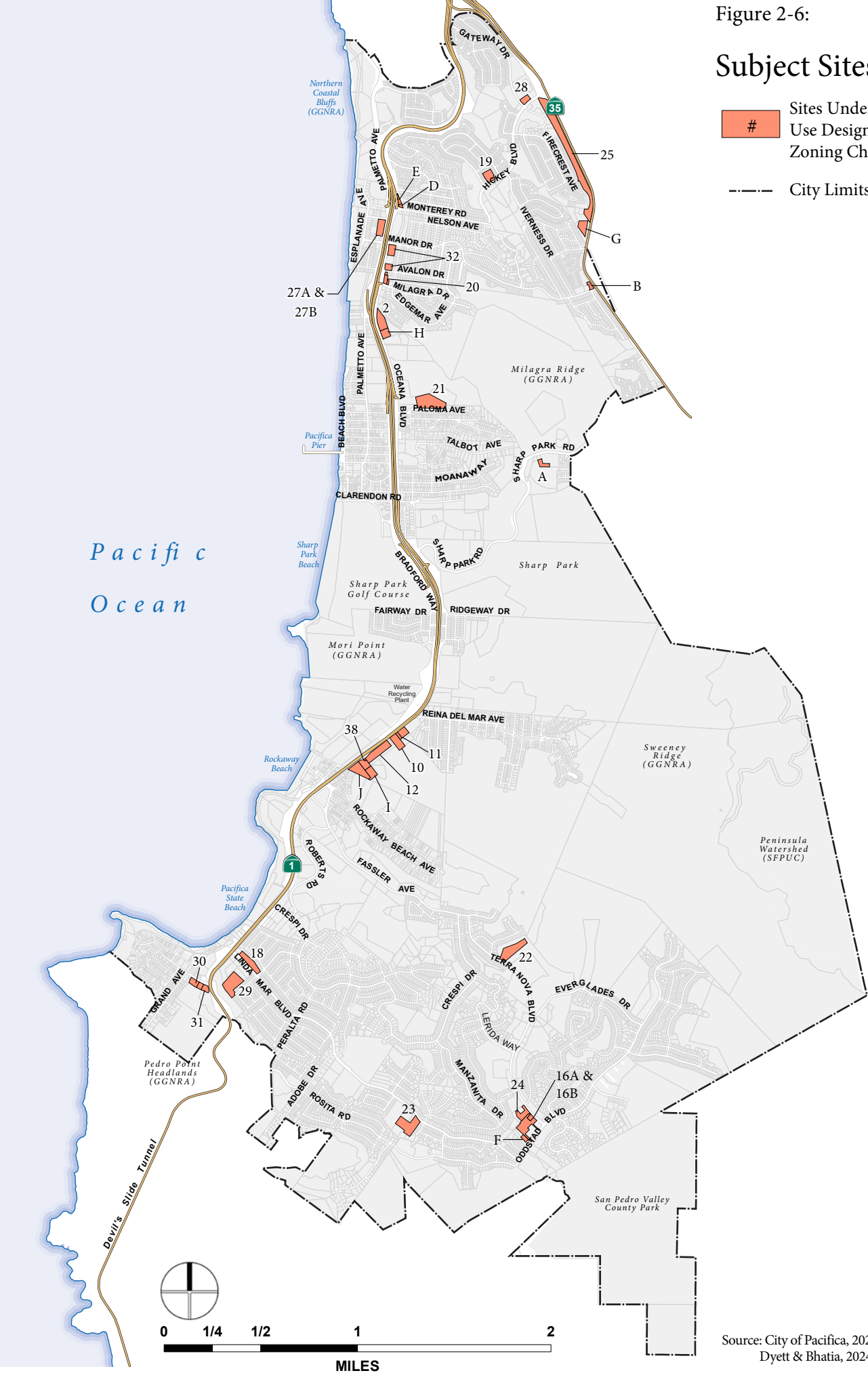


Figure 2-6:

Subject Sites

-  Sites Undergoing Land Use Designation or Zoning Change
-  City Limits



2.5 Intended Uses of this EIR

This EIR is intended to review potential environmental impacts associated with the adoption and implementation of the Proposed Project and determine corresponding mitigation measures, as necessary. This EIR is a program-level EIR and does not evaluate the project-specific impacts of individual developments or projects that may be allowed under the Proposed Project. Pursuant to CEQA Section 15152, subsequent projects that are consistent with the Proposed Project may “tier” from this EIR, relying on the environmental analysis and mitigation measures it contains in order to streamline environmental review or to focus on project-specific environmental effects not considered in this EIR, if any. Additionally, subsequent projects that satisfy the requirements of CEQA Section 15182 or 15183 may be eligible for streamlined environmental review.

This EIR is intended to be the primary reference document in the formulation and implementation of a Mitigation Monitoring and Reporting Program (MMRP) for the Proposed Project. This EIR is also intended to assist other responsible agencies in making approvals that may result from the Proposed Project. Federal, State, regional, and local government agencies that may have jurisdiction over development proposals in the Planning Area include:

- U.S. Army Corps of Engineers
- Federal Emergency Management Agency
- U.S. Fish and Wildlife Service
- California Department of Fish and Wildlife
- California Department of Transportation
- Metropolitan Transportation Commission
- Bay Area Air Quality Management District
- San Francisco Bay Regional Water Quality Control Board
- North Coast County Water District

The Proposed Project would require the following approvals and discretionary actions by Pacifica:

- **Planning Commission**
 - Recommendation to certify the EIR pursuant to CEQA and adopt required findings.
 - Recommendation to adopt proposed General Plan amendments, rezoning ordinance(s) amending the Pacifica Municipal Code and zoning map, and proposed Objective Development Standards.
- **City Council**
 - Certification of the EIR pursuant to CEQA and adoption of required findings.
 - Adoption of proposed General Plan amendments and rezoning ordinance(s) amending the Pacifica Municipal Code and zoning map, and proposed Objective Development Standards.

3.1 Aesthetics

This section evaluates the potential impacts to aesthetics that could arise from implementation of the Proposed Project. The analysis includes possible impacts to scenic resources, visual character, and visual quality, as well as those arising from the possible introduction of new sources of light and glare.

The City received four responses to the Notice of Preparation (NOP) related to topics addressed in this section. Comments expressed concern for potential development impacts on scenic ridgelines and highways, vistas, and city character. Commenters also expressed concern about aesthetic impacts at Oceana High School. These comments are addressed under the Impact Analysis below.

Environmental Setting

PHYSICAL SETTING

Scenic resources can be understood as a community's key visual assets that define the visual character of a landscape and enhance community identity. Scenic resources include natural and open spaces, along with associated features such as landforms, trees, and water features. Scenic resources also include the built environment, particularly if architectural forms are of historic or artistic value.

Visual quality is defined as the overall visual impression or attractiveness of an area based on the scenic resources, both natural and built. The attributes of visual quality include variety, vividness, coherence, uniqueness, harmony, and pattern. Viewshed is a term used to describe a range of resources and their context that relate to what people can see in the immediate environment in terms of foreground, middle ground, and background distances.

Impacts to visual quality are perceived by different viewer types and to different degrees, depending on the viewer exposure. Different land uses, such as open space or commercial districts, derive value from the quality of their settings and, for the purposes of this study, city gateways and surrounding land features. For example, travelers in Pacifica might be exposed to views of dramatic ocean cliffs, Montara Mountains, or sandy beaches as they move throughout the city. Exposure to these views varies based on proximity and ability to see the viewshed, and scenic resources are of particular importance in circumstances where viewer sensitivity may be impacted. This sensitivity is determined by two measures: exposure and awareness. Exposure is the relative proximity of potential viewers to a given project implemented under the Proposed Project, and awareness indicates the attention and focus viewers bring to the experience of the area.

Existing Visual Conditions

Pacifica has a strong physical identity as a stretch of dramatic coastline punctuated by ridges. Its boundaries are very distinct on three sides, with the Ocean on the west, the crest of Sweeney Ridge and Skyline Boulevard on the east, and San Pedro Mountain on the south. The northern edge narrows almost to a gateway entered along Highway 1. As an urban place, Pacifica presents itself as a collection of valley and coastal neighborhoods nestled in the topography. The basic components of Pacifica's existing structure—its open spaces, neighborhoods, activity centers, and transportation corridors—are described below.

Hillsides and Ridges

Pacifica is striking for its high proportion of both parks and undeveloped land, which comprises two-thirds of the Planning Area, and for the way its neighborhoods and rugged, open ridges alternate along the length of the city. The crest of the Coast Range forms Pacifica's eastern boundary. This crest rises toward the south as Sweeney Ridge. Five lateral ridges extend westward from Sweeney Ridge to the ocean. From north to south, these are Milagra Ridge, Gypsy Hill, Mori Ridge, Cattle Hill, and Fassler Ridge. At the south end, San Pedro Mountain extends to the coast at Pedro Point Headlands. This dramatic terrain is a defining feature of the city.

Neighborhoods

Pacifica developed first as a string of coastal communities and later as a suburban extension of San Francisco; this has created unusual patterns. Development in the newer neighborhoods has occurred on a larger scale, often with significant grading to provide access and construction pads, whereas older development was generally one or a few houses at a time with minimal change to the existing terrain. This quality will lessen over time as context-sensitive infill housing is developed, older housing is replaced, and vegetation matures. Common architectural styles throughout the Planning Area include Cape-Cod, Bungalows, Contemporary, Ranch, Tudor, and Split-Level.

Balance of Activity Centers

Unlike many cities, Pacifica has no single downtown, but rather an assortment of activity centers. West Sharp Park has a concentration of public uses and a small business district, and the Sharp Park Specific Plan was adopted by City of Pacifica City Council in 2022 to build upon this center of gravity. Pacifica is balanced by the shopping hubs of West Linda Mar to the south and Pacific Manor to the north, while a tourist atmosphere is captured more clearly at Rockaway Beach. Other small activity centers are at Fairmont Shopping Center, Park Mall, Eureka Square, and small business districts at Crespi Drive, Adobe Drive, and Vallemar.

According to the City's General Plan 2040, Pacifica's multi-centered quality will continue to be part of its identity, but each activity center will become more distinct and more vibrant, especially the area within the Sharp Park Specific Plan. The three primary activity centers will be at West Sharp Park, Rockaway Beach, and Linda Mar, associated with Pacifica's three accessible beaches. Smaller mixed-use activity centers will grow at Pacific Manor and Park Mall. Each activity center will be distinguished by its land use mix, built form, and public realm enhancements, as well as by district-specific signage.

Highway 1

Highway 1 is a unifying element for the city, connecting all of its neighborhoods and key sites to one another and to the region. The sequential experience created by the Highway will be strengthened as each activity center becomes more distinct, and as coastal and hillside views are enhanced. The highway also divides neighborhoods and influences access to and use of various commercial centers.

Gateways and Open Space

Pacifica is introduced to southbound travelers with the experience of coming over the hill and seeing the expansive coastal vista. Northbound travelers come through the Devils Slide Tunnel, wind around the forested Pedro Point Headlands, and arrive at the active intersection with Linda Mar Boulevard. Skyline Boulevard acts as a coherent eastern boundary for the city, as it travels along the crest of the ridge with mature trees along its edges. From Skyline, Pacifica is entered via Sharp Park Road, Manor Drive, and Hickey Boulevard. While the “gateways” into Pacifica are strong, entry points from the east can be made stronger, and all entries treated with a consistent signage theme. Gateway locations are shown on **Figure 3.1-1**.

Beyond these gateways and into the city itself, vistas of the surrounding coastline, forested hillside and open space are visible from many vantage points within the Planning Area. Highway 1 offers an end to end view of Pacifica, while Sharp Park road encompasses space from the ridgeline at Skyline Boulevard to the coast, with views to the Ocean and over the Sharp Park neighborhood and golf course.¹ Other views that contribute to the city’s unique visual character include the view over the West Sharp Park District and Pacifica Pier from Highway 1, views toward Cattle Hill and Fassler Ridge from Highway 1, and the view to the ocean from Grace McCarthy Vista Point on Sharp Park road. In addition to these coastal view corridors, nearly half of the Planning Area is protected open space or park land, which is often found around ridgelines, on the coastline and beaches, and offered in recreational facilities and pocket parks throughout the city. Protected open space within the Planning Area includes the Northern Coastal Bluffs, Sharp Park, Milagra Ridge, Sweeny Ridge, Mori Point, the Pedro Point Headlands, San Pedro Valley County Park, McNee Ranch State Park, Pacifica State Beach, Rockaway Beach, Sharp Park State Beach and Pacifica Pier, in addition to other ecologically sensitive areas, such as riparian corridors and watershed lands.

Scenic Routes

Highway 1 and Sharp Park Road in Pacifica have been identified by the State and County as eligible for scenic highway status. Local scenic roadway designation requires a corridor study, a program to enhance the scenic qualities, and adoption of the scenic roadway designation and its protection plan. Such a plan may be prepared in the future.

Highway 1 plays an important role in defining the image of Pacifica, creating a visual narrative for the traveler from one end of the city to the other. Sharp Park Road also represents an important visual summary of Pacifica, drawing travelers from the ridgeline at Skyline Boulevard to the coast,

¹ Ibid.

with views out to the Ocean and over the Sharp Park neighborhood and Golf Course. Other defining views include the view over the West Sharp Park district and Pacifica Pier from Highway 1; views toward Cattle Hill and Fassler Ridge from Highway 1; and the view to the ocean from Grace McCarthy Vista Point on Sharp Park Road. **Figure 3.1-1** shows these scenic routes and visual resources.

Light and Glare

Glare refers to the discomfort or impairment of vision experienced when a person is exposed to a direct or reflected source of light, causing objectionable brightness greater than that to which the eyes are adapted. Sources of glare in suburban settings include sunlight reflected in the windows of buildings, including glass façades, and cars. Lighted signs on multi-story buildings are another source of light. Existing development and motor vehicles produce light and glare throughout Pacifica. Primary sources of light in the Planning Area are streetlights, parking lot lights, and automobile headlights.

REGULATORY SETTING

Federal

No existing federal regulations pertain to visual resources in the City of Pacifica.

State

California Scenic Highways Program

Recognizing the value of scenic areas and the value of views from roads in such areas, the State Legislature established the California Scenic Highway Program in 1963. This legislation sees scenic highways as "a vital part of the all-encompassing effort...to protect and enhance California's beauty, amenity and quality of life." Under this program, a number of State highways have been designated as eligible for inclusion as scenic routes. Once the local jurisdictions through which the roadway passes have established a corridor protection program and the Departmental Transportation Advisory Committee recommends designation of the roadway, the State may officially designate roadways as scenic routes. Interstate highways, state highways, and county roads may be designated as scenic under the program. The Master Plan of State Highways Eligible for Official Scenic Highway Designation maps show designated highway segments, as well as those that are eligible for designation. Changes to the map require an act of the legislature.

Highway 1 and Sharp Park Road in Pacifica have been identified by the State and County as eligible for scenic highway status. Local Scenic roadway designation requires a corridor study, a program to enhance the scenic qualities, and adoption of the scenic roadway designation and its protection plan. Such a plan has not been adopted for either roadway in Pacifica.

Figure 3.1-1:
Visual Resources

- # Subject Sites
- ✱ Gateways
- Prominent Landforms
- ← Coastal View Corridors
- Scenic Routes
- Prominent Ridges
- City Limits



Source: US Geological Survey, 2009; City of Pacifica, 2019; San Mateo County, 2019; Dyett & Bhatia, 2023.

California Coastal Act and California Coastal Commission.

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 land forms, 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.

California Solar Shade Control Act.

Under the California Solar Shade Control Act (Public Resource Code Sections 25980-25986), no property owner shall allow a tree or shrub to be placed or to grow so as to cast a shadow greater than 10 percent at any one time between the hours of 10:00 AM and 2:00 PM over an existing solar collector used for water heating, space heating or cooling, or power generation on an adjacent property. These limitations apply to the placement of new trees or shrubs, and do not apply to trees and shrubs that already cast a shadow upon that solar collector. The location of a new solar collector is required to comply with local building and setback regulations but must be set back not less than five feet from the property line and must be no less than 10 feet above the ground.²

Title 24 Outdoor Lighting Zones.

The Building Energy Efficient Standards (California Building Standards Code, California Code of Regulations, Title 24, Part 6, California Energy Code) specify outdoor lighting requirements for residential and non-residential development. The intent of these standards is to improve the quality of outdoor lighting and help reduce the impacts of light pollution, light trespass, and glare. The standards regulate lighting characteristics, such as maximum power and brightness, shielding, and sensor controls to turn lighting on and off. Different lighting standards are set by classifying areas by lighting zone. The classification is based on U.S. Census Bureau population figures, and the areas can be designated as LZ0 (very low), LZ1 (low), LZ2 (moderate), LZ3 (moderately high), or LZ4 (high). Lighting requirements for dark and rural areas are stricter in order to protect the areas from new sources of light pollution and light trespass. According to the U.S. Census Bureau, portions of the eastern County are defined as urban areas or urban clusters and are therefore designated as

² California Codes, Public Resource Code Sections 25980-25986
(https://leginfo.ca.gov/faces/codes_displayText.xhtml?lawCode=PRC&division=15.&title=&part=&chapter=12.&article=).⁹The Census Bureau def

Lighting Zone 4 per the California Energy Commission outdoor lighting zone classification standards.³

Local

San Mateo County General Plan

San Mateo County has regulations that attempt to preserve the County's scenic resources, including those in Pacifica's Sphere of Influence. The 2013 policies on Visual Quality, which describes the visual character of San Mateo County's topography, natural vegetation, water bodies, developed areas and scenic roads and corridors. The Plan also explains the existing visual controls, analyzes relevant issues, as well as provides statements of policy to guide decision-makers in managing the preservation and modification of these resources.⁴

City of Pacifica General Plan 2040

The Community Design Element presents a vision for the city's overall form and image, and provides guidance for preserving and enhancing the qualities that support that urban structure. The following General Plan policies are related to aesthetics:

Economic Sustainability

Guiding Policy ES-G-3: Promote a Positive Image. Promote a positive image of Pacifica as a desirable place to work, live, and visit.

Guiding Policy ES-G-6: Ensure Environmental Protection. Ensure that economic development in Pacifica proceeds synergistically with environmental protection.

Implementing Policy ES-I-18: Public Realm Improvements. Invest in streetscape and public space improvements to attract visitor-oriented development and improve Pacifica's image and the quality of life for residents.

Implementing Policy ES-I-32: Investment in Infrastructure. Continue to invest in public infrastructure improvements, including landscaping, signage, lighting, undergrounding overhead utility lines, and roadways.

Implementing Policy ES-I-35: Preserve the Experience of the Natural Environment. Ensure that new development projects do not disrupt view corridors from prominent points or otherwise interfere with residents' and visitors' experience of Pacifica's natural areas and amenities.

³ The Census Bureau defines rural as any population, housing, or territory not in an urban area. (U.S. Census Bureau, <https://www.census.gov/programs-surveys/geography/guidance/geo-areas/urban-rural.html>. Accessed August 17, 2023.)

⁴ San Mateo County General Plan 1986, page 4.1.

Implementing Policy ES-I-36: Appropriate Site Design. Ensure that development projects adjacent to protected natural areas are designed to minimize impacts on those areas by employing low impact development techniques for stormwater management, using native/non-invasive landscaping, and minimizing nighttime lighting and glare.

Community Design

Guiding Policy CD-G-1: Identifiable City Structure. Reinforce a clear city structure, characterized by a progression of ridges, neighborhoods, and activity centers.

Guiding Policy CD-G-3: Neighborhood Conservation. Preserve the unique qualities of each of Pacifica's residential neighborhoods. Incorporate neighborhood narratives into the General Plan to reflect these unique qualities and inform appropriate development standard and other policies.

Guiding Policy CD-G-5: Hillside and Prominent Ridgelines. Maintain development standards that ensure that new development does not detract from the visual qualities of Pacifica's hillsides and visually prominent ridgelines.

Guiding Policy CD-G-6: Scenic and Visual Amenities of the Coastal Zone. Protect the City's irreplaceable scenic and visual amenities in the Coastal Zone by protecting landforms, vegetation, special communities, and important viewsheds.

Implementing Policy CD-I-11: Minimize Visual Impacts of Hillside Development. Require new development to employ innovative site planning, engineering and design techniques that:

- Seek first to avoid impacts to scenic resources through site planning and design;
- Minimize grading and conform with natural landforms to the greatest extent possible;
- Design structures so that they follow contours and limit their downslope exposure; and
- Use landscaping to screen and integrate buildings with the natural environment.

Implementing Policy CD-I-12: Protection of Ridgelines. Protect visually prominent ridgelines from residential and commercial development.

Implementing Policy CD-I-15: Minimize Impacts of Coastal Development on Landforms. Ensure that negative visual impacts resulting from new development in the Coastal Zone are minimized. In areas characterized by bluffs and landforms. Strategies to implement this policy include:

- Prohibiting development on slopes in excess of 35 percent and highly visible tops of prominent landforms;
- Requiring blufftop development to minimize impacts on the view from the ocean and beach below by implementing a setback from the bluff edge;
- Requiring that development be clustered and contoured into the existing slope; and
- Requiring that new development be scaled and designed to be subordinate to landforms in the Coastal Zone.

Implementing Policy CD-I-18: Rockaway Quarry Site. Development on the Quarry site should be prioritized in the “flats” and should connect with the adjacent Rockaway Beach district. Development in areas of the Quarry site that would impact the visual qualities of surrounding hillsides or ridgelines should be avoided to the greatest extent feasible.

Implementing Policy CD-I-20: Underground Utilities. Continue to require underground utilities in all new development. New developments should include undergrounding existing overhead utilities along each project frontage. Within scenic corridors, place lines underground or located there so they do not break the viewline of a roadway vista. This policy applies Citywide.

Guiding Policy CD-G-7: Views from Scenic Routes. Ensure that viewsheds from Highway 1 and Sharp Park Road are preserved and enhanced. These views are an essential part of Pacifica’s identity.

Guiding Policy CD-G-8: Gateways. Create strong entrances and preserve the quality of experience of movement along primary travel routes, in particular along the coast.

Implementing Policy CD-I-22: Scenic Corridor Plans. Seek grant funding to develop local scenic corridor plans for Highway 1 and Sharp Park Road.

Implementing Policy CD-I-24: Other Scenic Trails. Improve pedestrian routes along corridors that provide access to locations of significant scenic quality, recreation, historic and cultural importance in Pacifica.

Implementing Policy CD-I-26: Roadway Design. Ensure that any proposed new roads or modification to existing roads which traverse scenic areas minimize visual impacts to views from scenic routes.

Implementing Policy CD-I-27: High-Quality Design at Key Points. Ensure that new development directly adjacent to Highway 1 in West and East Sharp Park helps to create a strong image of Pacifica’s cultural and civic core, and that new development in the Rockaway Quarry site has a visual quality that enhances the natural setting and draws travelers in from the highway.

Implementing Policy CD-I-29: Gateway Signage. Create unified gateway signage, for entrances along Highway 1, Sharp Park Road, Manor Drive, and Hickey Boulevard.

Circulation

Implementing Policy CI-I-27 Sharp Park Specific Plan Streetscape. Complete and implement streetscape improvements in the Sharp Park Specific Plan to widen sidewalks, provide bike lanes, landscaping, and make other improvements that will upgrade the appearance of the area and make it more attractive to pedestrians.

Open Space and Community Facilities

Guiding Policy OC-G-5 Open Space Preservation. Preserve open space that protects natural resources, visual amenities, and public health and safety.

Implementing Policy OC-I-22 Open Space Restoration. Continue to support local volunteer or community service organizations in implementing revegetation programs on the city's greenbelts or elsewhere to reduce erosion potential and enhance the visual quality of these areas for adjacent neighborhoods.

Implementing Policy CO-I-64 Outdoor Lighting. Establish outdoor lighting performance standards to minimize energy use while ensuring appropriate light levels. These can be met by:

- Greater use of photocells or astronomical time switches;
- Directional and shielded LED lights;
- Security lights with motion detectors; and
- Prohibitions against continuous all-night outdoor lighting unless needed for security reasons.

Sharp Park Specific Plan

The Objective Development Standards in the Proposed Plan reference the following:

Implementing Policy 5-I-37: Stepbacks. Encourage upper-story stepbacks to incorporate features that activate the setback areas, such as balconies, terraces, living roofs, and greenery as described in Table 5-1.

Implementing Policy 5-I-47: Corner Buildings. Facilitate corner buildings to have distinct architectural features and defined building entrances at the corner to animate the intersection and facilitate pedestrian flow, as shown in Figure 5-6. Where two streets are equally important, both streets should be considered as primary frontages.

Design Standard 12: East-West Corridor Stepbacks. Development fronting an east-west street along view corridors shown in Figure 5-8 must step back from the street frontage a minimum of 10 feet above the second floor as described in Table 5-1.

Local Coastal Land Use Plan

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. 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 such as those designated in the California Coastline Preservation and Recreation Plan, prepared by the Department of Parks and Recreation and by local government, shall be subordinate to the character of its setting. (CN, OS, CD, LU)

City of Pacifica Municipal Code

Hillside Preservation District

To protect important views from public areas and the sensitive terrain of hillside areas, the City has special development regulations for the Hillside Preservation District (HPD), which requires submission of development plans, grading plans, and other documentation. Hillside development also receives special consideration in the City's Design Guidelines, which are used to evaluate proposed projects. The key issues for hillside development are slope stability, grading, and visual impact. Prominent ridgelines are identified based on their visual importance or scenic quality. Owners must focus development on suitable portions of their property off the ridges, to protect the scenic quality of ridgelines.

Coastal Zone Combining District

The Coastal Zone Combining District provides special regulations to ensure appropriate protection of the undeveloped coastal bluffs and promontories, as well as to developed coastal areas. The city's Coastal Zone Combining District ensures that the goals and policies of the California Coastal Act are followed. These goals include the protection and enhancement of the coastal environment, including its visual resources.

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 the 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.

Section 9-4.401 through 9-4.2259 includes establishment of zoning districts. For each of these districts, development regulations and or development standards or procedures are listed, which are variable for each district but include regulations such as minimum building area, minimum landscape area, permitting requirements, maximum height, and more general regulations such as maintaining aesthetic character.

Section 9-4.4408 (Coastal View Corridors) defines provisions that apply to new development within coastal view corridors as designated in the Local Coastal Program Land Use Plan. These include development standards aimed at protecting public views, visual quality, and visual compatibility with the surrounding areas. In addition, structures should be screened from public view using native vegetation as feasible.

Section 9-4.4504 notes general regulations for new development in special area (SA) districts. Which includes preparing a landscaping plan that maximizes the use of native, drought-resistant plant species. Section 9-4.4505 and Section 9-4.4511 define the Mori Point District and Headlands District respectively as special areas to address environmental conditions and technical constraints unique to these areas, including panoramic coastal views. Immediately following, Section 9-4.4513

defines development provisions that limit public shoreline access to areas including public vista areas. In addition, Section 9-4.4516 provides development regulations in Pacifica State Beach District including limiting building height and mass to preserve existing coastal views.

Section 9-4.2901 through 9-4.2911 defines regulations on signs in the city, recognizing that signs impact the city's character and can increase aesthetic appeal.

Chapter 7 of Title 9 (Historic Preservation) describes the economic, social, and aesthetic importance of historic sites in the city as well as promoting and encouraging their continued use and preservation.

Section 5-27.501 (Business premises: Lighting) requires that business closed after dark must be sufficiently lighted by interior lights, exterior doors need to be adequately luminated at all hours, parking lots need to be adequately luminated anytime there are employees or visitor in the building, and the address number of every commercial building should be independently illuminated.

Section 10-1.1004 describes design regulations related to new subdivisions, noting that subdivision design should conform to the generally acceptable engineering standards and standards approved by the City engineer, as well as provide as feasible for future passive or natural heating or cooling opportunities.

Pacifica Design Guidelines

Pacifica's Design Guidelines are to be used by staff when reviewing the design of all new developments and additions requiring discretionary permit approvals, and are meant to encourage high-quality and context-sensitive buildings, without stifling creativity in design. The document's guidance on site planning, building design, and landscaping issues includes the following:

- Site plans should incorporate advantageous natural features, and should take into account solar orientation, privacy, and impact on adjacent places;
- Buildings should complement the character of surrounding neighborhoods, including being scaled appropriately even where zoning allows for more;
- The purpose of landscaping should be to have interplay with good buildings, not to hide bad ones.

Landscaping should be designed to conserve water; the guidelines seek to enable small, green backyards, but discourage large expanses of turf or water-requiring plants unless they are programmatically needed.

Impact Analysis

For the purposes of this EIR, a significant impact would occur if implementation of the Proposed Project would:

- Criterion 1:** Have a substantial adverse effect on a scenic vista;
- Criterion 2:** Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- Criterion 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). Or, in urbanized areas, conflict with applicable zoning and other regulations governing scenic quality; or
- Criterion 4:** Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

METHODOLOGY AND ASSUMPTIONS

Aesthetics and visual resources are generally subjective by nature and, therefore, the extent of visual impacts associated with adoption and implementation of the Proposed Project can be difficult to quantify. In addition, it is difficult to estimate the impact future development would have on scenic resources, since individual development projects would have different impacts on the aesthetic quality of an area. To evaluate potential impacts on visual resources in Pacifica, this analysis considered potential degradation to existing views and scenic resources, and existing visual character of the city. Therefore, this analysis was based on the expected changes in aesthetics and visual resources that could result from the buildout of the Proposed Project and considered existing policies and standards that regulate aesthetics.

RELEVANT PROPOSED PROJECT PROGRAMS

Objective Development Standards

The Proposed Project includes the adoption of objective development standards for multifamily sites that enable ministerial project review and approval consistent with state law. The Objective Development Standards component of Program HE-I-1 will create or revise objective development standards (“ODS”) applicable to the sites identified to achieve Housing Element densities and meet the City’s RHNA. The Proposed Project creates six ODS addressing the following: height; setbacks from property lines; lot coverage; floor area ratio (“FAR”); open space per dwelling unit; and, off-street parking. In many cases, the objective development standards increase allowable height and lot coverage, decrease minimum usable open space, and decrease parking requirements from the existing zone. The ODS for each proposed zoning designation are described in Table 2-2 of Chapter 2: Project Description of this EIR.

IMPACTS

Impact 3.1-1 Development under the Proposed Project would not have a substantial adverse effect on a scenic vista. (Less than Significant)

A significant impact would occur if development pursuant to the Proposed Project would have a substantial adverse effect on any of these scenic vistas or resources. The City's General Plan recognizes that scenic vistas along the panoramic coastline and views to the ocean, beaches, and hillsides are an integral part of Pacifica's character and must be preserved for the future. Of primary importance are views of the ocean, landforms, and special coastal communities from public roadways, trails, and vista points. Sites to be rezoned under the Proposed Project do overlap with some visual resources identified in **Figure 3.1-1**, including views to the ocean along Manor Drive and Paloma Avenue. In particular, development of Site 21 at Oceana High School could affect views along Paloma Avenue if one stands on Paloma Avenue facing westward, looking slightly to the northeast for ocean views. In addition, development of Site 32 at the Brentwood Shopping Center could affect views to the west along Manor Drive if one stands facing westward and looking slightly northeast from a higher elevation, such as at the intersection of Manor Drive and Fremont Avenue. As such, impacts are potentially significant.

However, a number of the General Plan's policies provide long-term protections for scenic vistas in Pacifica while also creating opportunities for development in already-developed areas of the city; these policies include the continuation of the Hillside Preservation District program and Design Guidelines and Review for development projects (including Guiding Policies CD-G-5 and CD-G-6; and Implementing Policies CD-I-4; I-7; I-11; I-12; I-13; I-14; I-15; I-16; and I-17). Subsequently, sites to be rezoned under the Proposed Project reflect the priority given in the General Plan overall and Housing Element specifically to focus development on infill locations, including existing commercial shopping centers (Implementing Policy CD-I-4). Such infill development would help maintain the existing development pattern in the city, thus preserving existing scenic vistas.

The Proposed Project includes rezoning and General Plan redesignation, to allow an additional 2,175 units, in order for the City to accommodate its share of regional housing. The proposed General Plan land use designations do not impact existing preserved open spaces in Pacifica, including hillside land, beaches, and bluffs, for conservation and recreation, and in doing so preserve the potential for views of those open spaces. Similarly, sites to be rezoned occur in already urbanized areas, on vacant or developed lots, and would not impact existing preserved open spaces. These redesignated and/or rezoned properties would allow residential uses or higher density residential as standalone residential or mixed-use development to plan for the potential development of low- and moderate-income units. In addition, the Proposed Project creates six ODS addressing the following: height; setbacks from property lines; lot coverage; floor area ratio ("FAR"); open space per dwelling unit; and, off-street parking. In many cases, the objective development standards increase allowable height and lot coverage, decrease minimum usable open space, and decrease parking requirements from the existing zone.

Higher densities would create a visual environment that is more concentrated, with a more urbanized appearance compared to a visual environment that currently contains lower densities. Future redevelopment projects and development of vacant lots within and adjacent to already-

developed neighborhoods will be subject to regulation and review mechanisms to ensure there is no substantial adverse effect on scenic vistas. Policies in the Proposed General Plan that ensure that new development achieve a high standard of visual quality consistent with existing regulations governing scenic quality include use of the City's Design Guidelines in evaluating proposals (CD-I-4) and providing updated, illustrated Design Guidelines for multifamily and senior housing (CD-I-5) and for commercial and mixed-use building form (CD-I-7). Additionally, open space policies (OC-G-5, OC-I-22, CO-I-64) in the General Plan protect natural resources, visual amenities, and public health and safety.

Further, the Pacifica Municipal Code also provides standards for protection of visual resources, compatible design, and illumination for new development in the city, such as the Hillside Preservation District and Coastal Zone Combining District. Section 9-4.4408 (Coastal View Corridors) defines provisions that apply to new development within coastal view corridors as designated in the Local Coastal Program Land Use Plan. These include development standards aimed at protecting public views, visual quality, and visual compatibility with the surrounding areas. In addition, the code states structures should be screened from public view using native vegetation as feasible.

Regarding particular site impacts, Site 21 and Site 32 are the only sites that have the potential to impact scenic vistas. As noted above, Site 21 at Oceana High School could affect views along Paloma Avenue, looking slightly to the northeast for ocean views. Currently, the site has about 5.5 acres of undeveloped, relatively flat land along Paloma Avenue. As such, ODS require a height limit of 45 feet to minimize impacts, since the taller a potential development is, the more severely such ocean views would be obstructed. Further, in order to ensure there is a clear line of vision to the ocean along Paloma Avenue, ODS require specific setbacks, so developments do not abut the property line. Further, the area is screened in by trees and located at a lower elevation than the surrounding neighborhood which further minimizes building height impacts.

In addition, Site 32 at the Brentwood Shopping Center could affect views to the west along Manor Drive if one stands looking slightly northeast from a higher elevation. Currently, the site includes three parcels that total 3.1 acres. Existing uses include a cluster of 1-story buildings constructed in the 1960s and 1970s including 24 Hour Fitness, plus smaller local retail uses including a taqueria, insurance company, and Starbucks. Similarly, ODS require a height limit of 55 feet to minimize impacts. ODS setback requirements would also help maintain the line of view of the ocean vista along Manor Drive by preventing development from abutting the property line. Further, development at Site 32 would be infill at an existing commercial area and views are already partially obstructed due to existing power lines and trees. Development at the site would maintain the existing land use pattern, thus preserving existing scenic vistas. As such, with how the lots are configured and implementation of ODS, views along Paloma Avenue and Manor Drive would not be impeded and the impact of these sites would be less than significant.

Compliance with the City's Municipal Code requirements and goals, policies, and actions in the General Plan would protect scenic resources upon development and redevelopment facilitated by the Proposed Project. Therefore, implementation of the Proposed Project would have a less-than-significant impact on scenic vistas.

Mitigation Measures

None required.

Impact 3.1-2 Development under the Proposed Project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. (Less than Significant)

A significant impact would occur if scenic resources, including but not limited to trees, rock outcroppings, and historic buildings, would be damaged or removed by a project within a state scenic highway. Highway 1 and Sharp Park Road have been identified by the State and County as eligible for scenic highway status. As such, while eligible, these roads are currently not designated as scenic highways. However, Pacifica's scenic resources are an important part of its identity, and the City's General Plan intends to protect the city's scenic resources from substantial damage, particularly when visible from scenic or eligible scenic highways.

As such, there are several General Plan policies that provide protection for the city's scenic resources, including trees, historic buildings, and ridgelines, to ensure that they remain visible from scenic roadways. For example, Guiding Policy CD-G-7 ensures viewsheds from Highway 1 and Sharp Park Road are preserved and enhanced through scenic corridor plans (CD-I-22), roadway design or modification that minimizes visual impacts to views from scenic routes (CD-I-26), and updates to the Design Guidelines to provide direction on how new buildings relate to Highway 1 (CD-I-28). Given that the Proposed Project is not expected to substantially damage scenic resources visible from scenic highways and must comply with General Plan policies, this potential impact is less than significant.

Mitigation Measures

None required.

Impact 3.1-3 Development under the Proposed Project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings in non-urbanized areas or conflict with applicable zoning and other regulations governing scenic quality in urbanized areas. (Less than Significant)

A significant impact may occur if a project were to introduce incompatible visual elements on the project site or visual elements that would be incompatible with the character of the area surrounding the project site. The overall focus of the Proposed Project is to create the regulatory framework to accommodate the Regional Housing Needs Allocation (RHNA) sites inventory as part of the City's General Plan Housing Element. As the majority of the Planning Area for Pacifica is protected open space or already-developed neighborhoods, future development under the Proposed Project would be focused on infill locations, including existing commercial shopping centers. As such, the development under the Proposed Project would address local housing needs

in compliance with State law while also seeking to retain Pacifica's character and existing scenic resources.

Higher densities would still create a visual environment that is more concentrated, with a more urbanized appearance compared to a visual environment that currently contains lower densities. Future redevelopment projects and development of vacant lots within and adjacent to already-developed neighborhoods will be subject to regulation and review mechanisms to ensure there is no substantial adverse effect on existing visual character or quality of public views. The City's General Plan establishes a comprehensive approach towards diverse types of development projects through policies that protect the character of existing neighborhoods while providing guidance for future development, such as ensuring compatibility with existing development and protecting natural and scenic resources. For instance, Implementing Policy CD-I-4 supports compatible residential infill on vacant lots and redevelopment of under-utilized commercial properties. Implementing Policy CD-I-5 requires high-quality multi-family housing that relates positively to the street and surrounding areas, and provides updated, illustrated Design Guidelines that reflect the unique qualities of Pacifica's neighborhoods. Implementing Policy CD-I-7 also seeks to ensure that new commercial and mixed-use development creates an attractive and human-scaled built environment. The Zoning Ordinance and Design Guidelines will be updated to address mixed use access, building form, the building-sidewalk relationship.

Under the Proposed Project, Objective Development Standards (ODS) would provide specific standards that regulate height, setbacks from property lines, lot coverage, floor area ratio ("FAR"), open space per dwelling unit, and off-street parking. For example, ODS requires a minimum 30 foot setback from any property line abutting a zone where a single-family residential use is a permitted use. Any building located on a corner shall include a design consistent with Sharp Park Specific Plan Policy 5-I-47. This policy requires façade elements to establish building scale and pattern, using architectural techniques such as clustering or aligning windows and doors to form a regular pattern. Horizontal building elements should be roughly aligned (within 3 feet of height) with others in the same block. Such regulations would ensure compatibility with the existing visual quality of a particular development site.

In addition, the City's Municipal Code regulates the quality of public views. To protect important views from public areas and the sensitive terrain of hillside areas, the City has special development regulations for the Hillside Preservation District (HPD), which requires submission of development plans, grading plans, and other documentation. Proposed Project site 12 would be subject to HPD regulations. Further, Section 9-4.4408 (Coastal View Corridors) defines provisions that apply to new development within coastal view corridors. These include development standards aimed at protecting public views, visual quality, and visual compatibility with the surrounding areas. In addition, structures should be screened from public view using native vegetation as feasible.

Overall, in those areas where the Proposed Project would change existing land use and physical design, it is expected that the impact will be less than significant because the proposed changes in land use and physical design are intended to increase visual quality, create a more unified visual experience, and fill in vacant and undesirable visual areas with attractive and economically vibrant new development. Further, development under the Proposed Project would be required to comply with the applicable General Plan, Municipal Code, and other regulations governing visual character. Compliance with existing regulations and the Proposed Project ODS would help ensure the compatibility of new developments and impacts would be less than significant.

Mitigation Measures

None required.

Impact 3.1-4 Development under the Proposed Project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. (Less than Significant)

A significant impact may occur if a project were to introduce new sources of light or glare on or from the project site which would be incompatible with the surrounding area. New development facilitated under the Proposed Project would introduce new sources of light within the Planning Area. Potential sources of new nighttime light from new development include light spillover from the windows of residences. New development also could produce glare from sunlight reflecting off windows, reflective surfaces, and unshielded equipment. Motor vehicle windows, parked or passing by, or vehicle headlights at night form another potential source of light and glare.

As discussed previously, the Planning Area is a suburban area where existing lights and surfaces with glare are common. Buildout of the Proposed Project would primarily occur on infill locations, including existing commercial shopping centers. Therefore, the additional light and glare created under the Proposed Project would not illuminate currently dark or unlit areas without reflective or glaring surfaces.

The Pacifica General Plan also establishes outdoor lighting standards to minimize energy use while insuring appropriate light levels. Implementing Policy CO-I-64 requires that these standards be met by greater use of photocells or astronomical time switches, directional and shielded LED lights, security lights with motion detectors, and prohibitions against continuous all-night outdoor lighting unless required for security reasons. Further, Implementing Policy ES-I-36 requires that development projects adjacent to protected natural areas are designed to minimize nighttime lighting and glare.

As such, new sources would not substantially increase the amount of nighttime lighting or glare in the already suburban city. With compliance to existing standards and regulations, impacts associated with light and glare would be less than significant.

Mitigation Measures

None required.

3.2 Air Quality

This chapter summarizes information on the air quality environment in the Planning Area and provides an evaluation of the air quality-related effects of the Proposed Project. The analysis considers existing and projected air quality along major roadways, in addition to other air pollutant sources in the Planning Area. This section focuses on criteria air pollutants and toxic air contaminants (TACs); greenhouse gases (GHGs) are evaluated in Chapter 3.5: Energy and Greenhouse Gas Emissions.

The City received two responses to the Notice of Preparation (NOP) regarding topics addressed in this section of the EIR. Commenters expressed concern for air quality impacts as a result of new development and additional vehicles on the road. This issue is addressed in the following Impact Analysis.

Environmental Setting

PHYSICAL SETTING

Air quality is affected by the rate, amount, and location of pollutant emissions, and the associated meteorological conditions that influence pollutant movement and dispersal. Atmospheric conditions, including wind speed, wind direction, and air temperature, in combination with local surface topography (i.e., geographic features such as mountains and valleys), determine the effect of air pollutant emissions on local air quality.

Climate, Meteorology, and Topography

Regional

The City of Pacifica is located within the San Francisco Bay Area Air Basin (SFBAAB). The Bay Area Air Quality Management District (BAAQMD) is the regional agency with regulatory authority over emission sources in the Bay Area, which includes all of San Francisco, San Mateo, Santa Clara, Alameda, Contra Costa, Marin, and Napa counties and the southern half of Sonoma and southwestern half of Solano counties.

The Bay Area's climate is dominated by the strength and position of the semi-permanent high-pressure center over the Pacific Ocean. During the summer, dry and subsiding air associated with high pressure off the coast acts as a cap over the cooler marine air near the surface. During the winter, when the high pressure system has retreated southward, subsidence inversions are less common; however, radiant inversions caused by warmer air radiating back from the land trapped under colder air masses above are frequent. These inversions typically develop overnight and,

though they can restrict the vertical dispersion of pollutants emitted at ground level, generally dissipate by afternoon.

The Bay Area has complex terrain that distorts wind flow and substantially influences local atmospheric conditions and air quality. The Golden Gate and Carquinez Strait provide major gaps in the Coast Range, allowing air to pass between the Pacific Ocean and the Central Valley. Winds typically bring marine air from the northwest, and pick up speed where they are channeled through the gaps.

Within the peninsula sub-region, air pollution potential is highest in the southeast (in the vicinity of Redwood City), the area most protected from high winds and most susceptible to pollution transported from upwind urban areas.

Pacifica

Pacifica lies in the northwestern portion of the Bay Area's peninsula climatological sub-region, on the coastal side of the Santa Cruz Mountains. The mountains generally rise to an elevation between 500 and 2,000 feet, with the exception of the San Bruno gap, extending from Fort Funston on the Pacific Ocean to SFO on the San Francisco Bay. Because it is oriented in the same northwest-to-southeast direction as the prevailing winds, and because elevations there are below 200 feet, marine air flows through the gap in the direction of the Bay.

Due to its position relative to wind flow patterns and topography, air quality in Pacifica is better than it is in the Bay Area overall. At Pacifica's location, winds bring air from the ocean and are generally strong enough to carry away local emissions.

CRITERIA AIR POLLUTANTS

The federal and state governments have established ambient air quality standards for six criteria pollutants. Ozone is considered a regional pollutant because its precursors affect air quality on a regional scale. Pollutants such as carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), and lead are considered local pollutants that tend to accumulate in the air locally. Particulate matter (PM) is both a regional and local pollutant. The primary criteria pollutants generated by the Proposed Project are ozone precursors, including nitrogen oxides (NO_x) and reactive organic gases (ROGs), CO, and PM.¹

All criteria pollutants can have human health effects at certain concentrations. The ambient air quality standards for these pollutants are set to protect public health and the environment with an adequate margin of safety (Clean Air Act [CAA] Section 109). Epidemiological, controlled human

¹ As discussed above, there are also ambient air quality standards for SO₂, lead, sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particulates. However, these pollutants are typically associated with industrial sources, which are not included as part of the project. Accordingly, they are not evaluated further. Most emissions of NO_x are in the form of nitric oxide (NO). Conversion to NO₂ occurs in the atmosphere as pollutants disperse downwind. Accordingly, NO₂ is not considered a local pollutant of concern for the project and is not evaluated further. Source: Reşitoğlu, Ibrahim A. 2018. *NO_x Pollutants from Diesel Vehicles and Trends in Control Technologies*. Published November 5. DOI: 10.5772/intechopen.81112. Available: <https://www.intechopen.com/books/diesel-and-gasoline-engines/no-sub-x-sub-pollutants-from-diesel-vehicles-and-trends-in-the-control-technologies>. Accessed: July 1, 2021.

exposure, and toxicology studies evaluate potential health and environmental effects of criteria pollutants, and form the scientific basis for new and revised ambient air quality standards. Principal characteristics and possible health and environmental effects from exposure to the primary criteria pollutants generated by the project are discussed below.

Ozone

Ozone (O₃, or “smog”) is a photochemical oxidant that is formed when ROG and NO_x (both byproducts of the internal combustion engine) react with sunlight. ROG, more broadly referred to as volatile organic compounds (VOCs),² are compounds made up primarily of hydrogen and carbon atoms. Internal combustion associated with motor vehicle use is the major source of hydrocarbons. Other sources of ROG are emissions associated with the use of paints and solvents, the application of asphalt paving, and the use of household consumer products such as aerosols. The two major forms of NO_x are nitric oxide (NO) and NO₂. NO is a colorless, odorless gas that forms from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure. NO₂ is a reddish-brown irritating gas formed by the combination of NO and oxygen. In addition to serving as an integral participant in ozone formation, NO_x also directly acts as an acute respiratory irritant and increases susceptibility to respiratory pathogens.

Ozone poses a higher risk to those who already suffer from respiratory diseases (e.g., asthma), children, older adults, and people who are active outdoors. Exposure to ozone at certain concentrations can make breathing more difficult, cause shortness of breath and coughing, inflame and damage the airways, aggravate lung diseases, increase the frequency of asthma attacks, and cause chronic obstructive pulmonary disease. Studies show associations between short-term ozone exposure and non-accidental mortality, including deaths from respiratory issues. Studies also suggest long-term exposure to ozone may increase the risk of respiratory-related deaths (U.S. EPA Ground, 2023). The concentration of ozone at which health effects are observed depends on an individual’s sensitivity, level of exertion (i.e., breathing rate), and duration of exposure. Studies show large individual differences in the intensity of symptomatic responses, with one study finding no symptoms to the least responsive individual after a 2-hour exposure to 400 parts per billion (ppb) of ozone and a 50 percent decrease in forced airway volume in the most responsive individual. Although the results vary, evidence suggests that sensitive populations (e.g., asthmatics) may be affected on days when the 8-hour maximum ozone concentration reaches 80 ppb (U.S. EPA Ozone, 2023).

In addition to human health effect, ozone has been tied to crop damage, typically in the form of stunted growth, leaf discoloration, cell damage, and premature death. Ozone can also act as a corrosive and oxidant, resulting in property damage such as the degradation of rubber products and other materials.

² EPA formerly defined the regulated organic compounds in outdoor air as “Reactive Organic Gases” (ROGs), intended to specifically refer to reactive chemicals; however, EPA later revised this terminology to “Volatile Organic Compounds” (VOCs) to more broadly encompass organic (carbon) compounds that participate in atmospheric photochemical reactions (i.e., contribute to ozone) in both indoor and outdoor air.

Carbon Monoxide

Carbon monoxide is a colorless, odorless, toxic gas produced by incomplete combustion of carbon substances, such as gasoline or diesel fuel. In the study area, high CO levels are of greatest concern during the winter, when periods of light winds combine with the formation of ground-level temperature inversions from evening through early morning. These conditions trap pollutants near the ground, reducing the dispersion of vehicle emissions. Moreover, motor vehicles exhibit increased CO emission rates at low air temperatures. The primary adverse health effect associated with CO is interference with normal oxygen transfer to the blood, which may result in tissue oxygen deprivation. Exposure to CO at high concentrations can also cause fatigue, headaches, confusion, dizziness, and chest pain. There are no ecological or environmental effects of CO at or near existing background CO levels (CARB, 2024).

Particulate Matter

PM consists of finely divided solids or liquids, such as soot, dust, aerosols, fumes, and mists. Two forms of fine particulates are now recognized: respirable coarse particles with an aerodynamic diameter of 10 micrometers or less (PM_{10}), and respirable fine particles with an aerodynamic diameter of 2.5 micrometers or less ($PM_{2.5}$). Particulate discharge into the atmosphere results primarily from industrial, agricultural, construction, and transportation activities. However, wind on arid landscapes also contributes substantially to local particulate loading. PM is considered both a local and a regional pollutant.

Particulate pollution can be transported over long distances and may adversely affect humans, especially people who are naturally sensitive or susceptible to breathing problems. Numerous studies have linked PM exposure to premature death in people with preexisting heart or lung disease. Other symptoms of exposure may include nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms. Depending on composition, both PM_{10} and $PM_{2.5}$ can also affect water quality and acidity, deplete soil nutrients, damage sensitive forests and crops, affect ecosystem diversity, and contribute to acid rain (U.S. EPA PM, 2023).

OTHER CRITERIA POLLUTANTS

The California Air Resources Board (CARB) has also established the California Ambient Air Quality Standards (CAAQS) for hydrogen sulfide (H_2S), sulfates, vinyl chloride, and visibility-reducing particles. These pollutants are not addressed by federal standards. Below is a summary of the pollutants and a description of their physical properties, health and other effects, sources, and the extent of the problems.

Hydrogen Sulfide

Hydrogen sulfide (H_2S) emissions often are associated with geothermal activity, oil and gas production, refining, sewage treatment plants, and confined animal feeding operations. H_2S in the atmosphere will likely oxidize into SO_2 , which can lead to acid rain. At low concentrations, H_2S may cause irritation to the eyes, mucous membranes, and respiratory system, dizziness, and headaches. In high concentrations (800 parts per million can cause death), H_2S is extremely hazardous,

especially in enclosed spaces. The Occupational Safety and Health Administration (OSHA) has the primary responsibility for regulating workplace exposure to H₂S.

Sulfates

Sulfates are another particulate product that results from the combustion of sulfur-containing fossil fuels; however, the majority of ambient sulfates is formed in the atmosphere. When SO₂ comes in contact with oxygen it precipitates out into sulfates. The health effects associated with SO₂ and sulfates more commonly known as sulfur oxides (SO_x) include respiratory illnesses, decreased pulmonary disease resistance, and aggravation of cardiovascular diseases. When acidic pollutants and particulates are also present, SO₂ tends to have an even more toxic effect. Increased PM derived from SO₂ emissions also contributes to impaired visibility. In addition to particulates, sulfur trioxide and sulfate ion are precursors to acid rain. SO_x and NO_x are the leading precursors to acid rain, which can lead to corrosion of human-made structures and cause acidification of water bodies.

Visibility-Reducing Particles

Visibility-reducing particles consist of PM generated from a variety of natural and manmade sources and vary greatly in shape, size, and chemical composition. Some haze-causing particles (e.g., windblown dust and soot) are directly emitted into the air, whereas others are formed in the air from the chemical transformation of gaseous pollutants (e.g., sulfates, nitrates, organic carbon particles), which are the major constituents of fine PM. These fine particles, caused largely by the combustion of fuel, can travel hundreds of miles and cause visibility impairment. California has been labeled unclassified for visibility—CARB has not established a method for measuring visibility with the precision and accuracy needed to designate areas attainment or nonattainment.

Vinyl Chloride

Vinyl chloride is a colorless, sweet-smelling gas at ambient temperature. Landfills, publicly owned treatment works, and polyvinyl chloride production are the major identified sources of vinyl chloride emissions in California. Polyvinyl chloride can be fabricated into several products, such as pipes, pipe fittings, and plastics. In humans, epidemiological studies of occupationally exposed workers have linked vinyl chloride exposure to development of liver angiosarcoma, a rare cancer, and have suggested a relationship between exposure and lung and brain cancers.

TOXIC AIR CONTAMINANTS

Although ambient air quality standards have been established for criteria pollutants, no ambient standards exist for TACs. Many pollutants are identified as TACs because of their potential to increase the risk of developing cancer or because of their acute or chronic health risks. For TACs that are known or suspected carcinogens, CARB has consistently found that there are no levels or thresholds below which exposure is risk-free. Individual TACs vary greatly in the risks they present. At a given level of exposure, one TAC may pose a hazard that is many times greater than another. TACs are identified in the California Code of Regulations Title 17, Section 93000, and their toxicity is studied by the California Office of Environmental Health Hazard Assessment (OEHHA). The primary TACs of concern associated with the Proposed Project are asbestos, benzene, diesel PM, inorganic lead, and perchloroethylene.

Asbestos

Asbestos is the name given to several naturally occurring fibrous silicate minerals, found in its natural state in rock or soil. Before the adverse health effects of asbestos were identified, asbestos was widely used as insulation and fireproofing in buildings because of its heat resistance and strong insulating properties, and it can still be found in some older buildings. The inhalation of asbestos fibers into the lungs can result in a variety of adverse health effects, including inflammation of the lungs, respiratory ailments (e.g., asbestosis, which is scarring of lung tissue that results in constricted breathing), and cancer (e.g., lung cancer and mesothelioma, which is cancer of the linings of the lungs and abdomen). The U.S. Consumer Product Safety Commission banned use of most asbestos-containing materials (ACMs) in 1977 due to their link to mesothelioma. As a result, present sources of ACMs are primarily buildings that were constructed prior to 1977.

Benzene

Benzene (C_6H_6) is a known carcinogen ubiquitously emitted by the marketing and burning of gasoline. Although benzene is treated as a substance without a carcinogenic threshold, health effects other than cancer are not expected to occur at usual ambient levels; however, in areas with elevated benzene levels, such as near gasoline dispensing facilities, the added lifetime cancer risk from ambient air benzene exposure ranges from 22 to 170 cases per million for every part per billion (CARB, 2024).

Diesel Particulate Matter

Diesel PM is a type of fine PM generated by diesel-fueled equipment and vehicles such as those used for freight and goods movement, construction, and industrial activities. Short-term exposure to diesel can cause acute irritation (e.g., eye, throat, and bronchial), neurophysiological symptoms (e.g., lightheadedness and nausea), and respiratory symptoms (e.g., cough and phlegm). The U.S. Environmental Protection Agency (EPA) has determined that diesel exhaust is “likely to be carcinogenic to humans by inhalation” (U.S. EPA Diesel, 2003).

Inorganic Lead

Although lead (Pb) is a naturally occurring mineral formed in the earth’s crust, “inorganic lead” refers to substances that do not contain carbon but include metallic lead and is considered a potential human carcinogen. More than cancer, however, ambient air exposure to inorganic lead PM at levels below the CAAQS could lead to significant health concerns including neurodevelopmental effects in children and increases in blood pressure and related cardiovascular conditions in adults.

Although leaded automobile (on-road) fuel has been banned in the U.S. since 1995, major sources of outdoor inorganic lead emissions in California include stationary point and area source fuel combustion, aircraft fuel combustion, industrial metal melting, autobody refinishing, cement manufacturing, and incineration. Inorganic lead emissions may deposit and accumulate in soil for many years, and lead-contaminated dust particles could become airborne by wind and agricultural activities.

Indoor concentrations of airborne lead are typically a result of outdoor air particle infiltration, but activities that disturb lead-based paint, such as remodeling or paint removal, can release large

amounts of lead-bearing particles into the air. Lead has been banned for use in residential paint since 1978, but housing units built prior to this date are likely to contain lead-based paint. Additionally, lead-based paints are still allowed in industrial, military, and marine applications.

Perchloroethylene

Perchloroethylene (C₂Cl₄, also known as tetrachloroethylene, “perc,” or PCE) is a nonflammable, colorless liquid used as a solvent for a wide variety of industrial and commercial activities including dry cleaning, degreasing, paints and coatings, adhesives, aerosols, printing inks, silicones, rug shampoos, and laboratory solvents. A large majority of perchloroethylene emissions result from dry cleaning and degreasing operations. It is a potential carcinogen that may also cause acute toxic health effects, including skin and eye irritation, burns, blistering, and elevated heart rate, as a result of prolonged exposure. Massive acute doses or chronic exposure can affect the central nervous system or liver. However, average ambient or indoor air exposures to perchloroethylene is not expected to have noncarcinogenic chronic health effects (CARB, 2024).

ODORS

The Bay Area Air Quality Management District’s (BAAQMD) thresholds for odors are qualitative and based on BAAQMD’s Regulation 7, Odorous Substances. This rule places general limitations on odorous substances and specific emission limitations on certain odorous compounds. Odors are also regulated under BAAQMD Regulation 1, Rule 1-301, Public Nuisance, which states that no person shall discharge from any source whatsoever quantities of air contaminants or other materials that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or the public; endanger the comfort, repose, health, or safety of any such persons or the public; or cause, or have a natural tendency to cause, injury or damage to businesses or property. Under BAAQMD’s Rule 1-301, a facility that receives three or more violation notices within a 30-day period can be declared a public nuisance. The BAAQMD has established odor screening thresholds for land uses that have the potential to generate substantial odor complaints, including wastewater treatment plants, landfills or transfer stations, composting facilities, confined animal facilities, food manufacturing, and chemical plants (BAAQMD, 2017).

EXISTING AIR QUALITY CONDITIONS

Criteria Air Pollutants: Bay Area Attainment Status

To measure and monitor the ambient concentrations of criteria pollutants in the Bay Area, the BAAQMD operates a regional network of monitoring stations that measures the ambient concentrations of criteria pollutants. Ozone, carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), particulate matter (PM), and lead are the six criteria air pollutants. Detailed definitions of pollutants are provided below in the regulatory setting.

The major criteria pollutants of concern in the San Francisco Bay Area are ozone and PM (both PM₁₀ and PM_{2.5}), which are monitored at a number of locations. As of January 2017, the Bay Area had nonattainment status for ozone (state and federal standards) and PM (PM₁₀ and PM_{2.5}, state and federal standards). The Bay Area has attained the state and federal CO standards; however, CO can be a concern at highly congested intersections during periods of high meteorological stability. Sulfur dioxide is no longer considered a problem pollutant in California due to improved industrial source controls, the substitution of natural gas for fuel oil, and lower sulfur content in fuels. The state has attained the sulfur dioxide standard for several years.³ **Table 3.2-1** summarizes the Bay Area Attainment Status.

³ CARB, "Sulfur Dioxide" webpage, 2017. Available: <https://ww2.arb.ca.gov/our-work/programs/state-and-federal-area-designations/federal-area-designations/sulfur-dioxide>

Table 3.2-1: Ambient Air Quality Sources, Standards and Attainment Status in the Bay Area^{1,2,3}

	Averaging Time	Standard	Bay Area Attainment Status
Ozone: from motor vehicles, other mobile sources, combustion, industrial and commercial processes			
State	1 hour	0.09 ppm	Non-Attainment
	8 hours	0.07 ppm	Non-Attainment ⁸
Federal	8 hours	0.07 ppm	Non-Attainment ^{4,5}
Carbon Monoxide: Internal combustion engines, primarily gasoline-powered motor vehicles			
State	1 hour	20 ppm	Attainment
	8 hours	9.0 ppm	Attainment ⁶
Federal	1 hour	35 ppm	Attainment
	8 hours	9.0 ppm	Attainment
Nitrogen Dioxide: Motor vehicles, petroleum refining operations, industrial sources, aircraft, ships, and railroads			
State	1 hour	0.18 ppm	Attainment
	Annual Average	0.030 ppm	Unclassified
Federal	1 hour	0.1 ppm ¹⁰	Unclassified
	Annual average	0.053 ppm	Attainment
Sulfur Dioxide: Fuel combustion, chemical plants, sulfur recovery plants and metal processing ¹¹			
State	1 hour	0.25 ppm	Attainment
	24 hours	0.04 ppm	Attainment
Federal	24 hours	0.14 ppm	Attainment
	Annual average	0.03 ppm	Attainment
Respirable Particulate Matter (PM₁₀): Dust- and fume-producing industrial and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays)			
State	24 hours	50 µg/m ³	Non-Attainment
	Annual arithmetic mean	20 µg/m ³	Non-Attainment ⁷
Federal	24 hours	150 µg/m ³	Unclassified
Fine Particulate Matter (PM_{2.5}): same sources as PM ₁₀			
State	Annual arithmetic mean	12 µg/m ³	Non-Attainment ⁷
Federal	24 hours ⁹	35 µg/m ³	Non-Attainment
	Annual arithmetic mean	15 µg/m ³	Unclassified
Lead: Lead smelters, battery manufacturing and recycling facilities ¹²			
State	30 Day Average	1.5 µg/m ³	Attainment
Federal	Calendar quarter	1.5 µg/m ³	Attainment

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

Table 3.2-1: Ambient Air Quality Sources, Standards and Attainment Status in the Bay Area^{1,2,3}

Averaging Time	Standard	Bay Area Attainment Status
2. National standards shown are the "primary standards" designed to protect public health. National standards other than for ozone, particulates and those based on annual averages are not to be exceeded more than once a year. The 1-hour ozone standard is attained if, during the most recent three-year period, the average number of days per year with maximum hourly concentrations above the standard is equal to or less than one. The 8-hour ozone standard is attained when the 3-year average of the 4th highest daily concentrations is 0.075 ppm (75 ppb) or less. The 24-hour PM₁₀ standard is attained when the 3-year average of the 99th percentile of monitored concentrations is less than 150 µg/m³. The 24-hour PM_{2.5} standard is attained when the 3-year average of 98th percentiles is less than 35 µg/m³. Except for the national particulate standards, annual standards are met if the annual average falls below the standard at every site. The national annual particulate standard for PM₁₀ is met if the 3-year average falls below the standard at every site. The annual PM_{2.5} standard is met if the 3-year average of annual averages spatially-averaged across officially designed clusters of sites falls below the standard.		
3. National air quality standards are set by US EPA at levels determined to be protective of public health with an adequate margin of safety.		
4. Final designations effective July 20, 2012.		
5. The national 1-hour ozone standard was revoked by U.S. EPA on June 15, 2005.		
6. In April 1998, the Bay Area was redesignated to attainment for the national 8-hour carbon monoxide standard.		
7. In June 2002, CARB established new annual standards for PM_{2.5} and PM₁₀.		
8. The 8-hour CA ozone standard was approved by the Air Resources Board on April 28, 2005 and became effective on May 17, 2006.		
9. U.S. EPA lowered the 24-hour PM_{2.5} standard from 65 µg/m³ to 35 µg/m³ in 2006. EPA designated the Bay Area as nonattainment of the PM_{2.5} standard on October 8, 2009. The effective date of the designation is December 14, 2009 and the Air District has three years to develop a plan, called a State Implementation Plan (SIP), that demonstrates the Bay Area will achieve the revised standard by December 14, 2014. The SIP for the new PM_{2.5} standard must be submitted to the US EPA by December 14, 2012.		
10. To attain this standard, the 3-year average of the 98th percentile of the daily maximum 1-hour average at each monitor within an area must not exceed 0.100ppm (effective January 22, 2010).		
11. On June 2, 2010, the U.S. EPA established a new 1-hour SO₂ standard, effective August 23, 2010, which is based on the 3-year average of the annual 99th percentile of 1-hour daily maximum concentrations. The existing 0.030 ppm annual and 0.14 ppm 24-hour SO₂ NAAQS however must continue to be used until one year following U.S. EPA initial designations of the new 1-hour SO₂ NAAQS. EPA expects to designate areas by June 2012.		
12. ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure below which there are no adverse health effects determined.		

Source : BAAQMD, 2017. <https://www.baaqmd.gov/about-air-quality/research-and-data/air-quality-standards-and-attainment-status#twelve>.

Ambient Criteria Pollutant Concentrations

A number of ambient air quality monitoring stations are located in SFBAAB to monitor progress toward air quality standards attainment of the National Ambient Air Quality Standards (NAAQS) and CAAQS. The NAAQS and CAAQS are discussed further under *Regulatory Setting*. Because the nearest BAAQMD monitoring station is approximately 10 miles from Pacifica on Arkansas Street in San Francisco, air quality in Pacifica can be inferred but not precisely gauged from BAAQMD measurements. **Table 3.2-2** summarizes data for criteria air pollutant levels from the Arkansas Street Station from 2021-2023. **Table 3.2-2** shows federal and state standards for pollutants were not exceeded from the samples at the monitoring station.

Table 3.2-2: Ambient Air Quality Data at the Arkansas Street Monitoring Station (2021-2023)

Pollutant Standards	2021	2022	2023
Ozone (O₃)			
Maximum 1-hour concentration (ppm)	0.074	0.070	0.057
Maximum 8-hour concentration (ppm)	0.054	0.060	0.046
Number of days standard exceeded^a			
CAAQS 1-hour (> 0.09 ppm)	0	0	0
CAAQS 8-hour (> 0.070 ppm)	0	0	0
NAAQS 8-hour (> 0.070 ppm)	0	0	0
Carbon Monoxide (CO)			
Maximum 1-hour concentration (ppm)	1.2	1.5	4.4
Maximum 8-hour concentration (ppm)	0.9	1.0	1.9
Number of days standard exceeded^a			
NAAQS 1-hour (≥ 35.0 ppm)	0	0	0
CAAQS 1-hour (≥ 20.0 ppm)	0	0	0
NAAQS 8-hour (≥ 9.0 ppm)	0	0	0
CAAQS 8-hour (≥ 9.0 ppm)	0	0	0
Nitrogen Dioxide (NO₂)			
State maximum 1-hour concentration (ppm)	0.050	0.046	0.044
State second-highest 1-hour concentration (ppm)	0.043	0.044	0.041
Annual average concentration (ppm)	0.007	0.008	0.007
Number of days standard exceeded^a			
CAAQS 1-hour (0.180 ppm)	0	0	0
Particulate Matter (PM₁₀)			
Maximum 24-hour concentration (µg/m ³)	32.2	34.2	43.8
Second-highest 24-hour concentration (µg/m ³)	26.4	28.5	40.4
Measured number of days standard exceeded^a			
NAAQS 24-hour (> 150 µg/m ³)	0	0	0
CAAQS 24-hour (> 50 µg/m ³)	0	0	0
Fine Particulate Matter (PM_{2.5})			
Maximum 24-hour concentration (µg/m ³)	22.4	29.0	16.7
Second-highest 24-hour concentration (µg/m ³)	21.7	29.0	15.9
Measured number of days standard exceeded^a			
NAAQS 24-hour (> 35 µg/m ³)	0	0	0

Notes:

^a. An exceedance is not necessarily related to a violation of the standard.

ppm = parts per million; NAAQS = National Ambient Air Quality Standards; CAAQS = California Ambient Air Quality Standards; µg/m³ = micrograms per cubic meter, mg/m³ = milligrams per cubic meter, – = no data available

Sources: California Air Resources Board, 2023. iADAM: Air Quality Data Statistics – Top 4 Summary (2021-2023), San Francisco County, Arkansas Street Monitoring Station. Available: <https://www.arb.ca.gov/adam/topfour/topfour1.php>. Accessed: September 10, 2024.; U.S. Environmental Protection Agency. 2024. Outdoor Air Quality Data. Monitor Values Reports (Carbon Monoxide, 2021-2023, San Francisco County, Arkansas Street Monitoring Station. Last updated January, 2024. Available: <https://www.epa.gov/outdoor-air-quality-data/monitor-values-report>. Accessed: September 10, 2024.

AIR POLLUTION SOURCES

The BAAQMD maintains an Emissions Inventory, which estimates the total volume of air pollutants generated each day by approximately 100 “areawide” sources, point sources such as factories, gas stations and power plants, and mobile sources (primarily vehicles). From estimates for San Mateo County for 2020, shown in **Table 3.2-3**, it is clear that the proportion of air pollution generated by different sources varies by pollutant. Cars, trucks, airplanes, and boats are responsible for most of the smog-producing pollutants (nitrogen oxides and reactive organic gases) in the air and nearly all of the carbon monoxide. Areawide sources, especially dust from roads, produce most of the particulate air pollutants. Ships account for virtually all of the sulfur dioxide emitted in San Mateo County. Waste disposal is the largest contributor to the release of Total Organic Gases (TOG).

Table 3.2-3: Summary of Sources of Air Pollutants in San Mateo County 2020

	Average Annual Emissions (tons/day)							
	TOG	ROG	CO	NO _x	SO _x	PM	PM ₁₀	PM _{2.5}
Stationary Sources								
Fuel Combustion	0.4	0.1	1.9	1.7	0	0.2	0.2	0.2
Waste Disposal	42.1	1.3	0.4	0.1	0	0	0	0
Cleaning and Surface Coatings	5.0	3.8	0	0	-	-	-	-
Petroleum Production and Marketing	4.5	1.2	-	-	-	-	-	-
Industrial Processes	1.6	1.2	0	0	-	1.2	0.8	0.6
Total Stationary Sources	53.5	7.6	2.3	1.8	0.1	1.5	1.1	0.8
Areawide Sources								
Solvent Evaporation	9.2	8.2	-	-	-	-	-	-
Miscellaneous Processes	5.9	1.2	11.7	2.0	0.1	37.2	19.2	4.8
Total Areawide Sources	15.2	9.4	11.7	2.0	0.1	37.2	19.2	4.8
Mobile Sources								
On-Road Motor Vehicles	6.2	5.7	48.1	7.4	0.1	1.1	1.1	0.7
Other Mobile Sources	8.6	7.8	63.7	42.7	12.2	2.5	2.4	2.2
Total Mobile Sources	14.8	13.5	111.8	50.1	12.3	3.5	3.4	2.9
Total for San Mateo County:	83.4	30.5	125.8	53.9	12.4	42.2	23.6	8.5

Source: California Air Resources Board, 2020, available at <https://ww2.arb.ca.gov/criteria-pollutant-emission-inventory-data>.

Existing TAC Sources and Health Risks

The BAAQMD maintains an inventory of health risks associated with all permitted stationary sources within the SFBAAB. The inventory was last updated in 2024 and is publicly available online. There are 29 stationary sources identified by BAAQMD within the Planning Area boundaries with screening-level risks identified. These sources are predominantly associated with commercial and office uses in the area, such as emergency diesel generators, gasoline dispensing facilities, boilers and dry cleaning operations. The excess cancer risk values for these sources can vary from none up to 97 in one million, depending on the source. This screening-level risk does not represent actual impacts. The values are based on worst-case assumption scenarios to determine whether or not a refined modeling analysis may be needed. The calculations used in the screening analysis do not include source specific exhaust information such as stack height, exhaust gas exit velocity, exhaust gas temperature, nor do they account for actual distances from receptors. A more refined analysis using source specific exhaust parameters, site specific meteorological data, site specific building dimensions and locations, and actual location of source and receptors is expected to result in lower and more accurate values than those found in the BAAQMD screening tool.⁴ Stationary sources located in the Planning Area and their associated risks are identified in **Table 3.2-4** and **Figure 3.2-1**. Values in bold in the table exceed increased cancer risk of 10 in a million or exceed ambient PM_{2.5} increase of 0.3 µg/m³ annual average. Of these stationary sources, 13 exceed the BAAQMD screening-level risk for cancer risk and no sources exceed the thresholds for chronic hazard risk or ambient PM_{2.5} increase.

Aside from stationary sources, emissions of TACs in and around the Planning Area are also generated from mobile sources. The BAAQMD considers roadways with greater than 10,000 average daily traffic (ADT) as “high volume roadways” and recommends they be included in the analysis of health risks (BAAQMD, 2024). State Route (SR) 1 (or the Coast Highway) traverses the city from north to south, SR 35 (or Skyline Boulevard) generally runs along the eastern edge of Pacifica, and Sharp Park Road follows a southwest-northeast route through the center of Pacifica, connecting SR 1 (Coast Highway) with SR 35 (Skyline Boulevard). Such freeways that pass through the Planning Area have ADT greater than 10,000 vehicles. In addition to freeways, segments of Hickey Boulevard and Fassler Avenue are expected to have ADT greater than 10,000 by 2040, accounting for the Proposed Project.⁵

LOCATIONS OF SENSITIVE RECEPTORS

Sensitive land uses are defined as locations where human populations, especially children, seniors, and sick persons are located and where there is reasonable expectation of continuous human exposure according to the averaging period for the air quality standards (i.e., 24-hour or 8-hour). Per the BAAQMD, typical sensitive land uses are residences, hospitals, and schools. Parks and playgrounds, where sensitive receptors (e.g., children and seniors) are present are considered

⁴ BAAQMD, California Environmental Quality Act Air Quality Guidelines, Updated May 2017. Available: <https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/tools/ceqa-guidelines-may-2017-thresholds-table-pdf.pdf?la=en&rev=b7a7fe49e3a341a78e282ae3d095a2c4>

⁵ DKS Associates, 2024.

sensitive land uses (BAAQMD, 2017). Existing sensitive land uses, including residential areas, are identified in **Figure 3.2-1**.

Table 3.2-4: Permitted Stationary Sources of TACs in the Planning Area^{1,2}

Facility ID	Facility Name (Source Type)	Street	Cancer Risk (per million)	Hazard Index (per million)	Increase of PM2.5 annual average ($\mu\text{g}/\text{m}^3$)
1186	0.09	2212 Beach Boulevard	67.41	0.02	0.03
1464	0	118 Monterey Rd	0	0	0.01
2001	0.07	700 Coast Highway	69.78	0.09	0.02
2264	0.01	325 Reina Del Mar	3.93	0	0
3259	0	2085 Coast Hwy	0	0	0
3636	0	201 Cypress Street	1.17	0	0
3691	0.01	1427 Palmetto Avenue	5.52	0	0
4218	0.01	1450 Terra Nova Blvd	7.22	0	0
4306	0.13	495 Linda Mar Blvd	97.18	0.03	0
4315	0	Big Sur & Park Pacifica	0.34	0	0
5070	0	100 Milagra Dr	38.86	0.17	0.01
5186	0	100 Brighton Road	0.01	0	0
5305	0	505 Linda Mar Blvd	23.68	0.1	0.1
5471	0	Golf Course Shrp Park	0.05	0	0.15
5503	0	498 Palmetto Ave	10.29	0.04	0
5510	0.01	897 Skyridge Drive	3.98	0	0.01
5798	0	6 Gypsy Hill Road	1.3	0	0.03
6740	0	5400 Pacific Coast Hwy	0	0	0

Table 3.2-4: Permitted Stationary Sources of TACs in the Planning Area^{1,2}

Facility ID	Facility Name (Source Type)	Street	Cancer Risk (per million)	Hazard Index (per million)	Increase of PM _{2.5} annual average (µg/m ³)
6936	0.08	6000 COAST HWY	62.52	0.02	0
7629	0	700 Hickey Blvd	16.26	0.07	0
7729	0	2400 Francisco Blvd	0.19	0	0
8047	0	2095 Coast Hwy	26.53	0.12	0
8173	0	765 Oddstad Blvd	16.66	0.07	0
8240	0	95 Aura Vista Street	14.23	0.06	0
9564	0	1100 Linda Mar Blvd	0.41	0	0
9565	0	700 Coast Hwy	0.73	0	0
9968	0	679 Hickey Blvd	18.88	0.08	0
9969	0	4475 Coast Hwy	51.27	0.22	0

Note: Values in Bold exceed increased cancer risk of ten in a million or exceed ambient PM_{2.5} increase of 0.3 µg/m³ annual average. Per BAAQMD Screening tool, the maximum acute and chronic hazard index for stationary sources in the Planning area is less than 1.0.

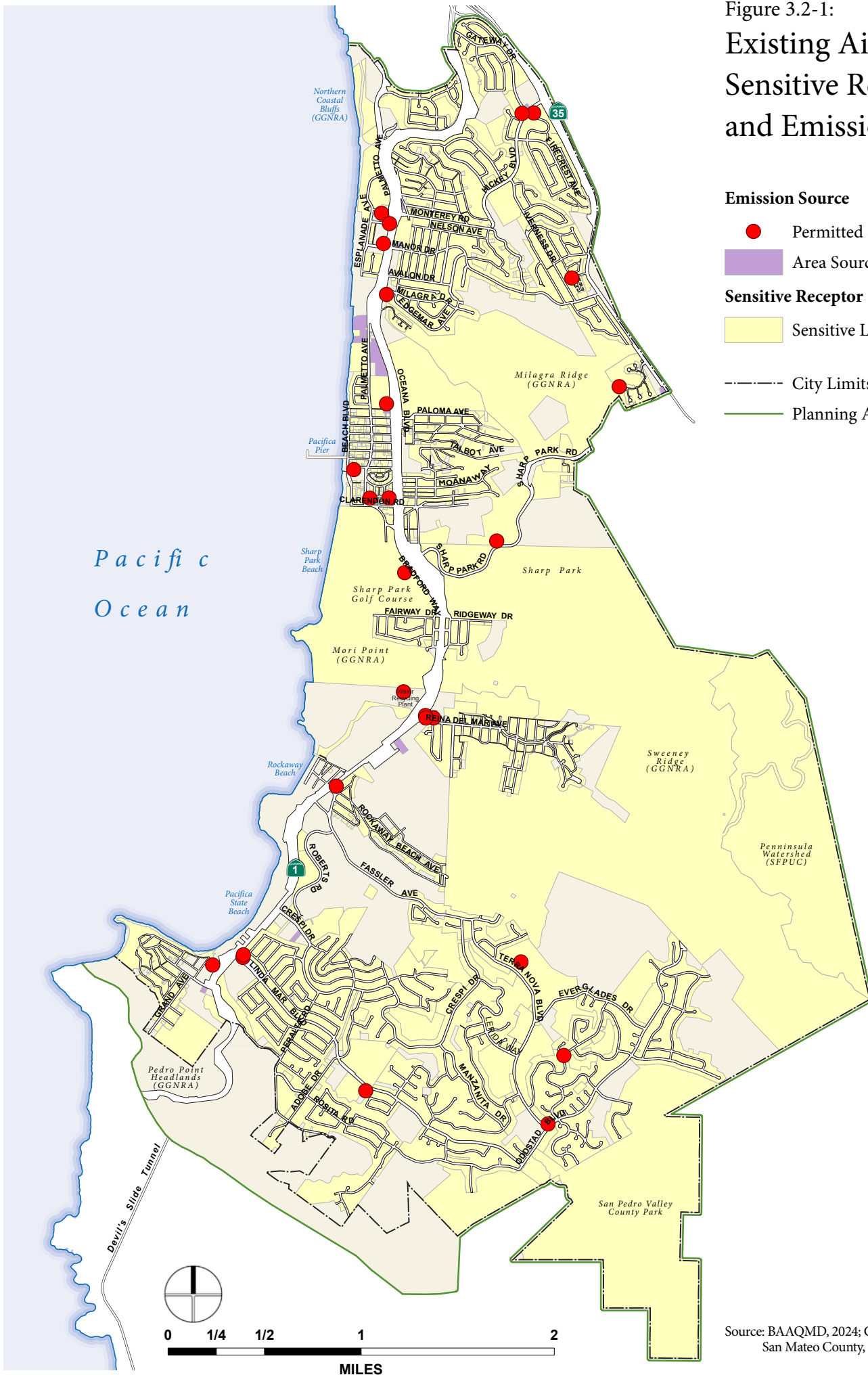
1. Excess Cancer Risk level describes the additional cancer risk above the expected rate of cancer in the population at the fence line of the site.
2. HRA Excess Cancer Risk level is based on Health Risk Screening Assessments conducted by the District for these sources, and represent the most site specific data available.

Source: BAAQMD, Permitted Sources Risk and Hazards Map, 2024, available at:
<https://baaqmd.maps.arcgis.com/apps/webappviewer/index.html?id=845658c19eae4594b9f4b805fb9d89a3>.

REGULATORY SETTING

Air quality in the project area is regulated through the efforts of various federal, state, regional, and local government agencies. These agencies work jointly, as well as individually, to improve air quality through legislation, planning, policymaking, education, and a variety of programs. The agencies responsible for improving the air quality within the air basin are discussed below.

Figure 3.2-1:
Existing Air Quality
Sensitive Receptors
and Emissions Sources



Source: BAAQMD, 2024; City of Pacifica, 2020;
San Mateo County, 2020; Dyett & Bhatia, 2024.

Federal

Clean Air Act and National Ambient Air Quality Standards

The EPA is responsible for implementing national air quality programs, as governed by the federal Clean Air Act, which was first enacted in 1963 and most recently amended in 1990. The Clean Air Act establishes primary and secondary NAAQS for the six criteria air pollutants [ozone, CO, NO₂, SO₂, Particulate Matter (PM₁₀ and PM_{2.5}), and lead] discussed in the Environmental Setting section; the NAAQS are shown in **Table 3.2-5**. The primary standards protect public health and the secondary standards protect public welfare. The Clean Air Act also requires each state to prepare a state implementation plan (SIP) for attaining and maintaining the NAAQS. States with nonattainment areas must revise their SIPs to incorporate additional control measures to reduce air pollution. EPA is responsible for reviewing all SIPs to determine whether they conform to the mandates of the Clean Air Act and its amendments, and whether implementation will achieve air quality goals. If EPA determines a SIP to be inadequate, EPA may prepare a federal implementation plan that imposes additional control measures. If an approvable SIP is not submitted or implemented within the mandated time frame, sanctions may be applied to transportation funding and stationary air pollution sources in the air basin.

Corporate Average Fuel Economy (CAFE) Standards

The National Highway Traffic Safety Administration (NHTSA) Corporate Average Fuel Economy (CAFE) standards require substantial improvements in fuel economy and reductions in emissions of criteria air pollutants and precursors, as well as greenhouse gases, from vehicles sold in the United States. The CAFE standards regulate how far vehicles must travel on a gallon of fuel, with standards for light-duty vehicles (passenger cars and light trucks) and separately for medium- and heavy-duty trucks and engines. The light-duty vehicle fuel economy standards are established for model years through 2026, and standards for model years 2027-2032 were proposed on July 28, 2023. Heavy-duty vehicle standards are established for model years through 2027, and proposed standards apply to model years 2030-2035 (with 2027 standards applying to interim model years). In accordance with the National Environmental Policy Act (NEPA), NHTSA released the Draft Environmental Impact Statement for public comment in September 2023. The final proposal was adopted on June 24, 2024, though would not go into effect until August 23, 2024. The proposal will require an industry fleet-wide average of approximately 58 miles per gallon for passenger cars and light trucks in model year 2032, by increasing fuel economy by two percent year-over-year for passenger cars, four percent year-over-year for light trucks, and 10 percent year-over-year for heavy-duty pickup trucks and vans. The proposal is intended to provide gas cost savings, conserve energy, and provide flexibility to industry using available fuel-saving technologies (NHTSA, 2023).

Table 3.2-5: National and California Ambient Air Quality Standards

Criteria Pollutant	Average Time	California Standards	National Standards ^a	
			Primary	Secondary
Ozone	1-hour	0.09 ppm	None ^b	None ^b
	8-hour	0.070 ppm	0.070 ppm	0.070 ppm
Particulate Matter (PM ₁₀)	24-hour	50 µg/m ³	150 µg/m ³	150 µg/m ³
	Annual mean	20 µg/m ³	None	None
Fine Particulate Matter (PM _{2.5})	24-hour	None	35 µg/m ³	35 µg/m ³
	Annual mean	12 µg/m ³	12.0 µg/m ³	15 µg/m ³
Carbon Monoxide (CO)	8-hour	9.0 ppm	9 ppm	None
	1-hour	20 ppm	35 ppm	None
Nitrogen Dioxide (NO ₂)	Annual mean	0.030 ppm	0.053 ppm	0.053 ppm
	1-hour	0.18 ppm	0.100 ppm	None
Sulfur Dioxide ^c (SO ₂)	Annual mean	None	0.030 ppm	None
	24-hour	0.04 ppm	0.014 ppm	None
	3-hour	None	None	0.5 ppm
	1-hour	0.25 ppm	0.075 ppm	None
	30-day Average	1.5 µg/m ³	None	None
Lead	Calendar quarter	None	1.5 µg/m ³	1.5 µg/m ³
	3-month average	None	0.15 µg/m ³	0.15 µg/m ³
Sulfates	24-hour	25 µg/m ³	None	None
Visibility-reducing Particles	8-hour	— ^d	None	None
Hydrogen Sulfide (H ₂ S)	1-hour	0.03 ppm	None	None
Vinyl Chloride	24-hour	0.01 ppm	None	None

Notes:

- National standards are divided into primary and secondary standards. Primary standards are intended to protect public health, whereas secondary standards are intended to protect public welfare and the environment.
- The federal 1-hour standard of 12 parts per hundred million was in effect from 1979 through June 15, 2005. The revoked standard is referenced because it was employed for such a long period and is a benchmark for SIPs.
- The annual and 24-hour NAAQS for SO₂ only apply for 1 year after designation of the new 1-hour standard to those areas that were previously in nonattainment for 24-hour and annual NAAQS.
- CAAQS for visibility-reducing particles is defined by an extinction coefficient of 0.23 per kilometer—visibility of 10 miles or more due to particles when relative humidity is less than 70 percent.

CAAQS = California Ambient Air Quality Standards; NAAQS = National Ambient Air Quality Standards; ppm = parts per million; µg/m³ = micrograms per cubic meter

Source: California Air Resources Board, Ambient Air Quality Standards, 2016, <https://ww2.arb.ca.gov/sites/default/files/2020-07/aaqs2.pdf>.

Emission Standards for On-road Heavy-Duty Vehicles

In December 2000, EPA signed the Heavy-Duty Highway Program, which established a series of increasingly strict emission standards for new heavy-duty highway engines. In December 2022, EPA finalized the Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards, part of the Clean Trucks Plan (consistent with President Biden's Executive Order 140937) to further reduce air pollution from heavy-duty engines and vehicles by establishing new, more stringent emission standards that apply to a wider range of heavy-duty engine operating conditions and must be met for a longer period of when these engines operate on the road. The final rulemaking sets new numeric standards and changes key provisions of the existing heavy-duty emission control program to reduce emissions of NOx, PM, hydrocarbons, CO, and TACs from heavy-duty engines beginning no later than model year 2027. EPA estimates that the final rule will reduce NOx emissions from heavy-duty vehicles in 2040 by more than 40 percent and almost 50 percent by 2045, with corresponding decreases in ambient concentrations of pollutants such as ozone and PM2.5 (CARB, 2024).

In addition, on March 20, 2024, the EPA announced Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium-Duty Vehicles. This rule focuses on light- and medium-duty vehicles and addresses multi-pollutant emissions, including greenhouse gas emissions and emissions that form smog and soot, for model year 2027 and later commercial pickup trucks and vans. An additional rulemaking of the Clean Trucks Plan was announced on March 29, 2024, and focuses on greenhouse gas emissions for model year 2027 and later heavy-duty vehicles.

Emission Standards for Off-Road Diesel Engines

EPA has adopted multiple tiers of emission standards that regulate all new nonroad (off-road) diesel engines used in machines such as excavators and other construction equipment; farm tractors and other agricultural equipment; forklifts; airport ground service equipment; and generators, pumps, compressors, and other utility equipment. Tier 1 standards were phased in on newly manufactured equipment from model years 1996 through 2000, Tier 2 standards apply to model years 2001 through 2006, and Tier 3 standards apply to model years 2006 through 2008. Tier 4 standards, which integrate engine and fuel controls as a system to gain the greatest emission reductions and require manufacturers to produce engines with advanced emission-control technologies, were phased in from model years 2008 through 2015 and apply to all model years thereafter. To prevent damage to emission control devices by sulfur, EPA has also adopted requirements for in-use diesel fuel to decrease sulfur levels (Ultra Low Sulfur Diesel Fuel) by more than 99 percent, with a maximum sulfur concentration of 15 parts per million.

Hazardous Air Pollutants and Toxic Air Contaminants

TACs, federally referred to as hazardous air pollutants (HAPs), are a defined set of airborne pollutants that may pose a present or potential hazard to human health. A TAC is defined as an air pollutant that may cause or contribute to an increase in mortality or in serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations. A wide range of sources, from industrial plants to motor vehicles, emit TACs. The health effects associated with TACs are quite diverse and generally are assessed locally, rather than regionally. TACs can cause long-term health effects such as cancer, birth defects, neurological

damage, asthma, bronchitis, or genetic damage; or short-term acute effects such as eye watering, respiratory irritation (a cough), running nose, throat pain, and headaches.

For evaluation purposes, TACs are separated into carcinogens and non-carcinogens based on the nature of the physiological effects associated with exposure to the pollutant. Carcinogens are assumed to have no safe threshold below which health impacts would not occur. This contrasts with criteria air pollutants for which acceptable levels of exposure can be determined and for which the ambient standards have been established (**Table 3.3-4**). Cancer risk from TACs is expressed as excess cancer cases per one million exposed individuals, typically over a lifetime of exposure. EPA and CARB regulate HAPs and TACs, respectively, through statutes and regulations that generally require the use of the maximum available control technology or best available control technology for air toxics to limit emissions.

The Toxic Substances Control Act of 1976 (“TSCA,” 15 USC §2601 et seq.) provides EPA with the authority to require reporting, record-keeping and testing requirements, and restrictions addressing production, importation, use, and disposal of specific chemicals including PCBs, asbestos, radon, and lead-based paint. The TSCA was updated by the Frank R. Lautenberg Chemical Safety Act of the 21st Century in 2016, requiring additional enforcement measures, risk-based chemical assessments, increased public transparency, and more consistent funding. Demolition and/or renovation activities are subject to the National Emission Standards for Hazardous Air Pollutants (“NESHAP,” 40 CFR Part 63), as required by the federal Clean Air Act Amendments. For example, demolition of existing facilities that contain asbestos would be subject to the asbestos NESHAP regulations to protect the public by minimizing the release of asbestos fibers during activities involving the processing, handling, and disposal of ACM.

EPA also addresses certain HAPs and common sources through specific regulations, such as the Residential Lead-Based Paint Hazard Reduction Act of 1992, which built on the 1971 prohibition of lead-based paint in federally funded, built, or rehabilitated residential structures and cooking, drinking, or eating utensils (42 USC Ch. 63, §4831). Under these laws, homes and child-occupied facilities such as day care centers and kindergartens built prior to 1978 are subject to additional requirements to prevent lead-based poisoning. Lead is also regulated by the TSCA and NESHAPs for primary and secondary lead smelting as well as other NESHAPs that control lead that is emitted along with other HAPs.

State

California Clean Air Act and California Ambient Air Quality Standards

In 1988, the state legislature adopted the California Clean Air Act, which established a statewide air pollution control program. Under this act, all air districts in the state are required to meet the CAAQS by the earliest practical date, with increasingly stringent requirements for areas that require more time to achieve the standards (rather than by precise attainment deadlines). The CAAQS are generally more stringent than the NAAQS and incorporate additional standards for sulfates, hydrogen sulfide, visibility-reducing particles, and vinyl chloride. The CAAQS and NAAQS are listed together in **Table 3.3-4**. CARB and regional air districts bear responsibility for achieving California’s air quality standards. The standards are to be achieved through district-level air quality management plans, which are incorporated into the SIP. In California, EPA has delegated authority to prepare SIPs to CARB, which, in turn, has delegated that authority to individual air districts,

such as BAAQMD. CARB has traditionally established state air quality standards, maintained oversight authority for air quality planning, developed programs for reducing emissions from motor vehicles, developed air emissions inventories, collected air quality and meteorological data, and approved SIPs.

The California Clean Air Act substantially increases the authority and responsibilities of air districts by designating air districts as lead air quality planning agencies, requiring air districts to prepare air quality plans, and granting air districts the authority to implement transportation control measures. The act also emphasizes control over “indirect and area-wide sources” of air pollutant emissions, giving local air pollution control districts explicit authority to regulate indirect sources and establish air toxic control measures.

Airborne Toxic Control Measures

CARB has developed multiple airborne toxic control measures (ATCMs), which are codified in the California Code of Regulations, to reduce air emissions from TAC emissions sources that adversely affect public health. The ATCMs focus on reducing emissions from on- and off-road mobile sources—such as school buses, solid waste collection vehicles, diesel-powered portable engines, transport refrigeration units, port and intermodal rail yard equipment, and ocean-going vessels—as well as stationary sources – such as gas stations, dry cleaners, medical waste incinerators, construction and grading operations, metal melting, and chrome plating shops, automobile service shops, and others.

Low-Emission Vehicle Program

CARB adopted the first Low-Emission Vehicle (LEV) regulations in 1990 (now referred to as the LEV I regulations), requiring manufacturers to introduce progressively cleaner light- and medium-duty vehicles for model years 1994 through 2003. LEV I included tiers of increasingly more stringent exhaust emissions standards for low-emission vehicles, a mechanism for requiring manufacturers to phase in a progressively cleaner mix of vehicles year-over-year, and a requirement that a specific percentage of passenger cars and light-duty trucks be zero-emission vehicles with no exhaust or evaporative emissions. In 2012, CARB adopted the LEV III regulations as part of the Advanced Clean Cars rulemaking package, which also includes the state’s zero-emission vehicle regulation, to establish increasingly stringent emission standards for criteria pollutants and greenhouse gases for new passenger vehicles through the 2025 model year (CARB Low-Emission, 2023).

Toxic Air Contaminant Regulation

The California Health and Safety Code defines TACs as air pollutants that may cause or contribute to an increase in mortality or an increase in serious illness or that may pose a present or potential hazard to human health. CARB has formally identified over 200 substances and groups of substances as TACs (CARB, 2024). Direct exposure to these pollutants has been shown to cause cancer, birth defects, damage to the brain and nervous system, and respiratory disorders. California regulates TACs primarily through AB 1807 (the Toxic Air Contaminant Identification and Control Act, otherwise known as the “Tanner Act”) and AB 2588 (the Air Toxics Hot Spots Information and Assessment Act of 1987, or “Hot Spots Act”). AB 1807 created California’s program to reduce exposure to air toxics, whereby the California OEHHA is required to develop guidelines that provide the scientific basis for the values used to assess the health risks of emissions exposure from

facilities and new sources (Office, 2015). AB 2588 supplements this program by requiring a statewide air toxics inventory, notification of people exposed to a significant health risk, and facility plans to reduce these risks.

Off-Road Diesel Vehicle Regulation

On November 17, 2022, CARB approved amendments to the InUse Off-Road Diesel-Fueled Fleets Regulation (Off-Road Regulation) (initially adopted in 2007) to further reduce emissions from all diesel-fueled equipment or alternative-fuel diesel equipment with a compression-ignition engine greater than 25 horsepower (e.g., tractors, bulldozers, backhoes) as well as dual-fuel equipment. The amendments, which will phase in starting in 2024 through 2036, will require fleets to phase out use of the oldest and highest polluting off-road diesel vehicles in California, prohibit the addition of high-emitting vehicles to a fleet, and require use of R99 or R100 renewable diesel in off-road diesel vehicles used in construction, mining, industrial operations, and other industries. CARB expect that the amendments will generate additional reductions in over 31,000 tons of NO_x and more than 2,700 tons of PM_{2.5} from 2024 through 2038 – half of which are expected within the first five years of implementation (by 2029).

CARB Air Quality and Land Use Guidance

In 2005, CARB published the Air Quality and Land Use Handbook, which is intended to encourage local land use agencies to consider health risks from air pollution before approving new sensitive receptor sites (such as homes or day care centers). Adverse air quality impacts may be overlooked when siting new sensitive receptors because such projects do not need air quality permits as industrial or stationary sources of air pollution are required to obtain. CARB makes “advisory” siting recommendations (i.e., buffer distances) for new sensitive land uses near freeways, distribution centers, rail yards, ports, refineries, chrome plating facilities, dry cleaners, and gasoline dispensing stations, as excerpted below:

- **Freeways and High-Traffic Roads.** Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles per day, or rural roads with 50,000 vehicles per day.
- **Dry Cleaners using Perchloroethylene.** Avoid siting new sensitive land uses within 300 feet of any dry-cleaning operation. For operations with two or more machines, provide 500 feet. For operations with three or more machines, consult with the local air district.
- **Gasoline Dispensing Facilities.** Avoid siting new sensitive land uses within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater). A 50-foot separation is recommended for typical gas dispensing facilities (CARB, 2005).

These recommendations were established based on data showing that localized air pollution exposures can be reduced by as much as 80 percent with the recommended separation; however, local agencies should consider conducting site-specific studies about potential health risks and balancing land use decisions to meet housing and climate objectives, among other goals, as appropriate.

Regional

Bay Area Air Quality Management District (BAAQMD)

At the local level, responsibilities of air quality districts include overseeing stationary-source emissions, approving permits, maintaining emissions inventories, maintaining air quality stations, overseeing agricultural burning permits, and reviewing air quality-related sections of environmental documents required by the California Environmental Quality Act (CEQA). The air quality districts are also responsible for establishing and enforcing local air quality rules and regulations that address the requirements of federal and state air quality laws and for ensuring that NAAQS and CAAQS are met.

The project falls under the jurisdiction of the BAAQMD. The BAAQMD has local air quality jurisdiction over projects in the SFBAAB including the Proposed Project's Planning Area of Fairfield and Solano County. The BAAQMD developed advisory emission thresholds to assist CEQA lead agencies in determining the level of significance of a project's emissions, which are outlined in its *California Environmental Quality Act, Air Quality Guidelines* (CEQA Guidelines) (BAAQMD, 2023). The BAAQMD has also adopted air quality plans to improve air quality, protect public health, and protect the climate, including the 2017 Clean Air Plan: Spare the Air, Cool the Climate (2017 Clean Air Plan) (BAAQMD, 2017).

The 2017 Clean Air Plan was adopted by the BAAQMD on April 19, 2017. The 2017 Clean Air Plan updates the prior 2010 Bay Area ozone plan and outlines feasible measures to reduce ozone; provides a control strategy to reduce particulate matter, air toxics, and greenhouse gases (GHGs) in a single, integrated plan; and establishes emission control measures to be adopted or implemented. The 2017 Clean Air Plan contains the following primary goals; consistency with these goals is evaluated in this section.

- **Protect Air Quality and Health at the Regional and Local Scale:** Attain all state and national air quality standards, and eliminate disparities among Bay Area communities in cancer health risk from TACs.
- **Protect the Climate:** Reduce Bay Area GHG emissions to 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050; the 2017 Clean Air Plan is the most current applicable air quality plan for the air basin and consistency with this plan is the basis for determining whether the project would conflict with or obstruct implementation of an air quality plan.

In addition to air quality plans, the BAAQMD also adopts rules and regulations to improve existing and future air quality. The Proposed Project, or subsequent implementing actions, may be subject to the following district rules.

- **Regulation 2, Rule 2 (New Source Review)**—This regulation contains requirements for Best Available Control Technology and emission offsets.
- **Regulation 2, Rule 5 (New Source Review of Toxic Air Contaminants)**—This regulation outlines guidance for evaluating TAC emissions and their potential health risks.
- **Regulation 6, Rule 1 (Particulate Matter)**—This regulation restricts emissions of particulate matter (PM) darker than No. 1 on the Ringlemann Chart to less than 3 minutes in any 1 hour.

- **Regulation 7 (Odorous Substances)**—This regulation establishes general odor limitations on odorous substances and specific emission limitations on certain odorous compounds.
- **Regulation 8, Rule 3 (Architectural Coatings)**—This regulation limits the quantity of reactive organic gases (ROG) in architectural coatings.
- **Regulation 9, Rule 6 (Nitrogen Oxides Emission from Natural Gas-Fired Boilers and Water Heaters)**—This regulation limits emissions of nitrogen oxides (NO_x) generated by natural gas-fired boilers.
- **Regulation 9, Rule 8 (Stationary Internal Combustion Engines)**—This regulation limits emissions of NO_x and carbon monoxide (CO) from stationary internal combustion engines of more than 50 horsepower.

Ozone

BAAQMD has prepared both federal and state air quality plans to bring the SFBAAB into attainment with ozone standards. The 2001 Ozone Attainment Plan describes the Bay Area's strategy for compliance with the federal 1-hour ozone standard. Although the US EPA revoked the federal one-hour ozone standard on June 15, 2005, the emission reduction commitments in the plan are still being carried out by the BAAQMD. At the time of the NOP, the Bay Area 2005 Ozone Strategy was the current adopted plan describing the strategy for compliance with the state 1-hour ozone standard.

Carbon Monoxide

The 1996 Carbon Monoxide Redesignation Request and Maintenance Plan for Ten Federal Planning Areas was developed by the air districts with jurisdiction over ten planning areas (including the BAAQMD) to ensure continued attainment of the federal carbon monoxide standard. In June 1998, the EPA approved this plan and designated the ten areas as attainment. The maintenance plan was revised most recently in 2004.

Particulate Matter

The 2017 Bay Area Clean Air Plan includes a control strategy to reduce particulate matter. In addition, there is a schedule for bringing the Bay Area into compliance, the Particulate Matter Implementation Schedule of 2005. In 2003, SB 656 mandated compliance with state PM standards in order to reduce public exposure to the health risks related to PM. BAAQMD has also developed additional regulations to reduce particulate emissions, including from stationary internal combustion engines (Regulation 9-8), commercial broiling operations (Regulation 6-2), and residential wood-burning devices (Regulation 6-3).⁶

⁶ BAAQMD, 2010b.

Toxic Air Contaminants

TACs do not have ambient standards below which no adverse health effects are assumed. Since 1987, BAAQMD has had a program to describe, control, and where possible, eliminate public exposure to airborne toxic compounds from stationary sources. The program elements include preconstruction review processes for new and modified TAC sources; the Air Toxics Hot Spots Program which identifies and monitors industrial and commercial facilities that emit TACs; implementation of control measures to reduce emissions from source categories of TACs; maintenance of the TAC air emissions inventory; ambient TAC concentration monitoring; and the Community Air Risk Evaluation Program which determines the impacts of TACs at a community level.

BAAQMD has established specific public notification measures for various levels of health risks associated with a facility's routine TAC emissions as determined in a Health Risk Assessment. The "individual cancer risk" is the likelihood that a person exposed to concentrations of TACs from a facility over a 70-year lifetime will contract cancer, based on the use of standard risk assessment methodology established by the Air Toxics Hot Spots Program.

1. Level 1 Risks: Between 10 and 100 in one million
2. Level 2 Risks: Between 100 and 500 in one million
3. Level 3 Risks: Greater than 500 in one million

BAAQMD Regulation 2, Rule 5 New Source Review of Toxic Air Contaminants implements state guidelines and control requirements for new and modified stationary sources. If the emissions from a stationary source exceed trigger levels, the source must use Best Available Control Technology to minimize TAC emissions.

In addition, demolition of buildings constructed prior to 1980 often involve the use of hazardous materials such as asbestos in insulation, fire retardants, or building materials (floor tile, roofing, etc.) and lead-based paint. Airborne asbestos fibers and lead dust pose a serious health threat. The demolition, renovation and removal of asbestos-containing building materials would be subject to the requirements of BAAQMD Regulation 11, Rule 2.

Odors

All odor sources are subject to the requirements of the BAAQMD Regulation 7 – Odorous Substances, which establishes general limitations on odorous substances and specific emission limitations on certain odorous compounds, in addition to the requirements of local nuisance ordinances.

Local

City of Pacifica General Plan 2040

The City of Pacifica General Plan 2040 (General Plan) includes the following goals and policies associated with air quality:

Economic Sustainability

Implementing Policy ES-I-3: Recycling Center Relocation. Work with Recology, Inc. to identify a new location for a recycling yard to free up land for visitor-based economic development.

Land Use

Implementing Policy LU-G-7: Open Space Conservation and Habitat Protection. Protect beaches, oceanfront bluffs, wetlands, riparian corridors, Environmentally Sensitive Habitat Areas (ESHA), ridgelines, hillside areas adjacent to existing open space, and areas that support critical wildlife habitat and special status species.

Circulation

Guiding Policy CI-G-3: Safety. Make safety a primary objective in street planning and traffic regulations.

Guiding Policy CI-G-11: Bicycle and Pedestrian Routes. Establish trails, bike routes and pedestrian amenities connecting neighborhoods to major shopping, public transportation, recreation, and public facility destinations, and fill in gaps in the existing network.

Guiding Policy CI-G-12: Walkable Neighborhoods. Improve pedestrian amenities to create more walkable neighborhoods, especially in mixed-use activity centers and around schools.

Guiding Policy CI-G-13: Recreational Access. Provide recreational access to coastal resources and public open space in keeping with Pacifica's natural environment, with links to regional trails and bicycle corridors.

Guiding Policy CI-G-14: Mobility for All Users. Create a safe and attractive walking environment accessible for all users, particularly persons with disabilities, seniors, and younger residents and visitors.

Guiding Policy CI-G-15: Connections Across Highway 1. Enhance under- and over-crossings of Highway 1 for pedestrians and bikes to improve accessibility and connect neighborhoods to each other and to the coast.

Guiding Policy CI-G-16: Coastal Trail and North-South Bikeway. Complete the Coastal Trail and the north-south bikeway from the north to sound end of the City parallel to Highway 1, providing clear, safe and efficient means to traverse coastal Pacifica.

Guiding Policy CI-G-17: Improved Public Transit. Advocate for SamTrans and other public transit providers to improve transit service and facilities, to enable trips to be made without use of

a car. In particular, advocate for the expansion of public transit services and facilities to improve public access and recreation opportunities along the coast.

Guiding Policy CI-G-18: Transportation Demand Management (TDM). Support TDM strategies to reduce congestion and single-occupant vehicle travel.

Implementing Policy CI-I-16: LOS for Pedestrians, Cyclists and Transit Users. Strive to maintain LOS C or better for pedestrians, cyclists, and transit users on all roadways, and impose mitigation measures as needed to achieve multi-modal service objectives.

Implementing Policy CI-I-26: Pedestrian-Oriented Street Improvements. Reduce curb-to-curb road widths and employ roadway design features, such as wider sidewalks, islands, bulb-outs, improved striping and signage, street trees, pedestrian amenities, pedestrian countdown signals, and pedestrian refuges where feasible and appropriate. Priority locations for pedestrian-oriented design improvements include:

- Pedestrian Priority Areas, shown on Figure 5-1, which include mixed use and higher-intensity areas;
- Streets that are part of Pacifica's proposed trail system improvements;
- Streets adjacent to schools; and
- Locations where pedestrian-automobile collisions have occurred.

Implementing Policy CI-I-28: Additional Pedestrian Facilities on Large Sites. Enhance the pedestrian network with an interconnected system of walkways, continuous sidewalks on both sides of the street, and pedestrian crossings as part of higher-intensity redevelopment of large sites.

Implementing Policy CI-I-29: Safe Routes to Schools. Partner with Pacifica School District and Jefferson Union School District to develop and implement a Safe Routes to Schools program.

Implementing Policy CI-I-30: Universal Design. Require all pedestrian facilities to be ADA compliant and accessible to persons with disabilities.

Implementing Policy CI-I-31: Neighborhood Bikeways. Develop a system of bikeways connecting all neighborhoods to the City's north-south pathway consistent with the Bicycle and Pedestrian Master Plan.

Implementing Policy CI-I-35: Obstructions. Align designated bikeways to avoid obstructions such as light posts, signage, trees, and curb cuts, and relocate or modify these obstructions as necessary.

Implementing Policy CI-I-36: Priorities for Improvements. Make designated bicycle routes a priority for pavement repair, as needed, and for regular maintenance to remove sand, gravel or other debris.

Implementing Policy CI-I-37: Improved Bikeway Visibility. Use strategies to improve bikeway visibility, including but not limited to:

- Using visual cues such as brightly-colored paint on bike lanes or a one-foot painted buffer strip;
- Upgrading a Class III facility to Class II and providing additional signage;
- Removing select on-street parking, if feasible.

Implementing Policy CI-I-38: Bicycle Lockers at Park-and-Ride Lots. Replace existing bicycle lockers at the public parking lot on Crespi Drive, and add lockers at the park-and-ride lot on Linda Mar Boulevard.

Implementing Policy CI-I-39: Bicycle Parking at Recreation and Shopping Areas. Provide bicycle parking at the following locations:

- Park and beach access at the northern end of Esplanade Drive (Lands End Apartments);
- Manor Plaza shopping area;
- Pedro Point Headlands/Devil's Slide.

Implementing Policy CI-I-40: Bicycle Parking Requirements for New Development. Continue to require bicycle parking facilities in new non-residential development.

Implementing Policy CI-I-41: Bicycle Parking at Schools and Workplaces. Work with the school districts and employers to provide adequate bicycle parking at all schools and workplaces with 30 or more employees.

Implementing Policy CI-I-43: Funding for Bicycle Facilities. Designate a portion of the City's annual street construction and improvement budget to fund bikeway design and construction, and continue to pursue potential funding from MTC and San Mateo County, as well as appropriate Federal and State programs.

Implementing Policy CI-I-45: Service Optimization. Continue coordination efforts with transit agencies (i.e., SamTrans) to maintain transit service that is safe and efficient, provides convenient connections to high-use activity areas and key destinations outside the City, and responds to the needs of all passengers, including seniors, youth, and persons with disabilities.

Implementing Policy CI-I-46: Improved Transit Stops. Work with transit agencies to improve transit stops and access to facilities.

Implementing Policy CI-I-47: Park-and-Ride Locations and Attributes. Work with SamTrans to identify changes that would improve the convenience and functionality of Park-and-Ride facilities, and result in increased ridership.

Implementing Policy CI-I-48: Transit-Oriented Development. Work with SamTrans to facilitate transit-oriented development at all appropriate locations where existing or projected future rider demand will support it.

Implementing Policy CI-I-49: Promotion of Transit Use. Lead an initiative to promote transit use and reduce reliance on the private automobile in order to reduce congestion, reduce greenhouse gas emissions, and improve quality of life.

Implementing Policy CI-I-50: Transportation Demand Management Measures. Incorporate conditions of approval for development projects that exceed the Congestion Management Program (CMP) threshold for impacts to the CMP transportation network to require adoption of transportation demand management (TDM) measures authorized by the CMP to make measurable reductions in their trip generation and to require a monitoring plan to determine if established trip reduction targets are met or exceeded. Require TDM measures for development projects below the CMP threshold whenever feasible, but do not require a monitoring plan for these smaller projects.

Implementing Policy CI-I-51: Local Transportation Services. Support expanded funding for Local Transportation Services tailored to the schedules and destinations of students, seniors, and recreational visitors.

Implementing Policy CI-I-56 Off-Street Parking. Update parking requirements in the zoning code based on “best practices,” including provisions for reduced parking and, if acceptable, parking maximums.

Implementing Policy CI-I-57: Shared Parking. Facilitate efficient use of parking areas by allowing uses whose primary activity occurs at different times of day or days of the week to share parking, and provide less than the sum total of parking spaces each use would be required to provide individually. Require a shared parking agreement and approval of the Planning Director.

Implementing Policy CI-I-60: In-Lieu Parking Fees. Allow developers to meet their minimum parking requirements via shared parking between uses, payment of in-lieu fees, or off-site parking within a reasonable walking distance.

Implementing Policy CI-I-61: Environmental Benefits. Amend the Zoning Ordinance to establish “green” parking design standards that have multiple benefits, including photovoltaic panels to generate energy for parking lot lighting, and pervious paving to improve groundwater recharge.

Conservation

Guiding Policy CO-G-5: Water Conservation. Work with the Water District to meet State targets for reducing per capita urban water use by 10 percent by 2015 and 20 percent by 2020.

Guiding Policy CO-G-10: Trees. Conserve trees and encourage native forestation and planting of appropriate trees and vegetation.

Guiding Policy CO-G-13: Improve Air Quality. Reduce emissions of ozone-producing pollutants and particulate matter to improve regional air quality and protect the health of Pacifica and Bay Area residents.

Guiding Policy CO-G-14: Renewable Energy. Support the use and development of renewable energy through City purchasing, and facilitation of local renewable energy generation.

Guiding Policy CO-G-15: Energy Conservation. Support efforts to reduce energy use by increasing energy efficiency in buildings and promoting awareness of energy use.

Guiding Policy CO-G-16: Waste Reduction. Seek to reduce overall solid waste by limiting packaging, controlling construction and demolition waste, and promoting composting and recycling.

Implementing Policy: CO-I-4 Wetlands Preservation. Prohibit new development in existing wetlands except as allowed under the federal Clean Water Act and the California Coastal Act. Continue to require formal delineations of wetlands subject to State or federal regulations prior to any proposed development project where potential wetlands have been identified. If impacts on wetlands are unavoidable, compensation measure should be in line with the State's no-net-loss goal regarding wetlands.

Implementing Policy CO-I-7: Maintain Functional Capacity of Wetlands. Ensure that any diking, filling, or dredging in existing wetlands maintains or enhances their functional capacity.

Implementing Policy CO-I-14: Minimize Site Disturbance. Require use of best practices during development design and construction to preserve natural resources, such as soil, trees, native plants, and permeable surfaces.

Implementing Policy CO-I-39: Heritage Trees. Protect trees designated by the City Council as having special value, according to the terms of the Heritage Tree Ordinance.

Implementing Policy CO-I-48: Regional Cooperation. Cooperate with the Bay Area Air Quality Management District (BAAQMD) and other public agencies in implementing plans to achieve State and Federal Ambient Air Quality Standards.

Implementing Policy CO-I-49: Impact Guidelines. Use the BAAQMD's Air Quality Guidelines, to determine and mitigate project air quality impacts.

Implementing Policy CO-I-50: Sensitive Receptors. Work with BAAQMD to develop and implement a Community Risk Reduction Plan to address the exposure of sensitive populations to toxic air contaminant emissions in Pacifica.

Implementing Policy CO-I-51: Construction Equipment. Require all construction equipment to be maintained and tuned to meet appropriate EPA and CARB emission requirements.

Implementing Policy CO-I-52: Dust Abatement. Require contractors to use best management practices to reduce particulate emissions and dust associated with construction activities.

Implementing Policy CO-I-53: Transportation Control Measures. Ensure compliance with the most current Bay Area Clean Air Plan by implementing the Plan's recommended Transportation Control Measures.

Implementing Policy CO-I-55: Green Building. Monitor the effectiveness of the California Green Building Code in bringing about energy efficiency in architectural design and building construction.

Implementing Policy CO-I-56: Solar Orientation. When possible, require buildings to be oriented such that the use of passive and active solar strategies is maximized, in order to promote energy efficiency.

Implementing Policy CO-I-57: Encourage Solar Power Generation. Promote use of passive and active solar devices such as solar collectors, solar cells, and solar heating systems in buildings and parking areas by incentive programs and streamlining review.

Implementing Policy CO-I-59: City Purchasing of Renewable Energy. Pursue opportunities for the City to lower the cost of purchasing and producing renewable energy, such as through Peninsula Clean Energy or other energy provider at the best value to the City.

Implementing Policy CO-I-62: Energy Efficiency in Public Buildings. Prepare and implement a plan to increase energy efficiency in existing public buildings. Measures may include:

- Conduct energy audits for all municipal facilities;
- Retrofit municipal facilities for energy efficiency where feasible and when remodeling or replacing components, including increased insulation, installing green or reflective roofs, installing automated lighting controls, and retrofitting heating and cooling systems.
- Require that any newly constructed, purchased, or leased municipal space meet minimum standards, such as exceeding Title 24 energy efficiency by 20 percent;
- Educate employees on energy conservation.

Implementing Policy CO-I-63: Wastewater and Water System Efficiency. Maximize the efficiency of City-operated wastewater treatment, water treatment, pumping, and distribution equipment.

Implementing Policy CO-I-64: Outdoor Lighting. Establish outdoor lighting performance standards to minimize energy use while ensuring appropriate light levels. These can be met by:

- Greater use of photocells or astronomical time switches;
- Directional and shielded LED lights;
- Security lights with motion detectors; and
- Prohibitions against continuous all-night outdoor lighting unless needed for security reasons.

Implementing Policy CO-I-61: Waste Reduction and Diversion. Seek to continually reduce Pacifica's output of solid waste and increase the proportion of waste diverted from landfills, setting targets and monitoring progress.

Implementing Policy CO-I-20: Incentives for Water Conservation. Encourage the NCCWD to continue and expand its water conservation incentive programs, including free water-efficient fixtures and rebates for water-efficient appliances.

Implementing Policy CO-I-21: Water Recycling. Continue to support implementation and expansion of NCCWD's water recycling project, involving new pipes and pumping stations, to allow treated wastewater from the Calera Creek Water Recycling Plant to be used for irrigation of landscaped areas. The feasibility of expanding this project to include other potential uses of recycled water such as linkages with fire hydrants will be evaluated.

Implementing Policy CO-I-63: Wastewater and Water System Efficiency. Maximize the efficiency of City-operated wastewater treatment, water treatment, pumping, and distribution equipment.

Implementing Policy CO-I-54: Climate Action Plan for Greenhouse Gas Reductions. Maintain and update the Climate Action Plan that focuses on feasible actions the City can take to reduce greenhouse gas emissions from government, businesses, and residents in Pacifica.

Impact Analysis

SIGNIFICANCE CRITERIA

For the purposes of this EIR, a significant impact would occur if the Proposed Project would:

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

Criterion 1 is assessed based on existing population and VMT and projected population and VMT under the Proposed Project, using analysis from DKS Associates.

Criterion 2 is assessed based on BAAQMD guidance, which identifies three tests to determine consistency. These Criterion 2 consistency tests are as follows:

1. Does the Proposed Project support the primary goals of the 2017 Bay Area Clean Air Plan? These goals are:
 - a. Protect air quality and health at the regional and local scale; and
 - b. Protect the climate.
2. Does the Proposed Project include applicable control measures from the Clean Air Plan (CAP)? The 2017 CAP contains 85 control measures to reduce air pollution. Consistency with greenhouse gas reduction measures of the CAP is addressed in the Greenhouse Gas and Climate Change Section of this EIR.
3. Does the Proposed Project disrupt or hinder implementation of any CAP control measures? BAAQMD identifies examples of how a Plan may cause the disruption or delay of control measures, such as a project which may preclude an extension of a transit line or bike path or proposes excessive parking beyond parking requirements.

Criterion 3 is assessed based on BAAQMD guidance, as outlined in the 2017 BAAQMD CEQA Air Quality Guidelines, which states that the thresholds of significance for General Plans with regard to community risk and hazard impacts are inclusion of a land use diagram that identifies overlay zones around existing and planned sources of TACs and overlay zones of at least 500 feet around each side of freeways and high-volume roadways.

Additionally, the Plan must identify goals, policies and objectives to minimize potential impacts and create overlay zones for sources of TACs and receptors. As identified by the BAAQMD, if emissions of TACs exceed any of the Thresholds of Significance below, the proposed project would result in a significant impact:

- Non-compliance with a qualified risk reduction plan; or
- An excess cancer risk level of more than 10 in one million, or a non-cancer (i.e., chronic or acute) hazard index greater than 1.0 would be cumulatively considerable contribution;
- An incremental increase of greater than 0.3 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) annual average $\text{PM}_{2.5}$ would be a cumulatively considerable contribution.

IMPACTS

Impact 3.2-1 Implementation of the Proposed Project would not conflict with or obstruct implementation of the applicable air quality plan. (Less than Significant)

The CAA requires that a SIP or an air quality control plan be prepared for areas with air quality violating the NAAQS. The SIP sets forth the strategies and pollution control measures that states will use to attain the NAAQS. The CAA requires attainment plans to demonstrate a five percent per year reduction in nonattainment air pollutants or their precursors, averaged every consecutive 3-year period, unless an approved alternative measure of progress is developed. Air quality attainment plans (AQAP) outline emissions limits and control measures to achieve and maintain these standards by the earliest practical date. The current AQAP for the SFBAAB is the 2017 Clean Air Plan.⁷ The primary goals of the 2017 Clean Air Plan (CAP) are to (1) reduce emissions and decrease concentrations of harmful pollutants, (2) safeguard public health by reducing exposure to air pollutants that pose the greatest health risk, and (3) reduce GHG emissions and protect the climate.

Support of 2017 Clean Air Plan Goals

Development under the Proposed Project would be required to adhere to General plan policies that specifically address working with BAAQMD to implement plans supporting State and Federal Ambient Air Quality Standards, mitigating project-level air quality impacts, and developing a Community Risk Reduction Plan to protect sensitive receptors, thus directly supporting the first two goals of the Clean Air Plan (policies CO-I-48, CO-I-49, CO-I-50). Policy CO-I-54 requires the City to update its Climate Action Plan with a comprehensive suite of GHG reduction measures that would enable the Planning Area to achieve the GHG reduction thresholds established by BAAQMD and CARB, thus supporting the third goal of the CAP.

Additionally, the General Plan focuses on promoting mixed-use and transit-oriented development, sustainable and environmentally-sensitive design, and multimodal mobility, all of which would

⁷ Bay Area Air Quality Management District. 2017. *Final 2017 Clean Air Plan*. Adopted April 19. Available: https://www.baaqmd.gov/~media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en. Accessed: July 1, 2021.

support the goals of the Clean Air Plan (goal LU-G-6, CI-G-1, CI-G-5, CI-G-18, policies CI-I-2, CI-I-5, CI-I-16, CI-I-46, CI-I-49, CI-I-50, CI-I-51, CO-I-53). The Proposed Project would adhere to such policies by developing higher-density and infill developments where appropriate, including mixed-use development at existing commercial shopping centers. Further, the General Plan's requirement of the preservation of open space including the coastal areas, ridgelines, parks, and tree canopy would help to reduce emissions by having green space that can sequester carbon. Implementation of mixed-use land use designation and policies supporting pedestrian and bicycle accessibility could result in less energy consumption and fewer vehicle trips compared to the current more auto-oriented development pattern. The General Plan contains numerous additional policies and implementing actions in support of the goals of the Clean Air Plan, as shown in **Table 3.2-5**.

Based on consistency with the analysis above and in **Table 3.2-5**, the Proposed Project would support the primary goals of the Clean Air Plan and have a less than significant impact with respect to conflicts with the 2017 Clean Air Plan.

Applicable Control Measures

The 2017 Clean Air Plan contains 85 control measures aimed at reducing air pollution in the SFBAAB from a wide variety of emission sources. Many of these measures address stationary sources and will be implemented by BAAQMD using its permit authority and are therefore not suited to implementation through local planning efforts. As discussed above, the General Plan includes multiple policies that promote mixed-use and transit-oriented development along with sustainable, environmentally sensitive design. As such, development under the Proposed Project would not cause disruption, delay, or otherwise hinder implementation of any applicable control measure from the 2017 Clean Air Plan. The General Plan has incorporated control measures identified in the 2017 Clean Air Plan related to the transportation, natural and working lands, and climate pollutants sectors into its policies for implementation. **Table 3.2-6** presents the control measures of the 2017 Clean Air Plan that are applicable to the Proposed Project and how the Proposed Project complies with each of the measures. Control measures not listed in **Table 3.2-6** would not be applicable to the Proposed Project or Planning Area. **Table 3.2-6** shows that the Proposed Project generally would not disrupt or hinder implementation of any CAP control measures. BAAQMD has identified examples of how a Plan may cause the disruption or delay of control measures, such as a project that may preclude an extension of a transit line or bike path or proposes excessive parking beyond parking requirements. Accordingly, development under the Proposed Project would not fundamentally conflict with the 2017 Clean Air Plan and would result in a less than significant air quality impact.

Table 3.2-6: BAAQMD 2017 Clean Air Plan Control Measures Applicable to Proposed Project

<i>Clean Air Plan Control Measures</i>		<i>Incorporation into General Plan Policies</i>
Stationary Sources		
SS20	Air Toxics Risk Cap and Reduction from Existing Facilities	CO-I-49 Impact Guidelines. Use the BAAQMD's Air Quality Guidelines, to determine and mitigate project air quality impacts. The City consults with the BAAQMD during CEQA review for projects that require air quality impact analysis and BAAQMD is on the distribution list for CEQA documents. CO-I-50 Sensitive Receptors. Work with BAAQMD to develop and implement a Community Risk Reduction Plan to address the exposure of sensitive populations to toxic air contaminant emissions in Pacifica.
SS25	Coatings, Solvents, Lubricants, Sealants and Adhesives	The City of Pacifica has amended and adopted the California Green Building Code, which contains VOC content limits for architectural coatings, sealants, and adhesives, as Chapter 7, Section 8-7.01 of the City's Municipal Code.
SS26	Surface Prep and Cleaning Solvent	See above for SS25.
SS30	Residential Fan Type Furnaces	As discussed in the City of Pacifica Climate Action Plan, PG&E offers rebates to customers who make energy efficiency improvements when remodeling their homes, including rebates of up to \$300 for installing energy efficient furnaces.
SS31	General Particulate Matter Emission Limitation	CO-G-13 Improve Air Quality. Reduce emissions of ozone-producing pollutants and particulate matter to improve regional air quality and protect the health of Pacifica and Bay Area residents. CO-I-48 Regional Cooperation. Cooperate with the Bay Area Air Quality Management District (BAAQMD) and other public agencies in implementing plans to achieve State and Federal Ambient Air Quality Standards. CO-I-49 Impact Guidelines. Use the BAAQMD's Air Quality Guidelines, to determine and mitigate project air quality impacts. The City consults with the BAAQMD during CEQA review for projects that require air quality impact analysis and BAAQMD is on the distribution list for CEQA documents. CO-I-50 Sensitive Receptors. Work with BAAQMD to develop and implement a Community Risk Reduction Plan to address the exposure of sensitive populations to toxic air contaminant emissions in Pacifica.
SS36	PM from Trackout	CO-I-51 Construction Equipment. Require all construction equipment to be maintained and tuned to meet appropriate EPA and CARB emission requirements. CO-I-52 Dust Abatement. Require contractors to use best management practices to reduce particulate emissions and dust associated with construction activities.

Table 3.2-6: BAAQMD 2017 Clean Air Plan Control Measures Applicable to Proposed Project

<i>Clean Air Plan Control Measures</i>		<i>Incorporation into General Plan Policies</i>
		BMPs include, but are not limited to: regular materials and vehicle tire watering; covering of stockpiles; phasing or extension of grading operations; suspension of grading during high wind periods; and revegetation of graded areas.
SS37	PM from Asphalt Operations	See above for SS36.
SS39	Enhanced Air Quality Monitoring	See above for SS31.
SS40	Odors	SPSP 7-I-6 Impact Minimizing Design. New commercial uses that create noise, fumes, light, or odors shall be designed to minimize any impacts on adjacent sensitive uses. These commercial uses shall provide adequate ventilation within the structures that house them so that doors and windows are not left open for the purpose of ventilation resulting in nuisance emissions. The Proposed Project is subject to BAAQMD Regulation 7 and Regulation I, Rule I-30I regarding odorous emissions, and regulations in the City's Municipal Code further prohibit emissions of odorous substances considered to be a public nuisance.
<i>Transportation</i>		
TR1	Clean Air Teleworking Initiative	CO-I-53 Transportation Control Measures. Ensure compliance with the most current Bay Area Clean Air Plan by implementing the Plan's recommended Transportation Control Measures.
TR2	Trip Reduction Programs	CI-G-18 Transportation Demand Management (TDM). Support TDM strategies to reduce congestion and single-occupant vehicle travel. CI-I-50 Transportation Demand Management Measures. Incorporate conditions of approval for development projects that exceed the Congestion Management Program (CMP) threshold for impacts to the CMP transportation network to require adoption of transportation demand management (TDM) measures authorized by the CMP to make measurable reductions in their trip generation and to require a monitoring plan to determine if established trip reduction targets are met or exceeded. Require TDM measures for development projects below the CMP threshold whenever feasible, but do not require a monitoring plan for these smaller projects.
TR3	Local and Regional Bus Service	CI-G-17 Improved Public Transit. Advocate for SamTrans and other public transit providers to improve transit service and facilities, to enable trips to be made without use of a car. In particular, advocate for the expansion of public transit services

Table 3.2-6: BAAQMD 2017 Clean Air Plan Control Measures Applicable to Proposed Project

<i>Clean Air Plan Control Measures</i>		<i>Incorporation into General Plan Policies</i>
		and facilities to improve public access and recreation opportunities along the coast.
		CI-I-45 Service Optimization. Continue coordination efforts with transit agencies (i.e., SamTrans) to maintain transit service that is safe and efficient, provides convenient connections to high-use activity areas and key destinations outside the city, and responds to the needs of all passengers, including seniors, youth, and persons with disabilities.
		CI-I-46 Improved Transit Stops. Work with transit agencies to improve transit stops and access to facilities.
		CI-I-47 Park-and-Ride Locations and Attributes. Work with SamTrans to identify changes that would improve the convenience and functionality of Park-and-Ride facilities, and result in increased ridership.
		CI-I-48 Transit-Oriented Development. Work with SamTrans to facilitate transit-oriented development at all appropriate locations where existing or projected future rider demand will support it.
		CI-I-49 Promotion of Transit Use. Lead an initiative to promote transit use and reduce reliance on the private automobile in order to reduce congestion, reduce greenhouse gas emissions, and improve quality of life.
TR4	Local and Regional Rail Service	See above for TR3. The Planning Area is not currently accessible by local and regional rail service, and there are no plans to expand service to this area. However, policies that support improved transit service by SamTrans and other regional transit agencies would improve access to regional rail.
TR5	Transit Efficiency and Use	See above for TR3.
TR7	Safer Routes to Schools and Safer Routes to Transit	CI-G-3 Safety. Make safety a primary objective in street planning and traffic regulations. CI-G-12 Walkable Neighborhoods. Improve pedestrian amenities to create more walkable neighborhoods, especially in mixed-use activity centers and around schools. CI-G-14 Mobility for All Users. Create a safe and attractive walking environment accessible for all users, particularly persons with disabilities, seniors, and younger residents and visitors. CI-I-26 Pedestrian-Oriented Street Improvements. Reduce curb-to-curb road widths and employ roadway design features, such as wider sidewalks, islands, bulb-outs, improved striping and signage, street trees, pedestrian amenities, pedestrian countdown signals, and pedestrian refuges where feasible and appropriate. Priority locations for pedestrian-oriented design improvements include:

Table 3.2-6: BAAQMD 2017 Clean Air Plan Control Measures Applicable to Proposed Project

<i>Clean Air Plan Control Measures</i>		<i>Incorporation into General Plan Policies</i>
TR8	Ridesharing, Last-Mile Connection	• Pedestrian Priority Areas, shown on Figure 5-1, which include mixed use and higher-intensity areas; • Streets that are part of Pacifica's proposed trail system improvements; • Streets adjacent to schools; and • Locations where pedestrian-automobile collisions have occurred.
		CI-I-29 Safe Routes to Schools. Partner with Pacifica School District and Jefferson Union School District to develop and implement a Safe Routes to Schools program.
		CI-I-45 Service Optimization. Continue coordination efforts with transit agencies (i.e., SamTrans) to maintain transit service that is safe and efficient, provides convenient connections to high-use activity areas and key destinations outside the city, and responds to the needs of all passengers, including seniors, youth, and persons with disabilities.
		CI-I-46 Improved Transit Stops. Work with transit agencies to improve transit stops and access to facilities.
		CO-I-53 Transportation Control Measures. Ensure compliance with the most current Bay Area Clean Air Plan by implementing the Plan's recommended Transportation Control Measures.
		CI-G-17 Improved Public Transit. Advocate for SamTrans and other public transit providers to improve transit service and facilities, to enable trips to be made without use of a car. In particular, advocate for the expansion of public transit services and facilities to improve public access and recreation opportunities along the coast.
		CI-I-45 Service Optimization. Continue coordination efforts with transit agencies (i.e., SamTrans) to maintain transit service that is safe and efficient, provides convenient connections to high-use activity areas and key destinations outside the city, and responds to the needs of all passengers, including seniors, youth, and persons with disabilities.
		CI-I-50 Transportation Demand Management Measures. Incorporate conditions of approval for development projects that exceed the Congestion Management Program (CMP) threshold for impacts to the CMP transportation network to require adoption of transportation demand management (TDM) measures authorized by the CMP to make measurable reductions in their trip generation and to require a monitoring plan to determine if established trip reduction targets are met or exceeded. Require TDM measures for development projects below the CMP threshold whenever feasible, but do not require a monitoring plan for these smaller projects.

Table 3.2-6: BAAQMD 2017 Clean Air Plan Control Measures Applicable to Proposed Project

<i>Clean Air Plan Control Measures</i>		<i>Incorporation into General Plan Policies</i>
TR9	Bicycle and Pedestrian Access and Facilities	CI-I-51 Local Transportation Services. Support expanded funding for Local Transportation Services tailored to the schedules and destinations of students, seniors, and recreational visitors.
		CI-G-11 Bicycle and Pedestrian Routes. Establish trails, bike routes and pedestrian amenities connecting neighborhoods to major shopping, public transportation, recreation, and public facility destinations, and fill in gaps in the existing network.
		CI-G-12 Walkable Neighborhoods. Improve pedestrian amenities to create more walkable neighborhoods, especially in mixed-use activity centers and around schools.
		CI-G-13 Recreational Access. Provide recreational access to coastal resources and public open space in keeping with Pacifica's natural environment, with links to regional trails and bicycle corridors.
		CI-G-15 Connections Across Highway 1. Enhance under- and over-crossings of Highway 1 for pedestrians and bikes to improve accessibility and connect neighborhoods to each other and to the coast.
		CI-G-16 Coastal Trail and North-South Bikeway. Complete the Coastal Trail and the north-south bikeway from the north to south end of the city parallel to Highway 1, providing clear, safe and efficient means to traverse coastal Pacifica.
		CI-I-16 LOS for Pedestrians, Cyclists and Transit Users. Strive to maintain LOS C or better for pedestrians, cyclists, and transit users on all roadways, and impose mitigation measures as needed to achieve multi-modal service objectives.
		CI-I-26 Pedestrian-Oriented Street Improvements. Reduce curb-to-curb road widths and employ roadway design features, such as wider sidewalks, islands, bulb-outs, improved striping and signage, street trees, pedestrian amenities, pedestrian countdown signals, and pedestrian refuges where feasible and appropriate. Priority locations for pedestrian-oriented design improvements include: • Pedestrian Priority Areas (including Manor, Sharp Park, Vallemar/Fairway Park, and Linda Mar PPAs), which include mixed use and higher-intensity areas; • Streets that are part of Pacifica's proposed trail system improvements; • Streets adjacent to schools; and • Locations where pedestrian-automobile collisions have occurred.

Table 3.2-6: BAAQMD 2017 Clean Air Plan Control Measures Applicable to Proposed Project

<i>Clean Air Plan Control Measures</i>	<i>Incorporation into General Plan Policies</i>
	CI-I-28 Additional Pedestrian Facilities on Large Sites. Enhance the pedestrian network with an interconnected system of walkways, continuous sidewalks on both sides of the street, and pedestrian crossings as part of higher-intensity redevelopment of large sites. CI-I-30 Universal Design. Require all pedestrian facilities to be ADA compliant and accessible to persons with disabilities. CI-I-31 Neighborhood Bikeways. Develop a system of bikeways connecting all neighborhoods to the city's north-south pathway consistent with the Bicycle and Pedestrian Master Plan. CI-I-35 Obstructions. Align designated bikeways to avoid obstructions such as light posts, signage, trees, and curb cuts, and relocate or modify these obstructions as necessary. CI-I-36 Priorities for Improvements. Make designated bicycle routes a priority for pavement repair, as needed, and for regular maintenance to remove sand, gravel or other debris. CI-I-37 Improved Bikeway Visibility. Use strategies to improve bikeway visibility, including but not limited to: • Using visual cues such as brightly-colored paint on bike lanes or a one-foot painted buffer strip; • Upgrading a Class III facility to Class II and providing additional signage; • Removing select on-street parking, if feasible. CI-I-38 Bicycle Lockers at Park-and-Ride Lots. Replace existing bicycle lockers at the public parking lot on Crespi Drive, and add lockers at the park-and-ride lot on Linda Mar Boulevard. CI-I-39 Bicycle Parking at Recreation and Shopping Areas. Provide bicycle parking at the following locations: • Park and beach access at the northern end of Esplanade Drive (Lands End Apartments); • Manor Plaza shopping area; • Pedro Point Headlands/Devil's Slide. CI-I-40 Bicycle Parking Requirements for New Development. Continue to require bicycle parking facilities in new non-residential development. CI-I-41 Bicycle Parking at Schools and Workplaces. Work with the school districts and employers to provide adequate bicycle parking at all schools and workplaces with 30 or more employees. CI-I-43 Funding for Bicycle Facilities. Designate a portion of the City's annual street construction and improvement

Table 3.2-6: BAAQMD 2017 Clean Air Plan Control Measures Applicable to Proposed Project

Clean Air Plan Control Measures	Incorporation into General Plan Policies
TR10 Land Use Strategies	budget to fund bikeway design and construction, and continue to pursue potential funding from MTC and San Mateo County, as well as appropriate Federal and State programs. Policies in the Land Use and Design Chapter support mixed use development and a walkable street grid. The General Plan would integrate land use and multimodal transportation policies to promote accessibility and connectivity in the planning area while reducing the need for vehicle trips, which would reduce pollutant and GHG emissions.
TR13 Parking Policies	LU-I-18 Parking Requirements. Update commercial and mixed use parking requirements as appropriate based on best practices. Provide for shared parking between commercial uses; car-sharing availability for residential uses, reductions for transit-accessible locations, and other strategies. CI-I-39 Bicycle Parking at Recreation Areas. Provide bicycle parking at the following locations, when feasible: • Park and beach access at the northern end of Esplanade Drive (Lands End Apartments); • Pedro Point Headlands/Devil's Slide. CI-I-40 Bicycle Parking Requirements for New Development. Continue to require bicycle parking facilities in new non-residential development. CI-I-41 Bicycle Parking at Schools and Workplaces. Work with the school districts and employers to provide adequate bicycle parking at all schools and workplaces with 30 or more employees. CI-I-50 Transportation Demand Management Measures. Incorporate conditions of approval for development projects that exceed the Congestion Management Program (CMP) threshold for impacts to the CMP transportation network to require adoption of transportation demand management (TDM) measures authorized by the CMP to make measurable reductions in their trip generation and to require a monitoring plan to determine if established trip reduction targets are met or exceeded. Require TDM measures for development projects below the CMP threshold whenever feasible, but do not require a monitoring plan for these smaller projects. CI-I-56 Off-Street Parking. Update parking requirements in the zoning code based on "best practices," including provisions for reduced parking and, if acceptable, parking maximums. CI-I-57 Shared Parking. Facilitate efficient use of parking areas by allowing uses whose primary activity occurs at different times of day or days of the week to share parking, and provide less than the sum total of parking spaces each use would be

Table 3.2-6: BAAQMD 2017 Clean Air Plan Control Measures Applicable to Proposed Project

<i>Clean Air Plan Control Measures</i>		<i>Incorporation into General Plan Policies</i>
		required to provide individually. Require a shared parking agreement and approval of the Planning Director. CI-I-60 In-Lieu Parking Fees. Allow developers to meet their minimum parking requirements via shared parking between uses, payment of in-lieu fees, or off-site parking within a reasonable walking distance. CI-I-61 Environmental Benefits. Amend the Zoning Ordinance to establish “green” parking design standards that have multiple benefits, including photovoltaic panels to generate energy for parking lot lighting, and pervious paving to improve groundwater recharge.
TR22	Construction, Freight and Farming Equipment	CO-I-51 Construction Equipment. Require all construction equipment to be maintained and tuned to meet appropriate EPA and CARB emission requirements.
<i>Energy</i>		
EN1	Decarbonize Energy Production	CO-G-14 Renewable Energy. Support the use and development of renewable energy through City purchasing, and facilitation of local renewable energy generation. CO-I-57 Encourage Solar Power Generation. Promote use of passive and active solar devices such as solar collectors, solar cells, and solar heating systems in buildings and parking areas by incentive programs and streamlining review. CO-I-59 City Purchasing of Renewable Energy. Pursue opportunities for the City to lower the cost of purchasing and producing renewable energy, such as through Peninsula Clean Energy or other energy provider at the best value to the City.
EN2	Decrease Energy Demand	CO-G-15 Energy Conservation. Support efforts to reduce energy use by increasing energy efficiency in buildings and promoting awareness of energy use. CO-I-55 Green Building. Monitor the effectiveness of the California Green Building Code in bringing about energy efficiency in architectural design and building construction. CO-I-56 Solar Orientation. When possible, require buildings to be oriented such that the use of passive and active solar strategies is maximized, in order to promote energy efficiency. To achieve ideal solar orientation conditions, the long axis of the building should be oriented east-west, within 15 degrees. CO-I-62 Energy Efficiency in Public Buildings. Prepare and implement a plan to increase energy efficiency in existing public buildings. Measures may include: • Conduct energy audits for all municipal facilities; • Retrofit municipal facilities for energy efficiency where feasible and when remodeling or replacing components, including increased insulation, installing green or reflective roofs, installing

Table 3.2-6: BAAQMD 2017 Clean Air Plan Control Measures Applicable to Proposed Project

<i>Clean Air Plan Control Measures</i>		<i>Incorporation into General Plan Policies</i>
		automated lighting controls, and retrofitting heating and cooling systems. • Require that any newly constructed, purchased, or leased municipal space meet minimum standards, such as exceeding Title 24 energy efficiency by 20 percent; • Educate employees on energy conservation. CO-I-63 Wastewater and Water System Efficiency. Maximize the efficiency of City-operated wastewater treatment, water treatment, pumping, and distribution equipment. CO-I-64 Outdoor Lighting. Establish outdoor lighting performance standards to minimize energy use while ensuring appropriate light levels. These can be met by: • Greater use of photocells or astronomical time switches; • Directional and shielded LED lights; • Security lights with motion detectors; and • Prohibitions against continuous all-night outdoor lighting unless needed for security reasons.
<i>Building</i>		
BLI	Green Buildings	CO-I-55 Green Building. Monitor the effectiveness of the California Green Building Code in bringing about energy efficiency in architectural design and building construction. CO-I-56 Solar Orientation. When possible, require buildings to be oriented such that the use of passive and active solar strategies is maximized, in order to promote energy efficiency. To achieve ideal solar orientation conditions, the long axis of the building should be oriented east-west, within 15 degrees. CO-I-57 Encourage Solar Power Generation. Promote use of passive and active solar devices such as solar collectors, solar cells, and solar heating systems in buildings and parking areas by incentive programs and streamlining review. CO-I-62 Energy Efficiency in Public Buildings. Prepare and implement a plan to increase energy efficiency in existing public buildings. Measures may include: • Conduct energy audits for all municipal facilities; • Retrofit municipal facilities for energy efficiency where feasible and when remodeling or replacing components, including increased insulation, installing green or reflective roofs, installing automated lighting controls, and retrofitting heating and cooling systems. • Require that any newly constructed, purchased, or leased municipal space meet minimum standards, such as exceeding Title 24 energy efficiency by 20 percent; • Educate employees on energy conservation.

Table 3.2-6: BAAQMD 2017 Clean Air Plan Control Measures Applicable to Proposed Project

<i>Clean Air Plan Control Measures</i>		<i>Incorporation into General Plan Policies</i>
		CO-I-64 Outdoor Lighting. Establish outdoor lighting performance standards to minimize energy use while ensuring appropriate light levels. These can be met by: • Greater use of photocells or astronomical time switches; • Directional and shielded LED lights; • Security lights with motion detectors; and • Prohibitions against continuous all-night outdoor lighting unless needed for security reasons.
BL2	Decarbonize Buildings	See above for BL1.
BL4	Urban Heat Island Mitigation	See above for BL1. Multiple policies in the Conservation Element would increase the tree cover on streets and parking lots in the planning area. The Pacifica Climate Action Plan includes multiple adaptation strategies and measures aimed at reducing risks associated with urban heat islands and extreme heat events.
<i>Natural and Working Lands</i>		
NW2	Urban Tree Planting	CO-G-10 Trees. Conserve trees and encourage native forestation and planting of appropriate trees and vegetation. CO-I-14 Minimize Site Disturbance. Require use of best practices during development design and construction to preserve natural resources, such as soil, trees, native plants, and permeable surfaces. CO-I-39 Heritage Trees. Protect trees designated by the City Council as having special value, according to the terms of the Heritage Tree Ordinance.
NW3	Carbon Sequestration in Wetlands	LU-G-7 Open Space Conservation and Habitat Protection. Protect beaches, oceanfront bluffs, wetlands, riparian corridors, Environmentally Sensitive Habitat Areas (ESHA), ridgelines, hillside areas adjacent to existing open space, and areas that support critical wildlife habitat and special status species. CO-I-4 Wetlands Preservation. Prohibit new development in existing wetlands except as allowed under the federal Clean Water Act and the California Coastal Act. Continue to require formal delineations of wetlands subject to State or federal regulations prior to any proposed development project where potential wetlands have been identified. If impacts on wetlands are unavoidable, compensation measure should be in line with the State's no-net-loss goal regarding wetlands. CO-I-7 Maintain Functional Capacity of Wetlands. Ensure that any diking, filling, or dredging in existing wetlands maintains or enhances their functional capacity.

Table 3.2-6: BAAQMD 2017 Clean Air Plan Control Measures Applicable to Proposed Project

<i>Clean Air Plan Control Measures</i>		<i>Incorporation into General Plan Policies</i>
		Any alteration of coastal wetlands identified by the Department of Fish and Wildlife as defined by the Coastal Commission shall be limited to very minor incidental public facilities, restorative measures, or nature study.
Waste Management		
WAI	Landfills	ES-I-3 Recycling Center Relocation. Work with Recology, Inc. to identify a new location for a recycling yard to free up land for visitor-based economic development. CO-G-16 Waste Reduction. Seek to reduce overall solid waste by limiting packaging, controlling construction and demolition waste, and promoting composting and recycling. CO-I-61 Waste Reduction and Diversion. Seek to continually reduce Pacifica's output of solid waste and increase the proportion of waste diverted from landfills, setting targets and monitoring progress.
WA2	Composting and Anaerobic Digesters	See above for WAI.
WA3	Green Waste Diversion	See above for WAI.
WA4	Recycling and Waste Reduction	See above for WAI.
Water		
WR2	Support Water Conservation	CO-G-5 Water Conservation. Work with the Water District to meet State targets for reducing per capita urban water use by 10 percent by 2015 and 20 percent by 2020. Pacifica's water conservation efforts will include water efficient landscaping requirements, incentives for water conservation, and expansion of a system to use recycled wastewater. CO-I-20 Incentives for Water Conservation. Encourage the NCCWD to continue and expand its water conservation incentive programs, including free water-efficient fixtures and rebates for water-efficient appliances. CO-I-21 Water Recycling. Continue to support implementation and expansion of NCCWD's water recycling project, involving new pipes and pumping stations, to allow treated wastewater from the Calera Creek Water Recycling Plant to be used for irrigation of landscaped areas. The feasibility of expanding this project to include other potential uses of recycled water such as linkages with fire hydrants will be evaluated. CO-I-63 Wastewater and Water System Efficiency. Maximize the efficiency of City-operated wastewater treatment, water treatment, pumping, and distribution equipment.
Super-GHG		

Table 3.2-6: BAAQMD 2017 Clean Air Plan Control Measures Applicable to Proposed Project

Clean Air Plan Control Measures		Incorporation into General Plan Policies
SLI	Short-Lived Climate Pollutants	CO-I-54 Climate Action Plan for Greenhouse Gas Reductions. Maintain and update the Climate Action Plan that focuses on feasible actions the City can take to reduce greenhouse gas emissions from government, businesses, and residents in Pacifica. The CAP should: • Establish a baseline inventory of all known or reasonably discoverable sources of GHGs that currently exist in Pacifica and that existed in 1990; • Projected GHG emissions expected in 2040 under this General Plan and foreseeable municipal operations; • Set a target for the reduction of GHG emissions, in line with targets established by the California Air Resources Board; • Present a list of feasible—and to the greatest extent possible, quantifiable—GHG reduction measures to meet the reduction target, in the areas of energy use (in all sectors), transportation and land use, solid waste, water, and education/outreach; and • Establish an implementation plan, including strategies and funding for monitoring and making improvements.

Source: BAAQMD, 2017; Dyett & Bhatia, 2021.

Mitigation Measures

None required.

Impact 3.2-2 Implementation of the Proposed Project would not result in a cumulatively considerable net increase in any criteria pollutant for which the project region is classified as a nonattainment area under an applicable federal or state ambient air quality standard. (*Less than Significant with Mitigation Incorporated*)

Construction Emissions

Construction associated with new land use developments under the Proposed Project would result in the temporary generation of ozone precursors (ROG, NO_x), CO, and particulate matter emissions that could result in short-term impacts on ambient air quality within the Planning Area. Emissions would originate from mobile and stationary construction equipment exhaust, employee and haul truck vehicle exhaust, fugitive dust emissions from land clearing, soil movement, and demolition, and off-gassing emissions from architectural coatings and asphalt paving. Construction-related emissions would vary substantially depending on the level of activity, length of the construction period, specific construction operations, types of equipment, number of personnel, wind and precipitation conditions, and soil moisture content.

The Proposed Project is programmatic and does not propose any specific development projects. Rather, construction of development would occur intermittently throughout its 2040 planning horizon. As the timing and intensity of future development projects is not known at this time, the precise effects of construction activities associated with buildout of the Planning Area cannot be accurately quantified at this time. Project-specific details of future development within the Planning Area are currently unknown, development would be driven by market conditions, site constraints, land availability, and property owner interest. It is assumed that implementation of the Proposed Project ultimately could result in the development of up to 2,175 housing units as well as 102,004 additional square feet of non-residential uses. As such, it is anticipated that in any given year, multiple land use development projects would be constructed within the Planning Area.

As noted previously, the BAAQMD's project-level thresholds were developed to analyze emissions generated by a single project. Although the construction emission impacts associated with each new individual development would be short-term in nature and limited to the period of time when construction activity is taking place for that particular development, the concurrent construction of a multitude of individual development projects that could occur at any one time in the Planning Area under the Proposed Project could generate combined criteria pollutant emissions on a daily basis that would exceed the BAAQMD's project-level thresholds. In addition, depending on the size and scale of an individual development project, along with its construction schedule and other parameters, there may also be instances where the daily construction emissions generated by a single development project within the Planning Area could also exceed the BAAQMD's criteria pollutant thresholds. These emissions could contribute to ozone formation and other air pollution in the SFBAAB, which at certain concentrations, can contribute to short- and long-term human health effects.

During construction of a development project, the activity that typically generates the highest NO_x and PM exhaust emissions is the operation of off-road equipment, whereas the activity that typically generates the highest reactive organic gas (ROG) emissions is the application of architectural coatings. As discussed in **Table 3.2-5**, the City of Pacifica has amended and adopted the California Green Building Code, which contains VOC content limits for architectural coatings, sealants, and adhesives, as Chapter 7, Section 8-7.01 of the City's Municipal Code. With regards to construction equipment, General Plan policy CO-I-56 would require all construction equipment to be maintained and tuned to meet appropriate EPA and CARB emission requirements. Policy CO-I-52 also requires contractors to use best management practices to reduce particulate emissions and dust associated with construction activities, including regular materials and vehicle tire watering; covering of stockpiles; phasing or extension of grading operations; suspension of grading during high wind periods; and revegetation of graded areas. The extent to which these measures would reduce emissions is unknown.

As such, to ensure individual projects achieve consistency with the BAAQMD's construction screening criteria or, if consistency with the construction screening criteria cannot be demonstrated, the City is incorporating **Mitigation Measure AQ-1** into future project development projects. MM AQ-1 requires future projects that cannot meet construction screening criteria to prepare a detailed construction air quality impact assessment to: 1) estimate potential project construction emissions; 2) compare potential project construction emissions against BAAQMD project-level construction thresholds of significance; and 3) incorporate measures to reduce construction emission impacts to levels below the BAAQMD's construction thresholds of

significance for criteria air pollutants and TACs. Thus, the implementation of Proposed Project policies and MM-AQ-1 would ensure that the construction-related emissions under the Proposed Project would be reduced to the maximum extent practicable and as such impacts related to air quality would be less-than-significant with mitigation incorporated.

Operational Emissions

Buildout of the Planning Area under the Proposed Project has the potential to result in air quality impacts from mobile, area, and energy sources. Mobile sources would include vehicle trips generated by land uses proposed within the Planning Area. Area sources would include fireplace and oven usage, landscaping equipment, off-gassing during the reapplication of architectural coatings, and consumer products (e.g., solvents, cleaning supplies, cosmetics, toiletries). Energy sources would include onsite natural gas combustion for space and water heating. Each of these sources was taken into account in calculating the Proposed Project's long-term operational emissions, which were quantified using the CalEEMod model (see Appendix C).

Table 3.2-6 summarizes daily mobile, area, and energy source emissions generated under existing (2020) and 2040 conditions with implementation of the Proposed Project and its policies. To evaluate the magnitude of the change in the air quality environment due to implementation of the Proposed Project, the emissions under the Proposed Project at buildout in 2040 are compared to the emissions under existing conditions and the emissions under the General Plan 2040 buildout without the Proposed Project. The resulting net increase in emissions is compared to BAAQMD's project-level thresholds. BAAQMD's project-level thresholds are used for the purpose of a conservative estimate of emissions from the Proposed Project. This methodology is not required under BAAQMD CEQA Guidelines.

As indicated in **Table 3.2-6**, operational sources under the Proposed Project would result in a net increase in criteria pollutant emissions of PM₁₀, roughly the same amount of emissions of PM_{2.5}, and a net reduction in emissions of ROG, NO_x, and CO without assuming implementation of General Plan policies aimed at reducing VMT and promoting multi-modal transportation alternatives. Emissions of ROG, NO_x, CO, PM₁₀, and PM_{2.5} under the Proposed Project would not exceed BAAQMD's project-level thresholds.

Table 3.2-7: Estimated Maximum Daily Unmitigated Proposed Project Operational Emissions (pounds per day)

<i>Analysis Condition/Source</i>	<i>ROG</i>	<i>NO_x</i>	<i>CO</i>	<i>PM₁₀</i>	<i>PM_{2.5}</i>
Existing (2020)					
Area	12,916	215	14,736	1,862	1,862
Energy	195	132	64	11	11
Mobile	200	268	2,152	465	126
<i>Total</i>	13,131	615	16,951	2,337	1,999
2040 With General Plan					
Area	12,741	210	14,465	1,836	1,836
Energy	16	138	69	11	11
Mobile	169	152	1,776	524	141
<i>Total</i>	12,926	500	16,310	2,372	1,988
2040 With General Plan and Proposed Project					
Area	12,810	233	14,603	1,838	1,838
Energy	16	144	72	11	11
Mobile	181	159	1,885	561	150
<i>Total</i>	13,007	536	16,650	2,410	1,999
Net Increase with Proposed Project					
2040 General Plan With Proposed Project vs. Existing	(124)	(79)	(391)	73	0
Threshold ^a	54	54	-	82	54
Exceed Threshold?	No	No	-	No	No

Notes: Emission outputs from CalEEMod are generated for both the summer and winter seasons, with emission levels differing slightly for the pollutants in each season. Emission levels of ROG and NO_x tend to be generally higher during the winter while emissions of CO tend to be generally higher in the summer. Emissions of PM₁₀ and PM_{2.5} remain the same during both seasons. The maximum emissions for each pollutant over the course of the summer and winter seasons are shown in this table. Totals may vary due to rounding.

- a. BAAQMD's project-level thresholds (in pounds per day) were developed to analyze emissions generated by a single project and so offer an extremely conservative evaluation of emissions from an entire specific plan such as the Proposed Project. The threshold identifies the maximum acceptable pounds per day increase in emissions over existing conditions.

Source: Dyett & Bhatia, 2024.

As discussed in the Methodology section above, BAAQMD's project-level thresholds were developed to analyze emissions generated by a single project and not for a programmatic rezoning program (HE-I-1). Accordingly, operational air quality impacts of the Proposed Project are also evaluated for consistency with the 2017 Clean Air Plan to determine whether criteria pollutant emissions attributed to population and economic growth are significant. Impact 3.2-1 provides the 2017 Clean Air Plan consistency analysis based on the requirements of BAAQMD's 2017 CEQA Guidelines. The analysis demonstrates that the Proposed Project would qualitatively support the

goals of the 2017 Clean Air Plan, include all applicable control measures, and would not conflict with its implementation.

The Proposed Project would reduce the severity of growth-oriented criteria pollutants by locating uses in proximity to transit, fostering bicycle and pedestrian infrastructure, and supporting sustainable land use patterns, including mixed-use design and increased density near transit. Implementation of the Proposed Project land uses, circulation network, and General Plan policies would reduce emissions of criteria air pollutants and would ensure that individual projects would not generate operation-related emissions in excess of BAAQMD's project-level thresholds. Therefore, implementation of the Proposed Project would have a less than significant operational impact on the cumulatively considerable increase in criteria pollutants for which the region is in non-attainment.

Mitigation Measures

MM-AQ-1: Prepare Project-level Construction Emissions Assessment. The City shall require new development projects to submit a quantitative project-level construction criteria air pollutant and toxic air contaminant emissions analysis prior to the start of construction activities that shows project construction activities would not exceed BAAQMD project-level thresholds of significance to the satisfaction of the City. The analysis may rely on BAAQMD construction screening criteria to demonstrate that a detailed assessment of criteria air pollutant and toxic air contaminant construction emissions is not required for the project. If the project does not satisfy all BAAQMD construction screening criteria, the analysis shall estimate and compare construction criteria air pollutant and toxic air contaminant emissions against the project-level thresholds of significance maintained by BAAQMD and, if emissions are shown to be above BAAQMD thresholds, then the project must implement measures to reduce emissions below BAAQMD thresholds. Mitigation measures to reduce emissions could include, but are not limited to:

- a) Watering exposed surfaces at a frequency adequate to maintain a minimum soil moisture content of 12 percent, as verified by moisture probe or lab sampling;
- b) Suspending excavation, grading, and/or demolition activities when average wind speeds exceed 20 miles per hour;
- c) Selection of specific construction equipment (e.g., specialized pieces of equipment with smaller engines or equipment that will be more efficient and reduce engine runtime);
- d) Installing wind breaks that have a maximum 50 percent air porosity;
- e) Restoring disturbed areas with vegetative ground cover as soon as possible;
- f) Limiting simultaneous ground-disturbing activities in the same area at any one time (e.g., excavation and grading);
- g) Scheduling/phasing activities to reduce the amount of disturbed surface area at any one time;

- h) Installing wheel washers to wash truck and equipment tires prior to leaving the site;
- i) Minimizing idling time of diesel-powered construction equipment to no more than two minutes or the shortest time interval permitted by manufacturer's specifications and specific working conditions;
- j) Requiring equipment to use alternative fuel sources (e.g., electric-powered and liquefied or compressed natural gas), meet cleaner emission standards (e.g., U.S. EPA Tier IV Final emissions standards for equipment greater than 50-horsepower), and/or utilizing added exhaust devices (e.g., Level 3 Diesel Particulate Filter);
- k) Requiring that all construction equipment, diesel trucks, and generators be equipped with Best Available Control Technology for emission reductions of NOx and PM;
- l) Requiring all contractors use equipment that meets CARB's most recent certification standard for off-road heavy-duty diesel engines; and
- m) Applying coatings with a volatile organic compound (VOC) that exceeds the current regulatory requirements set forth in BAAQMD regulation 8, Rule 3 (Architectural Coatings).

Significance after mitigation: Less than significant

Impact 3.2-3 Implementation of the Proposed Project would not expose sensitive receptors to substantial pollutant concentrations. (Less than Significant with Mitigation Incorporated)

Sensitive land uses are generally considered to include those uses where an exposure to pollutants could result in health-related risks for individuals. Per the BAAQMD, typical sensitive receptors are residences, hospitals, and schools. Parks and playgrounds where sensitive receptors (e.g., children and seniors) are present would also be considered sensitive receptors.⁸ Sensitive receptors are located throughout the Planning Area at residences, schools, and parks (see **Figure 3.2-1**). Development of the Proposed Project has the potential to expose sensitive receptors to health effects from regional criteria pollutants, localized concentrations of CO, airborne dust containing asbestos, DPM, and PM_{2.5}. These pollutant emissions via Proposed Project construction and operations are discussed below.

Construction TAC Emissions

Future development pursuant to the Proposed Project would result in short-term construction-related emissions. Some of these construction emissions would be TACs, which could have an adverse effect on receptors who are exposed to them. Specifically, heavy-duty off-road construction

⁸ Bay Area Air Quality Management District. 2017. *California Environmental Quality Act, Air Quality Guidelines*. May. Available: https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed: July 1, 2021.

equipment, as well as haul trucks for any soil import / export, would generate exhaust PM_{2.5}, with a portion of the exhaust PM_{2.5} consisting of DPM, which is a TAC.

Although site-specific details of future projects in the Planning Area are not known at this time, it is reasonable to assume that construction TAC emissions associated with one or more projects developed under implementation of the Proposed Project could have the potential to expose sensitive receptors to substantial TAC concentrations. For example, several sites proposed for development would be located in proximity of existing residential receptors, and exposing these existing sensitive receptors to DPM emissions could have the potential to exceed the BAAQMD's cancer and non-cancer thresholds of significance.

Based on the preceding discussion and analysis, implementation of the Proposed Project could have a potentially significant impact with regard to construction TAC emissions that would be generated during construction, which requires mitigation. Accordingly, General Plan Policy CO-I-52 requires contractors to use best management practices to reduce particulate emissions and dust associated with construction activities, including regular materials and vehicle tire watering; covering of stockpiles; phasing or extension of grading operations; suspension of grading during high wind periods; and revegetation of graded areas. In addition, the City would implement **Mitigation Measure AQ-1** which requires future projects that cannot meet construction screening criteria to prepare a detailed construction air quality impact assessment to: 1) estimate potential project construction emissions; 2) compare potential project construction emissions against BAAQMD project-level construction thresholds of significance; and 3) incorporate measures to reduce construction emission impacts to levels below the BAAQMD's construction thresholds of significance for criteria air pollutants and TACs.

In addition, **Mitigation Measure AQ-2** would require individual developments to review and identify permitted stationary sources within 1,000 feet of the project that may result in risks and hazards to new receptors. If screening-level information indicates potential stationary source risks and hazards would exceed the BAAQMD's thresholds, the project applicant shall: 1) incorporate site and building design measures into the project that reduce exposure to pollutants; or 2) conduct refined, site-specific modeling, using the latest information and guidance from the BAAQMD, demonstrating sources risks and hazards would not exceed BAAQMD thresholds for new receptors. Therefore, with the implementation of **Mitigation Measures AQ-1 and AQ-2**, TAC construction emissions associated with the Proposed Project would not result in significant adverse health risks at receptor locations. This impact would be less than significant with incorporated mitigation.

Operational TAC Emissions

The Proposed Project may expose sensitive receptors to substantial TAC concentrations. Based on an inventory of existing stationary, roadway, and railway sources, several locations within the Planning Area include sources currently in excess of BAAQMD's project-level and cumulative health risk thresholds. The General Plan includes policies to minimize risks to future residents, such as requiring City consultation with BAAQMD to determine and mitigate air quality impacts for individual projects and implementation of a Community Risk Reduction plan to address the exposure of sensitive populations to TACs (policies CO-I-49 and CO-I-50). Operation of new stationary sources developed under the Proposed Project would be subject to the permit authority

of the BAAQMD, which prohibits sources with health risks in excess of the air district threshold. Future sources would be evaluated through the BAAQMD permit process and/or the CEQA process to identify and mitigate any significant exposures, and policies within the General Plan would establish buffers between potential air pollution sources and sensitive receptors. Other exposure reduction strategies including requirement of air filters, expansion of urban forestry, speed reduction, and traffic management, would minimize the Project's cumulative contribution to existing sources as well as protect future sensitive receptors. As such, the potential future emissions of TACs or PM and their impacts on sensitive receptors would be considered less than significant.

Freeways and High-Volume Roadways.

These are roadways, such as freeways or other major roadways, with traffic volumes at 10,000 vehicles per day or more. Primary pollutants of concern include diesel particulate matter, benzene, and 1,3-butadiene. Continuous engine exhaust may also elevate localized CO concentrations, resulting in hot spots. CARB, in its Air Quality and Land Use Handbook, recommends that sensitive land uses not be located within 500 feet of highways or major arterials having average annual daily traffic (AADT) exceeding 100,000 vehicles. State Route (SR) 1 and SR 35 both pass through Pacifica; such freeways that pass through the Planning Area have ADT greater than 100,000 vehicles.

Further, BAAQMD recommends that at least a 500-foot overlay zone should be established on each side of all freeways, high-volume roadways, railyards, Ports, rail lines using diesel locomotives. BAAQMD considers roadways with greater than 10,000 average daily traffic (ADT) as "high volume roadways". In addition to freeways, segments of Hickey Boulevard and Fassler Avenue are expected to have ADT greater than 10,000 by 2040, accounting for the Proposed Project.⁹

General Plan Policy CO-I-49 would continue to use the BAAQMD modeling tools and guidance documents as appropriate to identify and mitigate air quality impacts from proposed development projects, including for projects within 500 feet of a major freeway. In addition, **Mitigation Measure AQ-3** would require projects to implement health reduction measures in order to mitigate any potential air quality impacts on sensitive receptors within 500 feet of a freeway, major roadway, or rail line. With Policy CO-I-49 and **Mitigation Measure AQ-3**, recommended CARB and BAAQMD overlay zones along freeways and high-volume roadways would be adhered to and the impact would be less than significant.

⁹ DKS Associates, 2024.

Mitigation Measures

MM-AQ-1: Prepare Project-level Construction Emissions Assessment.

MM-AQ-2: Review Air Quality Risks to New Housing Sites. The City shall require new residential development projects to conduct a screening analysis in accordance with the Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines. Projects must also review and identify, using the BAAQMD's publicly available Stationary Source Screening Map or another standard methodology (e.g., BAAQMD public records request), permitted stationary sources within 1,000 feet of the project that may result in risks and hazards to new receptors. If screening-level information indicates potential stationary source risks and hazards would exceed the BAAQMD's thresholds, the project applicant shall: 1) incorporate site and building design measures into the project that reduce exposure to pollutants as to not exceed BAAQMD thresholds for new receptors; or 2) conduct refined, site-specific modeling, using the latest information and guidance from the BAAQMD, demonstrating sources risks and hazards would not exceed BAAQMD thresholds for new receptors. Site and building design measures that may reduce potential exposure to pollutants would include, but are not limited to, buffering/increasing the distance between sources and receptors, designing the site to limit exposure to the highest pollutant concentrations, and incorporating enhanced filter systems into heating, ventilation, and air conditioning equipment.

MM-AQ-3: Exposure to Air Pollution (Toxic Air Contaminants).

Mitigation Measure AQ-3 would apply if the project involves any residential uses (new dwelling units, excluding accessory dwelling units); and

The project is located within 500 feet (or other distance as specified below) of one or more of the following sources of air pollution:

- Freeway;
- Roadway with significant traffic (at least 10,000 vehicles per day);
- Railyards or rail lines using diesel locomotives; and

The project exceeds the health risk screening criteria after a screening analysis is conducted in accordance with the Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines.

If the above three criteria are met, the following reduction measures are required.

a) Health Risk Reduction Measures

Requirement: The Project applicant shall incorporate appropriate measures into the project design in order to reduce the potential health risk due to exposure of toxic air contaminants. The project applicant shall choose one of the following methods:

- i. The project applicant shall retain a qualified air quality consultant to prepare a Health Risk Assessment (HRA) in accordance with California Air Resources Board (CARB) and Office of Environmental Health and Hazard Assessment

requirements to determine the health risk of exposure of project residents/occupants/users to air pollutants. The HRA shall be submitted to the City for review and approval. If the HRA concludes that the health risk is at or below acceptable levels, then health risk reduction measures are not required. If the HRA concludes that the health risk exceeds acceptable levels, health risk reduction measures shall be identified to reduce the health risk to acceptable levels. Identified risk reduction measures shall be submitted to the City for review and approval and be included on the project drawings submitted for the construction-related permit or on other documentation submitted to the City. The approved risk reduction measures shall be implemented during construction and/or operations as applicable.

-OR-

- ii. The project applicant shall incorporate health risk reduction measures, including but not limited to the following measures detailed below. The project applicant must retain a qualified air quality consultant to conclude that such chosen measures shall reduce the health risk to acceptable levels. These features shall be submitted to the City for review and approval and be included on the project drawings submitted for the construction-related permit or on other documentation submitted to the City:
 - a. Installation of air filtration to reduce cancer risks and Particulate Matter (PM) exposure for residents and other sensitive populations in the project that are in close proximity to sources of air pollution. Air filter devices shall be rated MERV-13 or higher. As part of implementing this measure, an ongoing maintenance plan for the building's HVAC air filtration system shall be required.
 - b. Where appropriate, install passive electrostatic filtering systems, especially those with low air velocities (i.e., 1 mph).
 - c. Phasing of residential developments when proposed within 500 feet of freeways such that homes nearest the freeway are built last, if feasible.
 - d. The project shall be designed to locate sensitive receptors as far away as feasible from the source(s) of air pollution. Operable windows, balconies, and building air intakes shall be located as far away from these sources as feasible.
 - e. Sensitive receptors shall be located on the upper-floors of buildings, if feasible.
 - f. Planting trees and/or vegetation between sensitive receptors and pollution source, if feasible. Trees that are best suited to trapping PM shall be planted, including one or more of the following: Pine (*Pinus nigra* var. *maritima*), Cypress (*X Cupressocyparis leylandii*), Hybrid poplar (*Populus deltoids* X *trichocarpa*), and Redwood (*Sequoia sempervirens*).
 - g. Sensitive receptors shall be located as far away from truck activity areas, such as loading docks and delivery areas, as feasible.
 - h. Existing and new diesel generators shall meet CARB's Tier 4 emission standards, if feasible.

- i. Emissions from diesel trucks shall be reduced through implementing the following measures, if feasible:
 - i. Installing electrical hook-ups for diesel trucks at loading docks.
 - ii. Requiring trucks to use Transportation Refrigeration Units (TRUs) that meet Tier 4 emission standards.
 - iii. Requiring truck-intensive projects to use advanced exhaust technology (e.g., hybrid) or alternative fuels.
 - iv. Prohibiting trucks from idling for more than two minutes.
 - v. Establishing truck routes to avoid sensitive receptors in the project. A truck route program, along with truck calming, parking, and delivery restrictions, shall be implemented.

b) Maintenance of Health Risk Reduction Measures

Requirement: The project applicant shall maintain, repair, and/or replace installed health risk reduction measures, including but not limited to the HVAC system (if applicable), on an ongoing and as-needed basis. Prior to occupancy, the project applicant shall prepare and then distribute to the building manager/operator an operation and maintenance manual for the HVAC system and filter including the maintenance and replacement schedule for the filter.

Significance after mitigation: Less than significant

Impact 3.2-4 Implementation of the Proposed Project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. (Less than Significant)

Potential impacts could occur if the Proposed Project would result in new sources of nuisance odors located near sensitive receptors. The BAAQMD's CEQA Air Quality Guidelines provides examples of types of land uses that are potential odor sources. These land uses include wastewater treatment plants, landfills, confined animal facilities, composting stations, food manufacturing plants, refineries and chemical plants.¹⁰ Impacts from odor sources are analyzed based on each source's proximity to sensitive receptors.

In general, development under the Proposed Project would not involve construction and operation of such uses, as what is envisioned under the Project is higher-density and infill residential developments where appropriate, including mixed-use development at existing commercial shopping centers. Future development under the Proposed Project would be required to comply with Municipal Code and Zoning Code provisions that address noxious odors (Chapter 4, Title 9).

Potential odor emitters during construction activities include diesel exhaust, asphalt paving, and the use of architectural coatings and solvents. Construction-related operations near existing receptors would be temporary, and construction activities would not be likely to result in nuisance odors that would violate BAAQMD Regulation 7, Odorous Substances, which requires abatement

¹⁰ BAAQMD, 2017 CEQA Air Quality Guidelines, 2017.

of any nuisance generating an odor complaint. Typical abatement includes passing air through a drying agent followed by two successive beds of activated carbon to render air odor free. Given mandatory compliance with BAAQMD rules, no construction activities or materials are proposed that would create a significant level of objectionable odors.

Overall, compliance with Municipal Code requirements and BAAQMD rules would ensure that proposed uses under the Proposed Project would not generate odors that would adversely affect a substantial number of sensitive receptors. Therefore, this impact is less than significant.

Mitigation Measures

None required.

3.3 Biological Resources

This section of the Draft EIR provides an analysis of the Proposed Project's potential impacts to biological resources. The analysis in this section evaluates whether the Proposed Project would have a substantial adverse effect on any special-status species, riparian habitat or sensitive natural community, protected wetlands, or wildlife corridor; interfere with the movement of native or resident migratory species; or conflict with any local policies, ordinances, or conservation plans protecting biological resources. A summary of applicable regulations is also provided in this section.

The City received two responses to the Notice of Preparation (NOP) regarding topics covered in this section of the EIR. The comments expressed concern about wildlife species and their associated habitats. These comments are addressed in the Environmental and Regulatory Setting sections and incorporated into the following analysis.

Environmental Setting

Pacifica's varied topography creates a wide range of habitats in the city, including intertidal areas, beaches, ridges, coastal headlands, woodlands, grasslands, scrub, creeks, and wetlands. Most natural vegetation in the valley and canyon bottoms has been converted to development. However, intact native habitats persist along the riparian corridors of San Pedro, Calera, Rockaway, and Milagra Creeks, and on steep slopes.

HABITAT TYPES

The 31 subject sites were classified as developed, partially developed, and undeveloped as detailed in **Table 3.3-1** and depicted in **Figure 2-6** in the Project Description.

Table 3.3-1: Subject Sites Classification

Classification	Description	Sites
Developed	Sites that are entirely covered by man-made buildings and other structures; paved, gravel, or bare graded areas; and/or landscaped areas	16A, 18, 20, 27A, 27B, 28, 32, B
Partially developed	Sites that contain both developed and undeveloped areas	2, 10, 12, 16B, 19, 21, 22, 23, 24, 25, 29, 30, 31, A, E, F, H, J
Undeveloped	Sites that contain no developed areas	11, 38, D, G, I

The subject sites are located across the City of Pacifica, which is located on the western coastline of the San Francisco Peninsula and receives a maritime influence. In addition to developed areas, the City of Pacifica contains numerous natural areas, including beaches, coastal bluffs, coastal scrub, and groves of trees. Three creeks and their associated riparian corridors also occur within the City of Pacifica: San Pedro Creek, San Andreas Creek, and Caleras Creek. These creeks can act as corridors for local wildlife. Milagra Ridge, an open space park in eastern Pacifica, also forms an island ecosystem that hosts numerous special-status plant and wildlife species.

During the site visit, WRA evaluated the species composition and area occupied by distinct vegetation communities, aquatic communities, and other land cover types, in undeveloped areas. Mapping of these classifications utilized a combination of aerial imagery and ground surveys. Communities were characterized and mapped based on distinct shifts in plant assemblage (vegetation) and follow the California Natural Community List¹ and A Manual of California Vegetation, Online Edition.²

In addition to developed areas, WRA identified four non-sensitive land cover types (Monterey cypress – Monterey pine woodland stands, non-native annual grassland, arroyo willow thickets, and coyote brush scrub), one potentially sensitive land cover type (potential freshwater seasonal wetlands), and one sensitive land cover type (riparian arroyo willow thickets). Undeveloped land cover types are described below.

Monterey Cypress – Monterey Pine Woodland Stands (*Hesperocyparis macrocarpa* – *Pinus radiata* Woodland Semi-Natural Alliance). CDFW Rank: None. Non-sensitive. Wooded areas within subject sites 2, 10, 11, 12, 21, 22, 25, 30, 31, 38, A, E, H, I, and J are dominated by Monterey cypress (*Hesperocyparis macrocarpa*) and Monterey pine (*Pinus radiata*), occasionally co-occurring

¹ California Department of Fish and Wildlife (CDFW). 2024. California Natural Diversity Database. Biogeographic Data Branch, Vegetation Classification and Mapping Program, Sacramento, California. Available online at: <https://wildlife.ca.gov/Data/CNDDDB/Maps-and-Data>; most recently accessed: July 2024.

² California Native Plant Society (CNPS). 2024. A Manual of California Vegetation, Online Edition. Available online at: <http://vegetation.cnps.org>. Most recently accessed: July 2024.

with eucalyptus (*Eucalyptus* spp.). The understory varies from unvegetated, to non-native annual grassland, to coyote brush scrub, described below.

Non-Native Annual Grassland (multiple vegetation alliances). CDFW Rank: None. Non-sensitive. Non-native annual grassland occurs within subject sites 11, 12, 16B, 19, 21, 22, 23, 24, 38, and D. This land cover type includes mown areas, recreational fields, and areas overgrown with weedy herbaceous vegetation, that are dominated by non-native annual grasses and other ruderal herbaceous vegetation. Species composition varies widely between parcels; some common species include soft chess (*Bromus hordeaceus*), Italian thistle (*Carduus pycnocephalus*), upright veldt grass (*Ehrharta erecta*), Italian rye grass (*Festuca perennis*), bristly ox tongue (*Helminthotheca echioides*), foxtail barley (*Hordeum murinum*), jubata grass (*Cortaderia jubata*), and smilo grass (*Stipa miliacea*).

Arroyo Willow Thickets (*Salix lasiolepis* Shrubland Alliance). CDFW Rank: S4/G4. Non-sensitive. Dense, upland stands of arroyo willow (*Salix lasiolepis*) occur within subject sites 25 and G. The understory sometimes contains vine cover, including Cape ivy (*Delairea odorata*), English ivy (*Hedera helix*), and California blackberry (*Rubus ursinus*).

Coyote Brush Scrub (*Baccharis pilularis* Shrubland Alliance). CDFW Rank: S5/G5. Non-sensitive. Coyote brush scrub dominates undeveloped areas with an open canopy in subject sites 2, 10, 11, 12, 22, 25, 38, G, I, and J. This land cover type is dominated by coyote brush (*Baccharis pilularis*), which is often co-dominant with California sagebrush (*Artemisia californica*), and occasionally sticky monkeyflower (*Diplacus aurantiacus*). The composition of the herbaceous understory is similar to non-native annual grassland, described above.

Potential Freshwater Seasonal Wetlands (multiple vegetation alliances). CDFW Rank: None. Potentially Sensitive. Areas with potential freshwater seasonal wetlands were observed in subject sites 21, 25, F, G, and I. These areas contain facultative vegetation, such as Italian rye grass, bristly ox tongue, and rushes (*Juncus* spp.), and occur in depressions or other areas where water could pond during the rainy season. At some locations, wetland hydrology indicators such as surface soil cracks and algal matting, were also observed. While this land cover type is not considered sensitive based on species composition, it is potentially considered sensitive based on its function as potential aquatic habitat.

Riparian Arroyo Willow Thickets (*Salix lasiolepis* Shrubland Alliance). CDFW Rank: S4/G4. Sensitive. Riparian arroyo willow thickets occur along the edge of Calera Creek, within subject sites 16B and 29. Within subject site 29, this land cover type is dominated by arroyo willow, with lower cover of blue elderberry (*Sambucus mexicana*) and Monterey pine. The understory is dominated by dense vine cover, including Cape ivy, English ivy, California man-root (*Marah fabacea*), California blackberry, and periwinkle (*Vinca major*). Within subject site 16B, this land cover type is characterized by a dense stand of arroyo willow. While this land cover type is not considered sensitive based on species composition, it is considered sensitive based on its function as riparian vegetation.

Special-Status Species

Special-status Plants

No special-status plant species were observed in any of the subject sites during the site assessments conducted on August 21, 2023, and May 3, 2024. Based upon a review of the CNPS Inventory and CNDDB, 87 special-status plant species have been documented in the vicinity of the subject sites. Twenty-one of these species have the potential to occur in one or more of the subject sites. The remaining species documented from the greater vicinity are unlikely or have no potential to occur for one or more of the following:

- Hydrologic conditions (e.g., seep, riverine) necessary to support the special-status plant species are not present;
- Edaphic (soil) conditions (e.g., mudstone, serpentine) necessary to support the special-status plant species are not present;
- Topographic conditions (e.g., bluff, montane) necessary to support the special-status plant species are not present;
- Unique pH conditions (e.g., alkali scalds, acidic bogs) necessary to support the special-status plant species are not present;
- Associated natural communities (e.g., interior chaparral, tidal marsh) necessary to support the special-status plant species are not present;
- The subject sites are geographically isolated (e.g. below elevation, coastal environ) from the documented range of the special-status plant species;
- The historical landscape and/or habitat(s) of the subject sites were not suitable habitat prior to land/type conversion (e.g., non-native tree stands) to support the special-status plant species;
- Land use history and contemporary management (e.g., grading, urbanization) has degraded the localized habitat necessary to support the special-status plant species; and
- Host plant species known to support the special-status plant species are absent.

The 21 special-status plant species with potential to occur within one or more subject site are described below in **Table 3.3-2**.

Table 3.3-2: Special-Status Plant Species with the Potential to Occur in the Planning Area

<i>Species</i>	<i>Status¹</i>	<i>Habitat</i>	<i>Sites with Potential for Habitat</i>	<i>Rationale</i>
Ocean bluff milk-vetch <i>Astragalus nuttallii</i> var. <i>nuttallii</i>	Rank 4.2	Coastal bluff scrub, coastal dunes. Elevation ranges from 10 to 395 feet (3 to 120 meters). Blooms Jan-Nov.	2, 10, 11, 12, 22, 25, 38, G, I, J	These sites contain coastal scrub habitat that could support this species, which is known from Rockaway Beach. ²
Brewer's calandrinia <i>Calandrinia breweri</i>	Rank 4.2	Chaparral, coastal scrub. Elevation ranges from 35 to 4005 feet (10 to 1220 meters). Blooms (Jan)Mar-Jun.	2, 10, 11, 12, 22, 25, 38, G, I, J	These sites contain coastal scrub habitat that could support this widely distributed species, which is known to occur in similar habitat in San Mateo County, such as in the City of San Carlos ²
Johnny-nip Castilleja ambigua var. ambigua	Rank 4.2	Coastal bluff scrub, coastal prairie, coastal scrub, marshes and swamps, valley and foothill grassland, vernal pools (margins). Elevation ranges from 0 to 1425 feet (0 to 435 meters). Blooms Mar-Aug.	2, 10, 11, 12, 22, 25, 38, G, I, J	These sites contain coastal scrub habitat that could support this species, which is known from Pedro Point Headlands. ²
pappose tarplant <i>Centromadia parryi</i> ssp. <i>parryi</i>	Rank 1B.2	Chaparral, coastal prairie, marshes and swamps (coastal salt), meadows and seeps, valley and foothill grassland (vernally mesic). Elevation ranges from 0 to 1380 feet (0 to 420 meters). Blooms May-Nov.	2, 10, 11, 12, 16B, 19, 21, 22, 23, 24, 25, 38, D, F, I, J	These sites contain chaparral and grassland habitat that could support this species, which is known from Laguna Salada and Rockaway Beach. ³
San Francisco Bay spineflower <i>Chorizanthe cuspidata</i> var. <i>cuspidata</i>	Rank 1B.2	Coastal bluff scrub, coastal dunes, coastal prairie, coastal scrub. Elevation ranges from 10 to 705 feet (3 to 215 meters). Blooms Apr-Jul (Aug).	2, 10, 11, 12, 22, 25, 38, G, I, J	These sites contain coastal scrub habitat that could support this species, which is known from Laguna Salada. ³

San Mateo woolly sunflower <i>Eriophyllum latilobum</i>	FE, SE, Rank IB.1	Cismontane woodland (often serpentine, roadcuts), coastal scrub, lower montane coniferous forest. Elevation ranges from 150 to 1085 feet (45 to 330 meters). Blooms May-Jun.	2, 10, 11, 12, 22, 25, 38, G, I, J	These sites contain coastal scrub habitat that could support this species, which is known from Montara Mountain. ³
blue coast gilia <i>Gilia capitata</i> ssp. <i>Chamissonis</i>	Rank IB.1	Coastal dunes, coastal scrub. Elevation ranges from 5 to 655 feet (2 to 200 meters). Blooms Apr-Jul.	2, 10, 11, 12, 22, 25, 38, G, I, J	These sites contain coastal scrub habitat that could support this species, which is known from Lake Merced. ³
San Francisco gumplant <i>Grindelia hirsutula</i> var. <i>maritima</i>	Rank 3.2	Coastal bluff scrub, coastal scrub, valley and foothill grassland. Elevation ranges from 50 to 1310 feet (15 to 400 meters). Blooms Jun-Sep.	2, 10, 11, 12, 22, 25, 38, G, I, J	These sites contain coastal scrub habitat that could support this species, which is known from Green Valley. ³
Kellogg's horkelia <i>Horkelia cuneata</i> var. <i>sericea</i>	Rank IB.1	Chaparral (maritime), closed-cone coniferous forest, coastal dunes, coastal scrub. Elevation ranges from 35 to 655 feet (10 to 200 meters). Blooms Apr-Sep.	2, 10, 11, 12, 22, 25, 38, G, I, J	These sites contain coastal scrub habitat that could support this species, which is known from Montara Mountain. ³
Point Reyes horkelia <i>Horkelia marinensis</i>	Rank IB.2	Coastal dunes, coastal prairie, coastal scrub. Elevation ranges from 15 to 2475 feet (5 to 755 meters). Blooms May-Sep.	2, 10, 11, 12, 22, 25, 38, G, I, J	These sites contain coastal scrub habitat that could support this species, which is known from Colma and Junipero Serra Park. ³
harlequin lotus <i>Hosackia gracilis</i>	Rank 4.2	Broadleafed upland forest, cismontane woodland, closed-cone coniferous forest, coastal bluff scrub, coastal prairie, coastal scrub, marshes and swamps, meadows and seeps, north coast coniferous forest, valley and foothill grassland. Elevation ranges from 0 to 2295 feet (0 to 700 meters). Blooms Mar-Jul.	F, G, I	These sites contain potential wetland habitat that could support this species, which is known from Lake San Andreas and Moss Beach. ³

island tube lichen <i>Hypogymnia</i> <i>schizidiata</i>	Rank IB.3	Chaparral, closed-cone coniferous forest. Elevation ranges from 1180 to 1330 feet (360 to 405 meters). Blooms.	2, 10, 11, 12, 21, 22, 25, 30, 31, 38, A, E, G, H, I, J	These sites contain hardwood conifers and/or coastal scrub that could support this species, which is known from coyote brush on Montara Mountain. ³
perennial goldfields <i>Lasthenia</i> <i>californica</i> ssp. <i>Macrantha</i>	Rank IB.2	Coastal bluff scrub, coastal dunes, coastal scrub. Elevation ranges from 15 to 1705 feet (5 to 520 meters). Blooms Jan-Nov.	2, 10, 11, 12, 22, 25, 38, G, I, J	These sites contain coastal scrub habitat that could support this species, which is known from Devil's Slide Trail. ³
coast yellow leptosiphon <i>Leptosiphon</i> <i>croceus</i>	SE, Rank IB.1	Coastal bluff scrub, coastal prairie. Elevation ranges from 35 to 490 feet (10 to 150 meters). Blooms Apr- Jun.	2, 10, 11, 12, 22, 25, 38, G, I, J	These sites contain coastal scrub habitat that could support this species, which is known from Rockaway Beach. ³
rose leptosiphon <i>Leptosiphon</i> <i>rosaceus</i>	Rank IB.1	Coastal bluff scrub. Elevation ranges from 0 to 330 feet (0 to 100 meters). Blooms Apr-Jul.	2, 10, 11, 12, 22, 25, 38, G, I, J	These sites contain coastal scrub habitat that could support this species, which is known from Mori Point. ³
San Mateo tree lupine <i>Lupinus arboreus</i> var. <i>eximius</i>	Rank 3.2	Chaparral, coastal scrub. Elevation ranges from 295 to 1805 feet (90 to 550 meters). Blooms Apr-Jul.	2, 10, 11, 12, 22, 25, 38, G, I, J	These sites contain coastal scrub habitat that could support this species, which is known from Rockaway Beach. ²
Choris' popcornflower <i>Plagiobothrys</i> <i>chorisianus</i> var. <i>chorisianus</i>	Rank IB.2	Chaparral, coastal prairie, coastal scrub. Elevation ranges from 10 to 525 feet (3 to 160 meters). Blooms Mar-Jun.	2, 10, 11, 12, 22, 25, 38, G, I, J	These sites contain coastal scrub habitat that could support this species, which is known from Sweeney Ridge on Montara Mountain. ³
Oregon polemonium <i>Polemonium</i> <i>carneum</i>	Rank 2B.2	Coastal prairie, coastal scrub, lower montane coniferous forest. Elevation ranges from 0 to 6005 feet (0 to 1830 meters). Blooms Apr-Sep.	2, 10, 11, 12, 22, 25, 38, G, I, J	These sites contain coastal scrub habitat that could support this species, which is known from Montara Mountain, in the vicinity of Pilarcitos Stone Dam. ³

Hickman's cinquefoil <i>Potentilla hickmanii</i>	FE, SE, Rank IB.1	Closed-cone coniferous forest, coastal bluff scrub, marshes and swamps (freshwater), meadows and seeps (vernally mesic). Elevation ranges from 35 to 490 feet (10 to 149 meters). Blooms Apr-Aug.	2, 10, 11, 12, 22, 25, 38, G, I, J	These sites contain coastal scrub habitat that could support this species, which is known from the Devil's Slide area. ³
Scouler's catchfly <i>Silene scouleri</i> ssp. <i>Scouleri</i>	Rank 2B.2	Coastal bluff scrub, coastal prairie, valley and foothill grassland. Elevation ranges from 0 to 1970 feet (0 to 600 meters). Blooms (Mar-May) J-Aug (Sep).	2, 10, 11, 12, 22, 25, 38, G, I, J	These sites contain coastal scrub habitat that could support this species, which is known from San Pedro Point. ³
two-fork clover <i>Trifolium amoenum</i>	FE, Rank IB.1	Coastal bluff scrub, valley and foothill grassland (sometimes serpentine). Elevation ranges from 15 to 1360 feet (5 to 415 meters). Blooms Apr-Jun.	2, 10, 11, 12, 22, 25, 38, G, I, J	These sites contain coastal scrub habitat that could support this species, which is known from Colma. ³

1. FE = Federal Endangered; FT = Federal Threatened; FC = Federal Candidate; SE = State Endangered, ST = State Threatened; SC = State Candidate; Rank 1A = Plants presumed extinct in California; Rank 1B = Plants rare, threatened, or endangered in California and elsewhere; Rank 2 = Plants rare, threatened, or endangered in California, but more common elsewhere; Rank 3 = Plants about which we need more information – a review list; Rank 4 = Plants of limited distribution – a watch list

2. Consortium of California Herbaria 2 (CCH2). 2024. CCH2 Portal. Online at: <http://cch2.org/portal/index.php>; most recently accessed: August 2024.

3. California Department of Fish and Wildlife (CDFW). 2024. California Natural Diversity Database. Biogeographic Data Branch, Vegetation Classification and Mapping Program, Sacramento, California. Available online at: <https://wildlife.ca.gov/Data/CNDDDB/Maps-and-Data>; most recently accessed: August 2024.

Thirteen (13) Federally Threatened or Endangered Species are documented in the vicinity of the subject sites but are unlikely or have no potential to occur in the subject sites. These species are described in Table 3.3-3 below.

Table 3.3-3: Special-Status Plant Species that are Unlikely or Have No Potential to Occur in the Planning Area

Species	Status/	Habitat	Rationale
San Mateo thorn-mint <i>Acanthomintha duttonii</i>	FE, SE, Rank IB.1	Chaparral, valley and foothill grassland. Elevation ranges from 165 to 985 feet (50 to 300 meters). Blooms Apr-Jun.	The subject sites do not contain serpentine or vertisol clay soils to support this species.
Franciscan manzanita <i>Arctostaphylos franciscana</i>	FE, Rank IB.1	Coastal scrub (serpentine). Elevation ranges from 195 to 985 feet (60 to 300 meters). Blooms Feb-Apr.	The subject sites do not have serpentine coastal scrub habitat to support this species.

San Bruno Mountain manzanita <i>Arctostaphylos imbricata</i>	SE, Rank IB.I	Chaparral, coastal scrub. Elevation ranges from 900 to 1215 feet (275 to 370 meters). Blooms Feb-May.	The subject sites do not have sandstone outcrops in chaparral, or serpentine coastal scrub habitat, to support this species.
Presidio manzanita <i>Arctostaphylos montana ssp. ravenii</i>	FE, SE, Rank IB.I	Chaparral, coastal prairie, coastal scrub. Elevation ranges from 150 to 705 feet (45 to 215 meters). Blooms Feb-Mar.	The subject sites do not have open, rocky serpentine slopes to support this species.
Pacific manzanita <i>Arctostaphylos pacifica</i>	SE, Rank IB.I	Chaparral, coastal scrub. Elevation ranges from 1085 to 1085 feet (330 to 330 meters). Blooms Feb-Apr.	This species is known only from San Bruno Mountain.
robust spineflower <i>Chorizanthe robusta</i> var. <i>robusta</i>	FE, Rank IB.I	Chaparral (maritime), cismontane woodland (openings), coastal dunes, coastal scrub. Elevation ranges from 10 to 985 feet (3 to 300 meters). Blooms Apr-Sep.	The subject sites do not have sandy terraces or bluffs in loose sand to support this species.
fountain thistle <i>Cirsium fontinale</i> var. <i>fontinale</i>	FE, SE, Rank IB.I	Chaparral (openings), cismontane woodland, meadows and seeps, valley and foothill grassland. Elevation ranges from 150 to 575 feet (45 to 175 meters). Blooms (Apr)May-Oct.	The subject sites do not have serpentine seeps to support this species. Grassland habitat within the subject sites is highly disturbed and unlikely to support this species.
Marin western flax <i>Hesperolinon congestum</i>	FT, ST, Rank IB.I	Chaparral, valley and foothill grassland. Elevation ranges from 15 to 1215 feet (5 to 370 meters). Blooms Apr-Jul.	The subject sites do not have serpentine barrens or grassland to support this species.
beach layia <i>Layia carnosa</i>	FT, SE, Rank IB.I	Coastal dunes, coastal scrub (sandy). Elevation ranges from 0 to 195 feet (0 to 60 meters). Blooms Mar-Jul.	Occurrences in the region are presumed to be extirpated. ²
San Francisco lessingia <i>Lessingia germanorum</i>	FE, SE, Rank IB.I	Coastal scrub (remnant dunes). Elevation ranges from 80 to 360 feet (25 to 110 meters). Blooms (Jun)Jul-Nov.	The subject sites do not have remnant dune habitat to support this species.
white-rayed pentachaeta <i>Pentachaeta bellidiflora</i>	FE, SE, Rank IB.I	Cismontane woodland, valley and foothill grassland (often serpentine). Elevation ranges from 115 to 2035	The subject sites do not contain serpentine soils to support this species. Grassland habitat within the subject sites is highly

		feet (35 to 620 meters). Blooms Mar-May.	disturbed and unlikely to support this species.
adobe sanicle <i>Sanicula maritima</i>	SR, Rank IB.1	Chaparral, coastal prairie, meadows and seeps, valley and foothill grassland. Elevation ranges from 100 to 785 feet (30 to 240 meters). Blooms Feb-May.	The subject sites do not contain moist clay or serpentine soils to support this species.
California seablite <i>Suaeda californica</i>	FE, Rank IB.1	Marshes and swamps (coastal salt). Elevation ranges from 0 to 50 feet (0 to 15 meters). Blooms Jul-Oct.	The subject sites do not contain coastal salt marsh habitat to support this species.

1. FE = Federal Endangered; FT = Federal Threatened; FC = Federal Candidate; SE = State Endangered, ST = State Threatened; SC = State Candidate; Rank 1A = Plants presumed extinct in California; Rank 1B = Plants rare, threatened, or endangered in California and elsewhere; Rank 2 = Plants rare, threatened, or endangered in California, but more common elsewhere; Rank 3 = Plants about which we need more information – a review list; Rank 4 = Plants of limited distribution – a watch list

2. California Department of Fish and Wildlife (CDFW). 2024. California Natural Diversity Database. Biogeographic Data Branch, Vegetation Classification and Mapping Program, Sacramento, California. Available online at: <https://wildlife.ca.gov/Data/CNDDDB/Maps-and-Data>; most recently accessed: August 2024.

Special-status Wildlife

Forty-seven (47) special-status wildlife species have been documented in CNDDDB within the San Francisco South, Montara Mountain, and adjacent USGS quadrangles. Of these, 35 were determined to have no potential, or are unlikely to occur within the 31 subject sites due to one or more of the following reasons:

- There is a lack of connectivity with suitable occupied habitat;
- Aquatic habitats necessary to support special-status wildlife species (e.g., ponds, brackish waters, streams) are not present;
- Vegetation communities (e.g., tidal or freshwater marsh, old-growth coniferous forest) that provide nesting and/or foraging resources necessary to support special-status wildlife species are not present;
- Structures or vegetation (e.g., caves, old-growth trees) necessary to provide nesting or cover habitat to support special-status wildlife species are not present; and
- The sites are outside of the species' documented range.

While the aforementioned factors contribute to the absence of many special-status wildlife species, several of the subject sites were determined to have potentially adequate conditions and locality for 12 special-status species to occur. The subject sites were assessed based on habitats mapped during the initial field review and proximity to occupied or otherwise suitable habitat. These sites should have focused assessments to determine if special-status species as detailed in **Table 3.3-4** have potential to occur.

Table 3.3-4: Special-Status Animal Species with the Potential to Occur in the Subject Sites

Species	Status ^{1,2}	Habitat	Sites with Potential for Habitat	Rationale
Birds				
White-tailed kite <i>Elanus leucurus</i>	FP	Year-round resident in coastal and valley lowlands with scattered trees and large shrubs, including grasslands, marshes and agricultural areas. Nests in trees, of which the type and setting are highly variable. Preys on small mammals and other vertebrates.	11, 22, 38, I	Trees and shrubs adjacent to open grassland may support this species
San Francisco (saltmarsh) common yellowthroat <i>Geothlypis trichas sinuosa</i>	SSC	Resident of the San Francisco Bay region, in fresh and saltwater marshes. Requires thick, continuous cover down to water surface for foraging; tall grasses, tule patches, willows for nesting.	29	Riparian Arroyo willow thicket along San Pedro Creek may support this species
(Brewster's) Yellow warbler <i>Setophaga petechia brewsteri</i>	SSC	Summer resident throughout much of California. Breeds in riparian vegetation close to water, including streams and wet meadows. Microhabitat used for nesting variable, but dense willow growth is typical. Occurs widely on migration.	29	Riparian Arroyo willow thicket along San Pedro Creek may support this species
Mammals				
pallid bat <i>Antrozous pallidus</i>	SSC, WBWG High	Found in a variety of habitats ranging from grasslands to mixed forests, favoring open and dry, rocky areas. Roost sites include crevices in rock outcrops and cliffs, caves, mines, and also hollow trees and various manmade structures such as bridges, barns, and buildings (including occupied buildings). Roosts must protect bats from high temperatures. Very sensitive	12, 38, I, J	May occur in mature trees with suitably dense foliage

		to disturbance of roosting sites.		
western red bat <i>Lasiurus blossevillii</i>	SSC, WBWG High	Highly migratory and typically solitary, roosting primarily in the foliage of trees or shrubs. Roosts are usually in broad-leaved trees including cottonwoods, sycamores, alders, and maples. Day roosts are commonly in edge habitats adjacent to streams or open fields, in orchards, and sometimes in urban areas.	12, 29, 38, I, J	Riparian habitat along San Pedro Creek may support this species.
hoary bat <i>Lasiurus cinereus</i>	WBWG Medium	Prefers open forested habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees. Feeds primarily on moths.	Sites with mature trees (>12 inch DBH)	May occur in mature trees with suitably dense foliage
fringed myotis <i>Myotis thysanodes</i>	WBWG High	Associated with a wide variety of habitats including dry woodlands, desert scrub, mesic coniferous forest, grassland, and sage-grass steppes. Buildings, mines and large trees and snags are important day and night roosts.	Sites with buildings, structures, or mature trees (>12 inch DBH)	May occur on buildings or large trees with suitable cavities.
San Francisco dusky-footed woodrat <i>Neotoma fuscipes annectens</i>	SSC	Forest habitats of moderate canopy and moderate to dense understory. Also in chaparral habitats. Constructs nests of shredded grass, leaves, and other material. May be limited by availability of nest-building materials.	2, 11, 12, 21, 22, 25, 29, 38, A, H, I, J	Sites with woodland or scrub that is not isolated by adjacent development have potential to support this species.
Reptiles and Amphibians				
California red-legged frog <i>Rana draytonii</i>	FT, SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11 to 20 weeks of permanent water for larval development. Associated with quiet perennial to intermittent ponds, stream	11, 12, 22, 29, 38, I, J	No suitable aquatic habitat is present within the subject sites. This species has potential to disperse into grassland or riparian habitat contiguous with occupied habitat.

		pools and wetlands. Prefers shorelines with extensive vegetation. Disperses through upland habitats after rains.		
San Francisco garter snake <i>Thamnophis sirtalis tetrataenia</i>	FE, SE, CFP	Vicinity of freshwater marshes, ponds and slow moving streams in San Mateo County and extreme northern Santa Cruz County. Prefers dense cover and water depths of at least one foot. Upland areas near water are also very important.	29	No suitable aquatic habitat is present within the subject sites. This species has potential to disperse into grassland or riparian habitat within dispersal distance (typically less than 200 m) ¹ of suitable aquatic habitat.
Invertebrates				
Mission blue butterfly <i>Plebejus icarioides missionensis</i>	FE	Inhabits grasslands and coastal chaparral of the San Francisco peninsula and southern Marin County, but mostly found on San Bruno Mountain. Three larval host plants: <i>Lupinus albifrons</i> , <i>L. variicolor</i> , and <i>L. formosus</i> , of which <i>L. albifrons</i> is favored.	2, 11, 21, 38, H	This species is known to occur on Milagra Ridge and Sweeney Ridge, and may occur in grassland or scrub contiguous with these populations.
monarch butterfly <i>Danaus plexippus</i>	none (winter roosts protected by CDFW)	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, Monterey cypress), with nectar and water sources nearby.	2, 11, 12, 21, 22, 25, A, H, I, J	No documented roosts are present within or adjacent to the sites. However, this species has potential to roost in suitable Monterey pine or cypress groves.

I. FP = California Fish and Game Code Fully Protected; FE = Federal Endangered; FT = Federal Threatened; FC = Federal Candidate; SE = State Endangered, ST = State Threatened; SC = State Candidate; SSC = state Species of Special Concern; WBWG = Western Bat Working Group

Several Federally Threatened or Endangered Species are documented in the City of Pacifica but are unlikely or have no potential to occur in the subject sites. These species are described in Table 3.3-5.

¹ U.S. Fish and Wildlife Service. 2020. Species Status Assessment for the San Francisco gartersnake (*Thamnophis sirtalis tetrataenia*), Version 1.0. May 2020. Sacramento, California

Table 3.3-5: Federally Listed Animal Species documented in the City of Pacifica with No Potential or Unlikely to Occur in the Subject Sites

<i>Species</i>	<i>Status</i>	<i>Habitat</i>	<i>Rationale</i>
San Bruno elfin butterfly <i>Callophrys mossii bayensis</i>	FE	Limited to the vicinity of San Bruno Mountain, San Mateo County. Colonies are located in rocky outcrops and cliffs in coastal scrub habitat on steep, north-facing slopes within the fog belt. Species range is tied to the distribution of the larval host plant, <i>Sedum spathulifolium</i> .	This species is known to occur in nearby habitats, including along Milagra Ridge (USFWS 2010). However, the nearest subject sites do not contain suitable north-facing slopes or rocky-habitat to support the host plant.
Myrtle's silverspot butterfly <i>Speyeria zerene myrtleae</i>	FE	Restricted to the fog belt of northern Marin and southernmost Sonoma County, including the Point Reyes peninsula; extirpated from coastal San Mateo County. Occurs in coastal prairie, dunes, and grassland. Larval foodplant is typically <i>Viola adunca</i> . Adult flight season may range from late June to early September.	This species is considered extirpated from San Mateo County.
steelhead - central CA coast DPS <i>Oncorhynchus mykiss irideus</i>	FT	Occurs from the Russian River south to Soquel Creek and Pajaro River. Also in San Francisco and San Pablo Bay Basins. Adults migrate upstream to spawn in cool, clear, well-oxygenated streams. Juveniles remain in fresh water for 1 or more years before migrating downstream to the ocean.	This species is documented to occur in San Pedro Creek adjacent to site 29. However, suitable habitat is not present within the subject sites.
western snowy plover <i>Charadrius nivosus (alexandrines) nivosus</i>	FT, SSC	Federal listing applies only to the Pacific coastal population. Year-round resident and winter visitor. Occurs on sandy beaches, salt pond levees, and the shores of large alkali lakes. Nests on the ground, requiring sandy, gravelly or friable soils.	This species is documented along the coast, but the subject sites do not contain beach, shore, or salt pond habitat to support nesting by the species.

Sensitive Habitats

Critical Habitat

Critical habitat is defined by the federal ESA as a specific geographic area that contains features essential for the conservation of a threatened or endangered species and may require special management and protection. Critical habitat is shown in **Figure 3.3-1**. Site 31 is partially within the boundary of critical habitat for California-red legged frog [CRLF] as designated by the USFWS. However, site 31 is fully developed and does not have the physical and biological features essential to the conservation of this species. All other sites are outside of the current designated critical habitat for CRLF.

Wildlife and Habitat Connectivity

Wildlife movement between suitable habitat areas can occur via open space areas lacking substantial barriers. The terms “landscape linkage” and “wildlife corridor” are often used when referring to these areas. The key to a functioning corridor or linkage is that it connects two larger habitat blocks, also referred to as core habitat areas. It is useful to think of a “landscape linkage” as being valuable in a regional planning context, a broad scale mapping of natural habitat that functions to join two larger habitat blocks. The term “wildlife corridor” is useful in the context of smaller, local area planning, where wildlife movement may be facilitated by specific local biological habitats or passages and/or may be restricted by barriers to movement. Above all, wildlife corridors must link two areas of core habitat and should not direct wildlife to developed areas or areas that are otherwise void of core habitat.

Much of southern Pacifica, including subject sites 10, 11, 12, 16A, 16B, 22, 23, 24, 38, A, F, I, J are within a less permeable portion of a wildlife corridor based on the Essential Connectivity Areas geospatial dataset, which uses habitat modelling on a broad scale to identify areas of land with value as wildlife corridors¹. Seven of the subject sites are fully developed and have no function for wildlife movement as they are bordered by dense development which serve as barriers to movement. However, subject sites 10, 11, 12, 22, I, and J are undeveloped or partially developed and facilitate local and regional wildlife movement as they are contiguous with large tracts of undeveloped lands encompassed within mapped potential wildlife corridors. As such, these sites serve to connect larger habitat blocks or core habitat areas within the central coast of California.

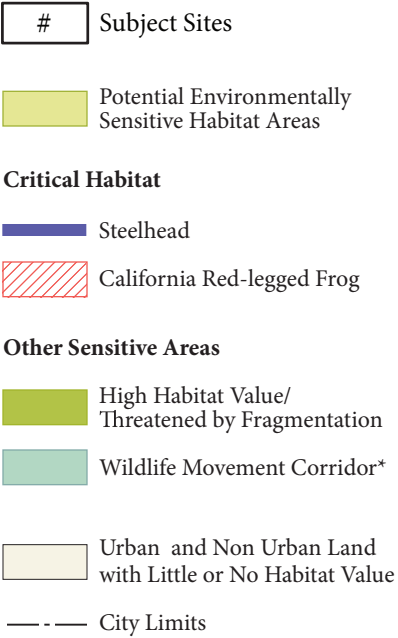
Sites 2 and H are mapped as High Habitat Value in the General Plan, shown in **Figure 3.3-1**. Site A is mapped within a potential Wildlife Movement Corridor in the General Plan. Site 34 contains riparian habitat along its southmost border. Site 26 is within Potential ESHA as mapped in the General Plan. However, these designations in the General Plan are not definitive. A habitat survey would be required to determine functionality for local wildlife movement.

¹ CalTrans. 2010. California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California. Prepared for California Department of Transportation, California Department of Fish and Game, and Federal Highways Administration. Available online at: <https://www.wildlife.ca.gov/Conservation/Planning/Connectivity/CEHC>.

Wetlands and Other Waters

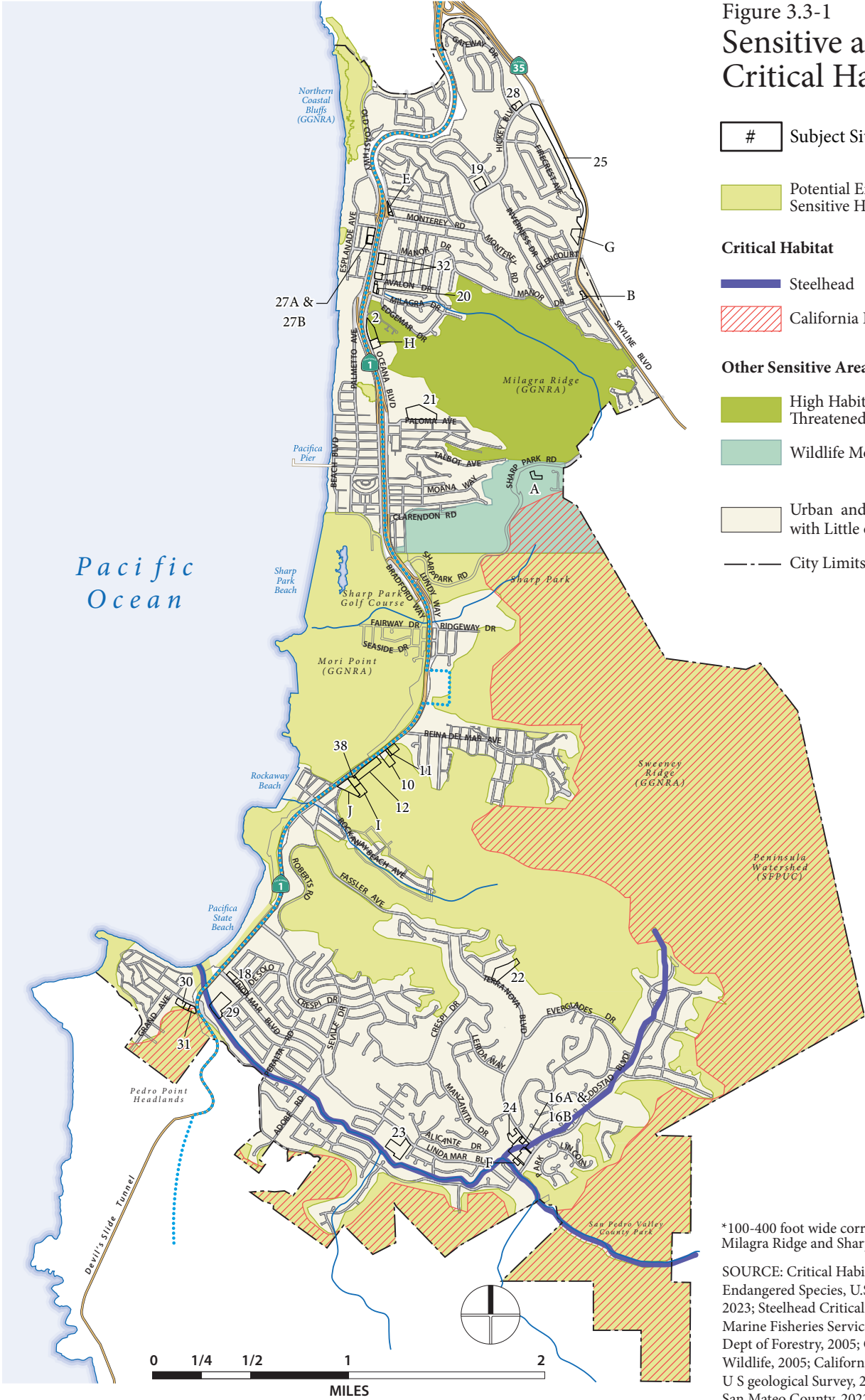
Areas with potential freshwater seasonal wetlands were observed in subject sites F, G, and I. These areas contain facultative vegetation, such as Italian rye grass and bristly ox tongue, and occur in depressions or other areas where water could pond during the rainy season. Potential freshwater seasonal wetlands may be regulated by the RWQCB under the CWA and Porter-Cologne Water Quality Control Act. Under the current definition, none of the observed potential freshwater seasonal wetlands are likely to be regulated by the Corps, due to the lack of a continuous surface connection to waters of the U.S.

Figure 3.3-1
Sensitive and
Critical Habitat



*100-400 foot wide corridor needed between Milagra Ridge and Sharp Park/Sweeney Ridge

SOURCE: Critical Habitat for Threatened & Endangered Species, U.S. Fish & Wildlife Service, 2023; Steelhead Critical Habitat - Coast, National Marine Fisheries Services, NOAA, 2023; California Dept of Forestry, 2005; California Dept of Fish & Wildlife, 2005; California Native Plant Society, 2005; U S geological Survey, 2005; City of Pacifica, 2022; San Mateo County, 2022; Dyett & Bhatia, 2023.



REGULATORY SETTING

Federal and State Regulations

Vegetation and Aquatic Communities

CEQA provides protections for particular vegetation types defined as sensitive by the California Department of Fish and Wildlife (CDFW) and aquatic features protected by laws and regulations administered by the U.S Army Corps of Engineers (Corps), State Water Resources Control Board (SWRCB), and Regional Water Quality Control Boards (RWQCB). The laws and regulations that provide protection for these resources are summarized below.

Sensitive Natural Communities

Sensitive natural communities include habitats that fulfill special functions or have special values. Natural communities considered sensitive are those identified in local or regional plans, policies, regulations, or by the CDFW. CDFW ranks sensitive communities as "threatened" or "very threatened"¹ and keeps records of their occurrences in its California Natural Diversity Database (CNDDB)². Natural communities are ranked 1 through 5 in the CNDDB based on NatureServe's (2023) methodology, with those communities ranked globally (G) or statewide (S) as 1 through 3 considered sensitive³. Impacts to sensitive natural communities identified in local or regional plans, policies, or regulations or those identified by the CDFW or U.S. Fish and Wildlife Service (USFWS) must be considered and evaluated under CEQA (California Code of Regulations [CCR] Title 14, Div. 6, Chap. 3, Appendix G). In addition, this general class includes oak woodlands that are protected by local ordinances under the Oak Woodlands Protection Act and Section 21083.4 of California Public Resources Code (CPRC).

Waters of the United States, Including Wetlands

The Corps regulates "Waters of the United States" under Section 404 of the Clean Water Act (CWA). Waters of the United States are defined in the Code of Federal Regulations (CFR) as including the territorial seas, and waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, such as tributaries, lakes and ponds, impoundments of waters of the U.S., and wetlands that are hydrologically connected with these navigable features (33 CFR 328.3). Potential wetland areas, according to the three criteria used to delineate wetlands as defined in the *U.S. Army Corps of Engineers Wetlands Delineation Manual*, are identified by the presence of (1) hydrophytic vegetation, (2) hydric soils, and (3) wetland

¹ California Department of Fish and Wildlife (CDFW). 2023. California Natural Community List. Biogeographic Data Branch. Vegetation Classification and Mapping Program, Sacramento, California. August 18.

² California Department of Fish and Wildlife (CDFW). 2023. California Natural Diversity Database. Biogeographic Data Branch, Vegetation Classification and Mapping Program, Sacramento, California. Available online at: <https://wildlife.ca.gov/Data/CNDDB/Maps-and-Data>; most recently accessed: August 2023.

³ NatureServe. 2023. NatureServe Conservation Status. Available online at: <http://explorer.natureserve.org/ranking.htm>. Most recently accessed: August 2023.

hydrology¹. Unvegetated waters including lakes, rivers, and streams may also be subject to Section 404 jurisdiction and are characterized by an ordinary high water mark (OHWM) identified based on field indicators such as the lack of vegetation, sorting of sediments, and other indicators of flowing or standing water. The placement of fill material into Waters of the United States generally requires a permit from the Corps under Section 404 of the CWA.

The Corps also regulates construction in navigable waterways of the U.S. through Section 10 of the Rivers and Harbors Act (RHA) of 1899 (33 U.S. Code [USC] 403). Section 10 of the RHA requires Corps approval and a permit for excavation or fill, or alteration or modification of the course, location, condition, or capacity of, any port, roadstead, haven, harbor, canal, lake, harbor or refuge, or enclosure within the limits of any breakwater, or of the channel of any navigable water of the United States. Section 10 requirements apply only to navigable waters themselves, and are not applicable to tributaries, adjacent wetlands, and similar aquatic features not capable of supporting interstate commerce.

Waters of the State, Including Wetlands

The term “Waters of the State” is defined by the Porter-Cologne Act as “any surface water or groundwater, including saline waters, within the boundaries of the state.” The SWRCB and nine RWQCB protect waters within this broad regulatory scope through many different regulatory programs. Waters of the State in the context of a CEQA Biological Resources evaluation include wetlands and other surface waters protected by the *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State*². The SWRCB and RWQCB issue permits for the discharge of fill material into surface waters through the State Water Quality Certification Program, which fulfills requirements of Section 401 of the CWA and the Porter-Cologne Water Quality Control Act. Projects that require a Clean Water Act permit are also required to obtain a Water Quality Certification. If a project does not require a federal permit but does involve discharge of dredge or fill material into surface waters of the State, the SWRCB and RWQCB may issue a permit in the form of Waste Discharge Requirements.

Sections 1600-1616 of California Fish and Game Code

Streams and lakes, as habitat for fish and wildlife species, are regulated by CDFW under Sections 1600-1616 of California Fish and Game Code (CFGF). Alterations to or work within or adjacent to streambeds or lakes generally require a 1602 Lake and Streambed Alteration Agreement. The term “stream,” which includes creeks and rivers, is defined in the CCR as “a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life [including] watercourses having a surface or subsurface flow that supports or has supported riparian vegetation” (14 CCR 1.72). The term “stream” can include ephemeral streams, dry washes, watercourses with subsurface flows, canals, aqueducts, irrigation ditches, and other means of water conveyance if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife. Riparian vegetation has been defined as “vegetation which occurs in and/or

¹ Environmental Laboratory. 1987. Corp of Engineers Wetlands Delineation Manual. Department of the Army, Waterways Experiment Station, Technical Report Y-87-1, Vicksburg, Mississippi.

² State Water Resources Control Board (SWRCB). 2019. State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State, May 14, 2019.

adjacent to a stream and is dependent on, and occurs because of, the stream itself.”¹ Removal of riparian vegetation also requires a Section 1602 Lake and Streambed Alteration Agreement from CDFW.

Environmentally Sensitive Habitat Areas

The California Coastal Act Section 30107.5 defines environmentally sensitive habitat areas (ESHAs) 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." Coastal Act Section 30240 protects ESHAs from "significant disruption of habitat values," limits allowable land uses within ESHAs, and requires adjacent uses to be designed to be compatible with habitat benefits provided by ESHAs. The Coastal Act includes wetlands as ESHAs but does not specifically define every vegetation type defined as an ESHA. Instead, the California Coastal Commission (CCC) often delegates the responsibility for administering the California Coastal Act to local municipalities through the approval of Local Coastal Programs. Many Local Coastal Programs provide more specific lists of communities that are considered ESHAs.

Special-status Species

Endangered and Threatened Plants, Fish, and Wildlife

Specific species of plants, fish, and wildlife species may be designated as threatened or endangered by the federal Endangered Species Act (ESA), or the California Endangered Species Act (CESA). Specific protections and permitting mechanisms for these species differ under each of these acts, and a species' designation under one law does not automatically provide protection under the other.

The ESA (16 USC 1531 et seq.) is implemented by the USFWS and the National Marine Fisheries Service (NMFS). The USFWS and NMFS maintain lists of endangered and threatened plant and animal species (referred to as "listed species"). "Proposed" or "candidate" species are those that are being considered for listing and are not protected until they are formally listed as threatened or endangered. Under the ESA, authorization must be obtained from the USFWS or NMFS prior to take of any listed species. "Take" under the ESA is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Take under the ESA includes direct injury or mortality to individuals, disruptions in normal behavioral patterns resulting from factors such as noise and visual disturbance, and impacts to habitat for listed species. Actions that may result in take of an ESA-listed species may obtain a permit under ESA Section 10, or via the interagency consultation described in ESA Section 7. Federally listed plant species are only protected when take occurs on federal land.

The ESA also provides for designation of critical habitat, which are specific geographic areas containing physical or biological features "essential to the conservation of the species." Protections afforded to designated critical habitat apply only to actions that are funded, permitted, or carried

¹ California Department of Fish and Game (CDFG). 1994. A Field Guide to Lake and Streambed Alteration Agreements, Sections 1600-1607. Environmental Services Division, California Department of Fish and Wildlife, Sacramento, California.

out by federal agencies. Critical habitat designations do not affect activities by private landowners if there is no other federal agency involvement.

The CESA (CFGC 2050 et seq.) prohibits the take of any plant and animal species that the CFGC determines to be an endangered or threatened species in California. CESA regulations include take protection for threatened and endangered plants on private lands, as well as extending this protection to candidate species that are proposed for listing as threatened or endangered under CESA. The definition of a "take" under CESA ("hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") only applies to direct impact to individuals, and does not extend to habitat impacts or harassment. CDFW may issue an Incidental Take Permit under CESA to authorize take if it is incidental to otherwise lawful activity and if specific criteria are met. Take of these species is also authorized if the geographic area is covered by a Natural Community Conservation Plan (NCCP), as long as the NCCP covers that activity.

Fully Protected Species and Designated Rare Plant Species

This category includes specific plant and wildlife species that are designated in the CFGC as protected even if not listed under CESA or ESA. Fully Protected Species includes specific lists of birds, mammals, reptiles, amphibians, and fish designated in CFGC. Fully protected species may not be taken or possessed at any time. No licenses or permits may be issued for take of fully protected species, except for necessary scientific research and conservation purposes. The definition of "take" is the same under the CFGC and the CESA. By law, CDFW may not issue an Incidental Take Permit for Fully Protected Species. Under the California Native Plant Protection Act (NPPA), CDFW has listed 64 "rare" or "endangered" plant species, and prevents "take", with few exceptions, of these species. CDFW may authorize take of species protected by the NPPA through the Incidental Take Permit process, or under a NCCP.

Special Protections for Nesting Birds and Bats

The federal Bald and Golden Eagle Protection Act provides relatively broad protections to both of North America's eagle species [bald eagle (*Haliaeetus leucocephalus*) and golden eagle (*Aquila chrysaetos*)] that in some regards are similar to those provided by the ESA. In addition to regulations for special-status species, most native birds in the United States, including non-status species, have baseline legal protections under the Migratory Bird Treaty Act of 1918 and CFGC, i.e., sections 3503, 3503.5 and 3513. Under these laws/codes, the intentional harm or collection of adult birds as well as the intentional collection or destruction of active nests, eggs, and young is illegal. For bat species, the Western Bat Working Group (WBWG) designates conservation status for species of bats, and those with a high or medium-high priority are typically given special consideration under CEQA.

Essential Fish Habitat

The Magnuson-Stevens Fishery Conservation and Management Act provides for conservation and management of fishery resources in the U.S., administered by NMFS. This Act establishes a national program intended to prevent overfishing, rebuild overfished stocks, ensure conservation, and facilitate long-term protection through the establishment of Essential Fish Habitat (EFH). EFH consists of aquatic areas that contain habitat essential to the long-term survival and health of

fisheries, which may include the water column, certain bottom types, vegetation (e.g., eelgrass (*Zostera* spp.)), or complex structures such as oyster beds. Any federal agency that authorizes, funds, or undertakes action that may adversely affect EFH is required to consult with NMFS.

Species of Special Concern, Movement Corridors, and Other Special-status Species under CEQA

To address additional species protections afforded under CEQA, CDFW has developed a list of special species as “a general term that refers to all of the taxa the CNDDDB is interested in tracking, regardless of their legal or protection status.” This list includes lists developed by other organizations, including for example, the Audubon Watch List Species, the Bureau of Land Management Sensitive Species, and USFWS Birds of Special Concern. Plant species on the California Native Plant Society (CNPS) Rare Plant Inventory (Inventory)¹ with California Rare Plant Ranks (Rank) of 1 and 2, as well as some with a Rank of 3 or 4, are also considered special-status plant species and must be considered under CEQA. Some Rank 3 and Rank 4 species are typically only afforded protection under CEQA when such species are particularly unique to the locale (e.g., range limit, low abundance/low frequency, limited habitat) or are otherwise considered locally rare. Additionally, any species listed as sensitive within local plans, policies and ordinances are likewise considered sensitive. Movement and migratory corridors for native wildlife (including aquatic corridors) as well as wildlife nursery sites are given special consideration under CEQA.

Local

City of Pacifica Tree Ordinance

Chapter 12 of the Pacifica Municipal Code (Tree Preservation Ordinance) contains regulations designed to preserve and protect protected trees on private or City-owned property. The ordinance defines a protected tree as 1) all trees on public and private property within the City of Pacifica, which have a trunk with a diameter of twelve (12”) inches or greater at diameter at breast height (DBH); 2) any heritage tree designated by the Public Works Director; 3) any grove of trees. Eucalyptus and any species determined invasive by the California Invasive Plants Council are not protected by the ordinance, except groves of trees and as the director may deem otherwise.

Because of their value to the City of Pacifica, protected trees may not be removed, destroyed, or damaged beyond repair without an approved Tree Permit authorizing removal of the tree or a Tree Encroachment Permit authorizing the proposed relocation/transportation of a protected tree, application of fertilizers or chemicals, grading, clearing, excavating, adding fill soil, trenching, boring, compacting, or paving within fifty (50’) feet of a protected tree or City tree as defined per the Pacifica Municipal Code Chapter 12 and Chapter 14. Substantial trimming which threatens the healthy growth of the tree and new construction within the dripline of a protected tree shall not be allowed without the issuance of a permit. Development projects affecting protected trees which require approval from the Planning Commission must be accompanied by a tree protection and preservation plan, which is processed through the planning entitlement phase by the City’s Planning Division of the Community Development Department.

¹ California Native Plant Society (CNPS). 2023. Rare Plant Inventory (online edition, v9.5). Sacramento, California.
Online at: <http://rareplants.cnps.org/>; most recently accessed: August 2023.

Removal of vegetation or any tree which is not considered a protected tree does not require a City tree removal permit. However, a permit is required for the removal or harvesting of major vegetation other than for agricultural purposes, kelp harvesting, and timber operations which are in accordance with a timber harvesting plan and if located within one or more of the resource areas defined by the City, in association with other permits required by the City for the project. In addition, modifications to existing vegetation, either removal, replacement or rehabilitation may be subject to the State of California's Model Water Efficient Landscape ordinance and further evaluation would be required.

City of Pacifica Logging Operations

Logging operations within the City of Pacifica are defined as any removal, destruction or harvesting of 20 or more trees in one year from any parcel or contiguous parcel under the same ownership. In reference to logging regulations, a tree is defined as any tree 6 inches in diameter as measured 12 inches from the ground. City of Pacifica Ordinance No. 636-C.S. prohibits logging operations unless one of the following conditions is met:

- a) Said operations are in conjunction with a City permit(s) requiring planning commission and/or City Council approval, at which time said operations shall be evaluated and approved or denied at a duly noticed public hearing by the Commission and /or Council, concurrently with other permit(s).
- b) Said operations are necessary immediately for the safety of life or property, as determined by the Director of Public Works or his/her designee.
- c) Said operations occur on City-owned property and are necessary immediately to maintain public health and safety.

City of Pacifica 2040 General Plan (General Plan)

The General Plan includes the following goals and policies associated with biological resources:

Guiding Policy CO-G-7: Wildlife and Critical Habitat. Conserve and protect indigenous threatened, endangered, and other special status species by preserving critical habitat.

Habitat can be protected by allowing very limited or no development, by identifying habitat areas as top priorities for permanent conservation, and by managing public land to ensure species protection.

Guiding Policy CO-G-8: Coastal Environment and Special Status Communities. Conserve and protect beaches, sand dunes, coastal bluffs, and special status communities, particularly the Coastal bluff scrub on the northern bluffs.

Guiding Policy CO-G-9: Creeks and Riparian Areas. Protect year-round creeks and their riparian habitats.

San Pedro Creek has been designated an "impaired waterway" by the Regional Water Quality Control Board and provides critical habitat to a federally-listed threatened species, the California coast population of steelhead.

Guiding Policy CO-G-10: Trees. Conserve trees and encourage native forestation and planting of appropriate trees and vegetation.

Guiding Policy CO-G-11: Other Environmentally Sensitive Areas. Protect other potential ESHAs, high habitat value areas, and wildlife movement corridors from development that would significantly disrupt habitat values.

Implementing Policy CO-I-26: Protection of Biological Resources with New Development. Protect sensitive habitat areas and special-status species through implementation of the following measures:

- 1) Discourage development and/or buildout in critical habitat of special status species during the development review process.
- 2) Pre-construction plant and wildlife surveys: Project applicants shall engage a qualified biologist to conduct presence/absence biological surveys for sensitive plant and wildlife species prior to construction adjacent to or within identified special status communities and other sensitive areas identified in Figure 7-3 of the proposed General Plan. If special status species are identified, the qualified biologist shall consult with the California Department of Fish and Wildlife (CDFW) and establish no-disturbance buffers around avian nests, bat roosts, and sensitive plants to avoid disturbance and direct impacts to these resources during construction. If no special status species are detected during surveys, then construction-related activities may proceed. Nesting birds, in particular, are protected by two means; they receive protection under the Migratory Bird Treaty Act, and nesting raptors (in the order Falconiformes or Strigiformes) are protected under the State Fish and Game Code, §3503.5.
- 3) Require biological resource assessments be conducted prior to approval for any development within 300 feet of creeks, wetlands, or other sensitive habitat areas shown on Figure 7-3 of the proposed General Plan.
- 4) Require on-site monitoring of biological resources by a qualified biologist throughout the duration of construction activity.
- 5) Require compensatory mitigation by means of habitat preservation, restoration, and enhancement; for the loss of any critical habitat and/or special status communities.

The City will coordinate with the U.S. Fish and Wildlife Service, National Marine Fisheries Service, California Department of Fish and Wildlife, and Regional Water Quality Control Board in providing project applicants with the best guidance to avoid impacts to special status species and habitat areas including creeks, wetland features, woodlands, or other sensitive natural features.

Implementing Policy CO-I-27: Verification of ESHA. Prior to any proposed development in an ESHA or potential ESHA, require that a habitat survey be conducted by a qualified botanist or biologist. The habitat survey will verify whether the site is an ESHA, and document the extent of the sensitive resources, document potential negative impacts to the habitat, and recommend appropriate mitigation measures. Verification of an ESHA shall be based on the following considerations:

- Presence of natural communities identified as rare by the California Department of Fish and Wildlife (determined by a state rarity ranking of S1 to S3).
- Recorded or potential presence of plant or animal species designated as rare, threatened or endangered under State or federal law.
- Recorded or potential presence of plant or animal species for which there is compelling evidence or rarity, such as a designation of 1B (rare or endangered in California or elsewhere) or 2 (rare, threatened, or endangered in California, but more common elsewhere) by the California Native Plant Society.
- Presence of coastal waterways.
- Integrity of the habitat and its connectivity to other natural areas.

Implementing Policy CO-I-28: Management of ESHA. If the area qualifies as an ESHA under the California Coastal Act, the following regulations apply:

- No new development shall be allowed within primary habitat areas with the exception of resource-dependent uses that can be demonstrated to have no significant adverse impact.
- Buffer areas shall be established around all sensitive resources, providing a minimum of 100 feet, and varying as needed to account for feeding, breeding, nesting, and other habitat requirements. New buildings in buffer areas shall be allowed only if there are no other feasible development areas on the parcel. Exceptions to such buffer requirements should be supported by a biological report demonstrating that the adjusted buffer, in combination with incorporated siting, design or other mitigation measures, will prevent impacts that significantly degrade the ESHA and will be compatible with the continuance of the ESHA. Buffer adjustments should also be limited to where the entire subject legal lot is within the buffer or where it is demonstrated that development outside the buffer would have a greater impact on the ESHA. Development shall be sited and designed to prevent impacts that would degrade adjacent habitat areas, taking into account drainage, vegetation, topography, and other considerations.
- Alteration of landforms, removal of vegetation, impervious surfaces, noise, light, and glare shall be minimized.

Implementing Policy CO-I-29: Fencing. Any fencing or barriers located within riparian ESHAs or wildlife corridors shall permit the free passage of wildlife.

Implementing Policy CO-I-30: Fuel Modification. Ensure that new development is sited and designed to minimize the need for fuel modification and vegetation clearance in order to avoid or minimize the disturbance or destruction of habitat and existing hydrology while still providing for fire safety as necessitated by the North County Fire Authority's Vegetation Management Program. Prohibit new development that would require fuel modification within ESHAs.

Implementing Policy CO-I-31: Habitat Preservation. Require a habitat survey be prepared by a qualified botanist or biologist for any development proposed for the following areas, as shown in Figure 7-3. Designated Critical Habitat for Endangered or Threatened Species;

- Potential Environmentally Sensitive Habitat Area (ESHA);
- High Habitat Value; and
- Wildlife Movement Corridor.

The survey will be used to determine the exact location of habitat areas and to recommend mitigation measures that minimize potential impacts.

Implementing Policy CO-I-32: Monitoring Requirements. Require a Restoration and Monitoring Proposal for any proposed habitat restoration or mitigation. The Proposal should describe the methods and practices to be employed, and include:

- A clear statement of the goals of the restoration or mitigation for all habitat types;
- Sampling of reference habitat, with reporting of resultant data;
- Designation of a qualified biologist as the Restoration or Mitigation Manager responsible for all phases of the restoration;
- A specific grading plan, if the topography must be altered;
- A specific erosion control plan, if soil or other substrate will be disturbed during restoration;
- A weed eradication plan designed to eradicate existing weeds and control future invasion by exotic species;
- A planting plan based on the natural habitat type;
- An irrigation plan that describes the method and timing of watering and ensures removal of watering infrastructure by the end of the monitoring period;
- An interim monitoring plan with performance goals, assessment methods, and a schedule; and
- A final monitoring plan to determine whether the restoration has been successful.

Implementing Policy CO-I-33: Construction during Nesting Season. If site work or construction occurs during the nesting season (February 1 through August 31), then pre-construction breeding bird surveys shall be performed by a qualified wildlife biologist prior to any site disturbance to ensure that no nests will be disturbed or destroyed during Project implementation. If an active nest is found sufficiently close to work areas to be disturbed by construction activities, then the biologist shall create a no-disturbance buffer of 250 feet around passerine nests and a 500 foot buffer around raptor nests. Work-free buffer zones shall be maintained until after the breeding season or until after the qualified biologist determines the young have fledged (usually late June through mid-July).

Nests initiated during construction activities would be presumed to be unaffected by the activity, and a buffer zone around such nests is not necessary. However, nests shall be flagged and construction activity shall avoid killing and/or injuring nesting birds.

Implementing Policy CO-I-34: Pre-Construction Bat Surveys. Pre-construction surveys for special-status and non-listed bat species will be performed by a qualified biologist if large trees (>4 ft. diameter at breast height) are to be removed or underutilized or vacant

buildings are to be demolished. A no-disturbance buffer of 100 feet shall be created around active bat roosts being used for maternity or hibernation purposes.

Implementing Policy CO-I-35: Protection of the Californian Red-Legged Frog and San Francisco Garter Snake during Construction. To minimize disturbance, require all grading activity within 100 feet of identified aquatic habitat shall be conducted during the dry season (May 1 and October 15) to protect California red-legged frog and San Francisco garter snake. A qualified biologist shall conduct presence/absence surveys for California red-legged frog and San Francisco garter snake prior to construction in or adjacent to riparian areas, grasslands near ponds/wetlands, or other sensitive habitat. Any individuals identified shall be treated in consultation with USFWS. Construction shall follow accepted procedures for exclusion and avoidance of California red-legged frog and San Francisco garter snake and their habitat. Additionally, the biologist shall supervise the installation of exclusion fencing along the boundaries of the work area, shall conduct environmental awareness training for construction workers, and shall be present during initial vegetation clearing and ground-disturbing activities.

Implementing Policy CO-I- 36: Invasive Plant Species. Prohibit the use of invasive plant species (i.e., any California Invasive Plant Council (Cal- IPC)-listed species with a status of high or moderate, or identified such as locally-threatened under the limited, alert, or watch status).

Implementing Policy CO-I-37: Beach Grooming. Work with the State of California, GGNRA, and other partners in the management of beaches in Pacifica to ensure biological resources are not adversely affected by beach grooming. Specifically, protect beach wrack (the piles of plant and animal debris that wash ashore), which plays an important role in the beach ecosystem.

Implementing Policy CO-I-38: Biological Productivity. Maintain—and where feasible, restore—the biological productivity and the quality of coastal waters, streams, wetlands, and lakes in order to maintain optimum populations of marine organisms and to protect human health.

Techniques may include:

- *Minimizing adverse effects of wastewater discharge;*
- *Controlling runoff, preventing depletion of ground water supplies and substantial interference with surface waterflow;*
- *Encouraging wastewater reclamation, maintaining natural vegetation buffer areas that protect riparian habitats; and*
- *Minimizing alteration of natural streams.*

Implementing Policy CO-I-39: Heritage Trees. Update the Heritage Tree ordinance to improve ease of City administration and clarity for applicants and surrounding residents. Consider a canopy goal for heritage and non-heritage trees as part of the Heritage Tree ordinance update or other updates to the City's tree regulations.

Implementing Policy CO-I-40: Regulations and Incentives to Preserve Habitat. Ensure that sensitive or critical habitat is protected, maintained, enhanced, or restored.

Possible techniques include:

- *Zoning for very low density and clustered development where appropriate;*
- *Requiring the preparation of a habitat survey in certain areas; and*
- *Identifying appropriate “sending sites” in the City’s Transfer of Development Rights program.*

Implementing Policy CO-I-41: Protection by Land Acquisition or Conservation Easements. Explore opportunities for public acquisition of land or conservation easements on parcels not currently designated for Conservation that have significant habitat value.

Implementing Policy CO-I-42: Public Land Management. Coordinate with GGNRA, State and County Parks, and the City and County of San Francisco to ensure that public open space lands are managed to optimize habitat protection for special status species while also providing for public access and other goals.

Key issues include maintaining viable habitat for the Mission Blue butterfly on Milagra and Sweeney ridges; for the California red-legged frog and San Francisco garter snake populations associated with Mori Point and Laguna Salada; and supporting migrating Western snowy plover at Pacifica State Beach.

Implementing Policy CO-I-43: Management of Public Coastal Access. Ensure regular public access, determining locations on a site-specific basis by considering: The capacity of the access way to sustain use;

- The intensity of access that can be sustained;
- The fragility of the natural resources in the accessing, and
- The proximity of the access to adjacent residential uses.

Innovative access management techniques include but are not limited to agreements with private organizations that would minimize management costs and the use of volunteer programs.

Impact Analysis

SIGNIFICANCE CRITERIA

For the purposes of this EIR, a significant impact would occur if implementation of the Proposed Project would:

- Criterion 1:** Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;
- Criterion 2:** Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;
- Criterion 3:** Have a substantial adverse effect on federally protected wetlands, as defined by Section 404 of the Clean Water Act (including, but not limited to, marshes, vernal pools, coastal areas, etc.), through direct removal, filling, hydrological interruption, or other means;
- Criterion 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;
- Criterion 5:** Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- Criterion 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.

METHODOLOGY AND ASSUMPTIONS

On August 21, 2023, WRA, Inc. (WRA) biologists, Molly Matson and Rei Scampavia, completed an initial field review of 27 sites that were proposed to be redesignated and or/rezoned as part of the Proposed Project. On May 3, 2024, 12 additional sites were proposed for redesignation and/or rezoning, and 8 were removed, for a total of 31 sites. On May 28, 2024, WRA, Inc. (WRA) biologist, Rei Scampavia, completed a follow-up field review of the 12 additional proposed sites. The field reviews were conducted to document (1) land cover types (e.g., vegetation communities, aquatic resources), (2) existing conditions and to determine if such provide suitable habitat for any special-

status plant or wildlife species, (3) if and what type of aquatic land cover types (e.g., wetlands) may be present, and (4) if special-status species may be present¹.

In addition, WRA biologists reviewed literature resources and performed database searches to assess the potential for sensitive land cover types and special-status species, including:

- Contemporary aerial photographs (Google Earth 2024)²
- Historical aerial photographs (NETR 2024)³
- National Wetlands Inventory (USFWS 2024)⁴
- California Aquatic Resources Inventory (SFEI 2024)⁵
- California Natural Community List (CDFW 2024)⁶
- California Natural Diversity Database (CNDDDB; CDFW 2024)⁷
- Biogeographic Information and Observation System (BIOS, CDFW 2024)⁸
- CNPS Inventory (CNPS 2024)⁹
- Consortium of California Herbaria (CCH1 2024, CCH2 2024)¹⁰
- USFWS Information for Planning and Consultation (USFWS 2024)¹¹
- eBird Online Database (Cornell Lab of Ornithology 2024)¹²

¹ Site assessments were conducted from publicly accessible rights-of-ways and aerial imagery; See Existing Conditions Section for discussion if additional species surveys or a wetland delineation is warranted.

² Google Earth. 2024. Aerial Imagery 1985-2024. Most recently accessed: July 2024.

³ Nationwide Environmental Title Research (NETR). 2024. Historic Aerials. Available online at: <https://historicaerials.com/viewer>. Most recently accessed: July 2024.

⁴ U.S. Fish and Wildlife Service (USFWS). 2024. National Wetlands Inventory. Available online at: <http://www.fws.gov/nwi>. Most recently accessed: July 2024.

⁵ San Francisco Estuary Institute (SFEI). 2024. December 28. California Aquatic Resource Inventory (CARI) version 0.3. Available online at: <https://www.sfei.org/data/california-aquatic-resource-inventory-cari-version-03-gis-data#sthash.9SjW0wBH.dpbs>. Most recently accessed: July 2024.

⁶ California Department of Fish and Wildlife (CDFW). 2024. California Natural Community List. Biogeographic Data Branch. Vegetation Classification and Mapping Program, Sacramento, California. July 18.

⁷ California Department of Fish and Wildlife (CDFW). 2024. California Natural Diversity Database. Biogeographic Data Branch, Vegetation Classification and Mapping Program, Sacramento, California. Available online at: <https://wildlife.ca.gov/Data/CNDDDB/Maps-and-Data>; most recently accessed: July 2024.

⁸ California Department of Fish and Wildlife (CDFW). 2024. Biogeographic Information and Observation System. Biogeographic Data Branch. Sacramento, California. Online at: <https://wildlife.ca.gov/Data/BIOS>; most recently accessed: July 2024.

⁹ California Native Plant Society (CNPS). 2024. Rare Plant Inventory (online edition, v9.5). Sacramento, California. Online at: <http://rareplants.cnps.org/>; most recently accessed: July 2024.

¹⁰ Consortium of California Herbaria 1 (CCH1). 2024. CCH1: Featuring California Vascular Plant Data from the Consortium of California Herbaria and Other Sources. Data provided by the Consortium of California Herbaria. Available online at: <http://ucjeps.berkeley.edu/consortium/>; most recently accessed: July 2024.

Consortium of California Herbaria 2 (CCH2). 2024. CCH2 Portal. Online at: <http://cch2.org/portal/index.php>; most recently accessed: July 2024.

¹¹ U.S. Fish and Wildlife Service (USFWS). 2024. Information for Planning and Consultation. Available online at: <https://ecos.fws.gov/ipac/>. Most recently accessed: July 2024.

¹² Cornell Lab of Ornithology. 2024. eBird: An online database of bird distribution and abundance. Ithaca, NY. Available online at: <http://www.ebird.org>. Most recently accessed: July 2024.

- California Bird Species of Special Concern in California (Shuford and Gardali 2008)¹
- California Amphibian and Reptile Species of Special Concern (Thomson et al. 2016)²
- A Field Guide to Western Reptiles and Amphibians (Stebbins 2003)³
- A Manual of California Vegetation, Online Edition (CNPS 2024)⁴
- Preliminary Descriptions of the Terrestrial Natural Communities (Holland 1986)⁵
- Database searches (i.e., CNDDDB, CNPS) for special-status species focused on the Montara Mountain, San Francisco South and seven surrounding USGS 7.5-minute quadrangles.

No focused field studies (i.e. aquatic resource delineations, special-status species surveys, etc.) were conducted for preparation of this Draft EIR. Future project-specific biological surveys may be necessary to confirm the presence or absence of sensitive resources on future development sites. Impacts associated with future development as a result of the Proposed Project implementation are analyzed qualitatively at a program level.

IMPACTS

Impact 3.3-1 Implementation of the Proposed Project would not have a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. (*Less than Significant*)

Special-status Plants

Twenty-one (21) special-status plant species have potential to occur within one or more subject sites:

- Ocean bluff milk-vetch
- Brewer's calandrinia
- Johnny-nip
- pappose tarplant
- San Francisco Bay spineflower
- San Mateo woolly sunflower
- blue coast gilia

¹ Shuford, W. D., and T. Gardali, eds. 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.

² Thomson, R. C., A. N. Wright, and H. B. Shaffer. 2016. California amphibian and reptile species of special concern. Co-published by the California Department of Fish and Wildlife and University of California Press, Oakland, California.

³ Stebbins, R. C. 2003. A Field Guide to Western Reptiles and Amphibians, Third edition. Houghton Mifflin Company, Boston, MA and New York, NY.

⁴ California Native Plant Society (CNPS). 2024. A Manual of California Vegetation, Online Edition. Available online at: <http://vegetation.cnps.org>. Most recently accessed: July 2024.

⁵ Holland, R. F. 1986. Preliminary descriptions of the terrestrial natural communities of California. State of California, The Resources Agency, Department of Fish and Game, Sacramento, CA.

- San Francisco gumplant
- Kellogg's horkelia
- Point Reyes horkelia
- harlequin lotus
- island tube lichen
- perennial goldfields
- coast yellow leptosiphon
- rose leptosiphon
- San Mateo tree lupine
- Choris' popcornflower
- Oregon polemonium
- Hickman's cinquefoil
- Scouler's catchfly
- two-fork clover

Table 3.3-2 contains a list of the subject sites that contain suitable habitat for each of the species listed above. If present, construction activities related to development activities, such as ground disturbance, vegetation removal, and equipment access, could directly impact these species. Direct impacts to special-status plant species would be considered a potentially significant impact under CEQA. However, implementation of General Plan policy CO-I-26, CO-I-27, CO-I-28, and CO-I-31 would reduce impacts to special-status plant species to a less-than-significant level. CO-I-26 requires project applicants to engage a qualified biologist to conduct presence/absence biological surveys for sensitive plant and wildlife species prior to construction adjacent to or within identified special status communities and other sensitive areas identified in the General Plan. If special status species are identified, the biologist is required to consult with CDFW and establish no-disturbance buffers around sensitive plants. Compensatory mitigation by means of habitat preservation, restoration, and enhancement is required for the loss of any critical habitat and/or special status communities that may occur from future development.

CO-I-27 requires that, prior to any development within an ESHA or potential ESHA, a habitat survey must be conducted to verify whether the site is an ESHA. A site may qualify as an ESHA if it contains recorded or potential presence of plant species identified as rare, threatened, or endangered by State or federal law, or plant species for which there is a compelling argument for rarity. If the site is determined to qualify as an ESHA, CO-I-28 further limits development within primary habitat areas and requires a buffer area of a minimum of 100 feet be established around all sensitive resources.

CO-I-31 requires a habitat survey be prepared by a qualified botanist or biologist prior to development in Designated Critical Habitats for Endangered or Threatened Species, Potentially Environmentally Sensitive Habitat Areas, area of High Habitat Value, and Wildlife Movement Corridors. If special-status plant species are identified within a site, additional measures, including the establishment of exclusion zones, and/or the development of a mitigation plan, are required.

Therefore, with implementation of General Plan Implementing Policies CO-I-26, CO-I-27, CO-I-28, and CO-I-31, the Proposed Project would not have a substantial adverse impact on any special-status plant species. The implementation of such General Plan policies would reduce the impact to **less than significant**.

Special-status Wildlife

As detailed in Existing Conditions, most of the subject sites have no potential to support special-status wildlife species, primarily due to the absence of suitable habitat. The following 12 special-status wildlife species have potential to occur in one or more of the subject sites:

- White-tailed kite
- San Francisco (saltmarsh) common yellowthroat
- (Brewster's) yellow warbler
- Pallid bat
- Western red bat
- Hoary bat
- Fringed myotis
- San Francisco dusky-footed woodrat
- California red-legged frog
- San Francisco garter snake
- Mission blue butterfly
- Monarch butterfly

In addition, non-special-status roosting bats and nesting birds are protected under the Migratory Bird Treaty Act and may be present within the subject sites. If present, these special-status species may be directly impacted by future development, which would be considered a potentially significant impact under CEQA.

Special-status species (including San Francisco common yellow throat, white-tailed kite, and yellow warbler) and non-special-status native birds (e.g., passerines) may nest on the ground, in trees, on structures, and in vegetation within and immediately surrounding all thirty-one (31) subject sites. The active nests of such birds are protected under the federal Migratory Bird Treaty Act, as well as by CFGC. If construction of future development begins during the avian nesting season (generally February 1 to August 31), nesting birds may be impacted directly through the removal of nest structures, or indirectly through localized disturbance sufficient to cause nest abandonment. Impacts to nesting birds would be considered a potentially significant impact under CEQA. Implementation of General Plan Implementing Policies CO-I-26, CO I-33 and CO-I-34 would reduce impacts to nesting birds to a less-than-significant level. As described above in further detail, CO-I-26 requires pre-construction wildlife surveys by a qualified biologist and establish no-disturbance buffers around avian nests and bat roosts, and CO-I-33 restricts construction and establishes buffers prior to site disturbance during nesting season. With implementation of these General Plan Implementing Policies, the Proposed Project would not result in a substantial adverse impact on any special-status bird species or non-special status nesting bird. The impact would be less than significant.

Special-status (including pallid bat, hoary bat, fringed myotis, and western red bat) and non-special-status bats may roost in man-made structures, large trees, dense vegetation, or mature trees within subject sites 2, 10, 11, 12, 16B, 19, 21, 22, 24, 25, 26, 29, 30, 31, 32, 34, 38, G, H, I, and J. Construction activities could directly or indirectly impact roosting bats during vegetation removal, ground disturbance, or other noise generating activities. Impacts to roosting bats would be considered a potentially significant impact under CEQA. Implementation of General Plan Implementing Policy CO-I-34 would reduce potential impacts to special-status and non-special-

status bats to a less-than-significant level. CO-I-34 requires pre-construction surveys for special-status and non-listed bat species if project implementation requires tree removal or building demolition. This policy further requires that a no-disturbance buffer of 100 feet be established around any active bat roosts being used for maternity or hibernation purposes. With implementation of CO-I-34, the Proposed Project would not have a substantial adverse impact on any special-status or non-special-status bat species. The impact would be less than significant.

Dusky-footed woodrat has potential to occur in wooded or riparian areas including subject sites 2, 11, 12, 21, 22, 25, 29, 38, A, H, I, and J. Construction activities in suitable habitat may directly impact dusky-footed woodrat by destroying active nests within existing habitat. Destroying active nests would be a potentially significant impact under CEQA.

California red-legged frog has potential to occur in riparian areas or grassland habitat contiguous with occupied habitat including subject sites 11, 12, 22, 29, 38, I, and J. New development may result in temporary or permanent loss of habitat. Development in suitable habitat may result in direct impacts to individuals if they are present during construction. San Francisco garter snake has potential to occur in grassland or riparian habitat contiguous with nearby occupied habitat including subject site 29. New development may result in temporary or permanent loss of habitat. Development in suitable habitat may result in direct impacts to individuals if they are present during construction. Impacts to California red-legged frog and San Francisco garter snake would be considered a potentially significant impact under CEQA.

Mission blue butterfly has potential to occur in grassland or scrub near known populations on Milagra Ridge and Sweeney Ridge including subject sites 2, 11, 21, 38, and H. New development may result in temporary or permanent loss of habitat. Development in suitable habitat may result in direct impacts to individuals if they are present during construction. Monarch butterflies have potential to roost in suitable Monterey pine or cypress groves including subject sites 2, 11, 12, 21, 22, 25, A, H, I, and J. Winter roost sites for monarchs are protected by CDFW. Construction activities may impact monarch butterfly if a roosting site is removed or otherwise altered so that it is no longer suitable for the species. Impacts to Mission blue butterfly and Monarch butterfly would be considered a potentially significant impact under CEQA.

Compliance with General Plan Implementing Policies CO-I-26, CO-I-27, CO-I-28 would ensure that future development at the subject sites would not result in a substantial adverse effect on special-status wildlife species or their habitat. Policy CO-I-26 requires pre-construction wildlife survey to determine if special-status wildlife species are present. If such species are present, CO-I-26 further requires that consultation with CDFW shall occur and on-site monitoring of biological resources shall occur throughout the duration of construction by a qualified biologist. This policy further requires that, if new development would result in the loss of any critical habitat, compensatory mitigation shall be required by means of habitat preservation, restoration, and enhancement. CO-I-27 requires that, prior to any development within an ESHA or potential ESHA, a habitat survey be conducted by a qualified biologist to document the extent of sensitive resources, document potential negative impacts to habitat, and recommend appropriate mitigation measures. If a site is verified to be an ESHA, CO-I-28 further requires that no new development shall be allowed within primary habitat areas, and buffer areas shall be established around all sensitive resources. With implementation of General Plan Implementing Policies CO-I-26, CO-I-27, and

CO-I-28, the Proposed Project would not result in a substantial adverse effect on dusky-footed woodrat, Mission blue butterfly, or monarch butterfly. The impact would be less than significant.

General Plan Implementing Policy CO-I-35 pertains specifically to California red-legged frog and San Francisco garter snake, and requires that all grading activities within 100 feet of aquatic habitat shall be conducted during the dry season (May 1 to October 15). Policy CO-I-35 further requires that a qualified biologist shall conduct presence/absence surveys for California red-legged frog and San Francisco garter snake prior to construction in or adjacent to riparian areas, grasslands near ponds or wetlands, or other sensitive habitat. If individual California red-legged frogs or San Francisco garter snakes are found, consultation with USFWS must occur, and construction shall follow adopted procedures for exclusion and avoidance of California red-legged frog, San Francisco garter snake, and their habitat. Furthermore, a qualified biologist must supervise the installation of exclusion fencing along the boundaries of the work areas, shall conduct environmental awareness training for construction workers, and shall be present during initial vegetation clearing and ground-disturbing activities on-site. With implementation of General Plan Implementing Policies CO-I-26, CO-I-27, CO-I-28, and CO-I-35, the Proposed Project would not result in a substantial adverse effect on California red-legged frog or San Francisco garter snake. The impact would be less than significant.

Therefore, with implementation of General Plan Implementing Policies CO-I-26, CO-I-27, CO-I-28, CO-I-33, CO-I-34, and CO-I-35, the Proposed Project would not have a substantial adverse impact on any special-status wildlife species. The implementation of such General Plan policies would reduce the impact to **less than significant**.

Mitigation Measures

None required.

Impact 3.3-2 Implementation of the Proposed Project would not 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. (*Less than Significant*)

As described in the Environmental Setting, subject sites F, G, and I contain potential freshwater seasonal wetlands. Impacts to freshwater seasonal wetlands would be considered a potentially significant impact under CEQA. General Plan Implementing Policy CO-I-4 prohibits new development in existing wetlands except as allowed under the federal Clean Water Act and California Coastal Act. This policy ensures that the City will continue to require formal wetland delineations prior to any proposed development project in an area where potential wetlands have been identified. If wetlands subject to State or federal regulations are identified, the project applicant would be required to consult with the appropriate State or federal agency. If impacts on wetlands are unavoidable, compensation shall be provided in line with the State's no-net-loss goal regarding wetlands. Therefore, compliance with General Plan Implementing Policy CO-I-4, the Proposed Project would not have a substantial adverse effect on freshwater seasonal wetlands. The impact would be less than significant.

As noted above in the Environmental Setting, subject sites 16B and 29 contain riparian arroyo willow thickets. Impacts to riparian habitat, considered sensitive habitat by the CDFW, would be considered a potentially significant impact under CEQA. Implementing Policy CO-I-26 specifies that any development within 300 feet of creeks, wetlands, or other sensitive habitat areas require a biological resource assessment. Any development in sensitive areas identified in Figure 7-3 (inclusive of the creek that runs through sites 16B and 29, which is critical habitat for steelhead), would also be required to engage a qualified biologist, and if special status species are identified, would reduce potential impacts to riparian habitat in subject sites 16B and 29. Thus, potential impacts to riparian habitat or other sensitive natural communities would be less than significant.

Mitigation Measures

None required.

Impact 3.3-3 Implementation of the Proposed Project would not have a substantial adverse effect on federally protected wetlands, as defined by Section 404 of the Clean Water Act (including, but not limited to, marshes, vernal pools, coastal areas, etc.) through direct removal, filling, hydrological interruption, or other means. (*Less than Significant*)

Areas with potential freshwater seasonal wetlands were observed in subject sites F, G, and I. While these wetlands would likely be considered waters of the state by RWQCB, under the current definition of waters of the U.S., none of the observed potential freshwater seasonal wetlands are likely federally protected due to the lack of a continuous surface connection to waters of the U.S. Therefore, impacts to federally protected wetlands would be **less than significant**.

Mitigation Measures

None required.

Impact 3.3-4 Implementation of the Proposed Project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. (*Less than Significant*)

Most of the subject sites are developed, or bordered by dense development, and are not functional as wildlife movement corridors.

However, several sites are within areas that have been noted in the General Plan for their potential to be a high habitat value area, a migration corridor, or an ESHA under the California Coastal Act. The General Plan includes policies that prioritize these habitats and their protection. Specifically, General Plan Implementing Policy CO-I-26 requires biological resource assessments to be conducted prior to approval for any development within 300 feet of creeks, wetlands, or other sensitive habitat areas as shown on Figure 7-3 of the General Plan, and requires compensatory mitigation by means of habitat preservation, restoration, and enhancement for the loss of any critical habitat or special-status communities. In addition, General Plan Implementing Policy CO-I-27 requires that, prior to any proposed development in an ESHA or potential ESHA, a habitat

survey be conducted to verify whether the site is an ESHA, and document the extent of the sensitive resources, potential negative impacts to habitat, and recommend appropriate mitigation measures. If such sites qualify as ESHAs, General Plan Implementing Policy CO-I-28 further requires that no new development shall be allowed within primary habitat areas; buffer areas shall be established around all sensitive resources; and alterations to landforms, removal of vegetation, impervious surfaces, noise, light, and glare shall be minimized. General Plan Implementing Policy CO-I-31 requires that a habitat survey be prepared by a qualified biologist or botanist for any development proposed in Designated Critical Habitat for an Endangered or Threatened Species, potential ESHAs, areas of High Habitat Value, and Wildlife Movement Corridors. Implementation of these General Plan Implementing Policies would ensure that future development within the subject sites would not substantially interfere 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 wildlife nursery sites. The impact would be **less than significant**.

Mitigation Measures

None required.

Impact 3.3-5 Implementation of the Proposed Project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. (*Less than Significant*)

Subject sites 2, 10, 11, 12, 16B, 21, 22, 25, 29, 30, 31, 38, A, E, G, H, I, J contain trees that may be considered protected trees by the City of Pacifica. Substantial trimming, new construction within the dripline, and/or removal of any heritage tree would be considered a potentially significant impact under CEQA. Additionally, if more than 20 “trees” (greater than 6 inches in diameter as measured 12 inches from the ground) are removed from the subject site, this action may qualify as a logging operation by the City of Pacifica, which would also be considered a potentially significant impact under CEQA. However, all new development on the subject sites would be subject to the City of Pacifica Tree Ordinance, which requires that a tree removal permit be acquired from the City for the removal of any “protected tree.” Protected trees are defined by the ordinance as 1) all trees on public and private property within the City, which have a trunk with a diameter of twelve inches or greater at diameter-at-breast height, 2) any heritage tree designated by the Director, 3) any grove of trees; with the exception of eucalyptus and any species determined invasive by the California Invasive Plants Council. Any new development on the subject sites would be required to comply with the City’s Tree Ordinance; therefore, the Proposed Project would not conflict with the ordinance. The impact would be **less than significant**.

Mitigation Measures

None required.

Impact 3.3-6 Implementation of the Proposed Project would not conflict with the provisions of an adopted habitat conservation plan, natural community

conservation plan, or other approved local, regional, or State habitat conservation plan. (*Less than Significant*)

Subject sites 27, 30 and 31 are located within the Coastal Zone and are subject to policies of the Pacifica LCLUP. The Pacifica General Plan contains policies designed to protect ESHAs within the Coastal Zone. However, these sites do not contain any sensitive habitat and/or ESHAs, as they are fully developed. As no ESHAs are present within any subject sites located within the Coastal Zone, the impact is **less than significant**.

Mitigation Measures

None Required.

3.4 Cultural and Tribal Cultural Resources

This section describes the environmental and regulatory setting for cultural and tribal cultural resources. It also describes impacts related to historic, archaeological, and tribal cultural resources (including human remains) that would result from implementation of the Proposed Project and mitigation for significant impacts where feasible and appropriate. Cultural resources refer broadly to prehistoric and historic buildings, structures, objects, districts, and sites exhibiting important historical, cultural, scientific, or technological associations. This definition extends to tribal cultural resources which refer to sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe. For the purposes of CEQA, cultural resources are separated into three subcategories: historical resources, archaeological resources, and Native American tribal resources and remains. This section describes the historical setting of the Planning Area as well as the context for cultural resources in the Planning Area. Appendix B includes relevant background materials related to cultural resources and consultation.

There were two responses to the Notice of Preparation (NOP) regarding topics covered in this section. One commenter expressed concerns about potential native American artifacts at sites identified for development. The Native American Heritage Commission (NAHC) also provided a brief summary of portions of Assembly Bill (AB) 52 and Senate Bill (SB) 18 as well as the NAHC's recommendations for conducting cultural resources assessments. A summary of AB 52 and SB 18 is included in the Regulatory Settings section of this chapter and the NAHC's recommendations for conducting cultural resources assessments are incorporated into the following analysis.

Environmental Setting

PHYSICAL SETTING

Bay Area Prehistoric Resources

Prehistoric cultural resources are composed of Native American structures or sites of historical or archaeological interest. These may include districts, buildings, objects, landscape elements, sites, or features that reflect human occupations of the region, such as villages and burial grounds.

The moderate climate, combined with the abundant natural resources found throughout the nine-county region of the Bay Area, has supported human habitation for several thousand years. The prehistoric occupation of Central California can be interpreted using the Paleo-Archaic-Emergent chronological sequence (D.A. Fredrickson, 2974). The sequence consists of three broad periods: The Paleo-Indian period (10,000 – 6,000 B.C.); the Archaic period consisting of the

Lower Archaic (6,000 – 3,000 B.C.), Middle Archaic (3,000 – 1,000 B.C., and Upper Archaic (1,000 B.C. – A.D. 500); and the Emergent period (A.D. 500 – 1800). The entry and spread of people into California dates to the Paleo-Indian period (M.J. Moratto, 1984). The cultural patterns relevant to the Planning Area include the Windmill Pattern and Berkeley Pattern during the Archaic period and the Augustine Pattern during the Emergent period.

The Windmill Pattern was characterized by small communities of hunters and gatherers who moved seasonally. Material attributes typical of the Windmill Pattern include large leaf-shaped and stemmed projectile points, westerly oriented extended burials with grave offerings or burial goods such as red ocher, and a distinctive variety of shell beads and charmstones (M. Ember and P.N. Peregrine, 2001). Subsistence was based on hunting large animals including deer and elk, along with smaller game animals such as waterfowl. Fishing also occurred along with the gathering of nuts and fruits.

The Berkeley Pattern was characterized by larger communities with more permanent settlement patterns. Material attributes typical of the Berkeley Pattern include projectile points with distinctive diagonal flaking across their faces, flexed position burials with burial ornaments such as shell beads, and an extensive bone tool industry. During this Pattern, a heavy reliance was developed on acorns which were used throughout the year as a staple food (M. Ember and P.N. Peregrine, 2001). Food was also obtained through a combination of hunting, fishing, and gathering. Tools were more diverse than the Windmill Pattern and included specialized fish spears and hunting gear along with bone and ground-stone tools.

The Augustine Pattern was characterized by large sedentary communities. Material attributes typical of the Augustine Pattern include large spear points, often with serrated edges, and small arrow points, bone harpoons, ceramics and coiled basketry, and flexed position burials, and evidence of the practice of cremation (M. Ember and P.N. Peregrine, 2001). Hunting and gathering was practiced broadly and important technological innovations include the bow and arrow and shaped mortars and pestles. This late prehistoric pattern predated the Miwok who occupied central California at the time of Spanish contact (S.J. Fiedel, 1992).

California's Paleo-Coastal peoples were "traveling in seaworthy boats, using fishhooks and other fishing tackle, hunting marine mammals and sea birds, weaving cordage and basketry from sea grass, and making shell beads for ornamental use and exchange with interior peoples" by about 10,000 years ago (T. Jones and K. Klar, 2007). Rising sea levels, the formation of the San Francisco Bay, and the resulting filling of inland valleys have covered early sites, which were most likely located along the then existing bay shore and waterways. Existing evidence indicates the presence of many village sites began at least 5,000 B.C. in the region. The arrival of Native Americans into the Bay Area is associated with documented cultural resources from circa 5,500 B.C (U.S. Dept. of Interior, 1990).

Pacifica Historic Context

Native Americans once had an extensive presence in the Planning Area. When Europeans arrived, the area was home to persons who spoke the Ramaytush dialect of the San Francisco Bay Costanoan/Ohlone Language, and living in and around two villages: Pruristac, in San Pedro Valley, and Timigtac, in Calera Valley. In 1769, an expedition led by Gaspar de Portola, governor of the Spanish territory covering both Baja and Alta California, followed an Ohlone trail over the

Montara/San Pedro Mountain saddle (later the Old Coast Road) to San Pedro Valley where they camped. From the valley, scouts first sighted San Francisco Bay from atop Sweeney Ridge (CHRIS, 2009).

Mexican independence from Spain was followed by a “secularization” program, and in 1839 the San Pedro mission outpost and its *rancho*, covering the majority of the Planning Area, was granted to Francisco Sanchez, who built the adobe house that stands today as the oldest structure in San Mateo County. Following his death, the land was divided and the area developed slowly.

In 1905 construction began on the Ocean Shore Railway, which was to connect San Francisco with Santa Cruz. The line was never completed, but operated as far south as Half Moon Bay until 1921, supporting a string of small communities in present-day Pacifica including Edgemar, Salada Beach, Brighton Beach, Vallemar, Rockaway Beach, and Tobin (San Pedro Terrace-by-the-sea). The communities surrounding the railway grew slowly until the building boom following World War II. Pacifica incorporated as a city in 1957.

Historic Resources

In order to determine the presence or absence of cultural and historical resources within the Proposed Project sites and the surrounding area, a records search and literature review was requested for the Planning Area on August 21, 2023, at the NWIC, located at Sonoma State University. The purpose of this review was to access existing cultural resource survey reports, archaeological site records and historic maps, and evaluate whether any previously documented prehistoric or historic archaeological sites, architectural resources, cultural landscapes, or other resources exist within or near the city. Appendix B lists and describes all historic, archaeological, and tribal cultural resources NWIC identified in the Planning Area.

A historic resource is a building, structure, object, prehistoric or historic archaeological site, or district possessing physical evidence of human activities over 50 years old. Historic resources are often designated and listed on the national, state, or a local register, making them eligible for certain protections or other benefits. The State Office of Historic Preservation Built Environment Resources Directory (OHP BERD), which includes listings of the California Register of Historical Resources, California State Historical Landmarks, California State Points of Historical Interest, and the National Register of Historic Places, lists one recorded building or structure within one of the Proposed Project sites. Site 23 contains the Sanchez Art Center at 1220 Linda Mar Blvd with status code 6Y, meaning, this resource was determined ineligible for the National Register (NR) by consensus through Section 106 process – not evaluated for the California Register (CR) or local listing. Figure 3.4-1 shows the location of historic resources within the Proposed Project sites.

Archaeological Resources

CEQA defines unique archaeological resources as an artifact, object or site that can help answer important scientific questions, is an exemplary illustration of its type, or is associated with an important prehistoric or historic event or person (Public Resources Code [PRC], Section 21083.2[g]). According to the 2023 NWIC records search, there are no previously recorded historic-period archaeological resources within the Proposed Project sites. However, review of historical literature and maps indicated historic-period activity within the Proposed Project Planning Area. Early San Mateo County maps indicated the project area was located within the

lands of several land owners (Bromfield 1894). In addition, other San Mateo County maps indicate buildings and/or roads within or immediately adjacent to these project areas (1896, 1899, 1915). With this in mind, there is a high potential for unrecorded historic-period archaeological resources to be within the Proposed Project Planning Area.

Tribal Cultural Resources

A tribal cultural resource is a site, feature, place, cultural landscape, sacred place, or object with cultural value to a tribe that is included or determined to be eligible for inclusion in the CRHR, included in a local register of historical resources, or otherwise determined to be significant by the lead agency of an environmental review process. According to the NWIC records search, one recorded Native American archaeological resource has been found in a project area, a habitation site.

Potential Resources

At the time of Euroamerican contact, the Native Americans that lived in the area were speakers of the Ramaytush language, part of the Costanoan/Ohlone language family. Using Milliken's study of various mission records, the Proposed Project Planning Area is located within the lands of the Pruristac, a village in San Pedro Valley on the Pacific Coast just south of San Francisco, and Timigtac, just a few miles north on the coast at the present town of Rockaway Beach, were inhabited by small group of closely interrelated families.

Based on the Northwest Information Center's (NWIC) evaluation of the environmental setting and features associated with known sites, Native American resources in this part of San Mateo County have been found in areas marginal to the coast, and inland on ridges, midslope benches, in valleys, near intermittent and perennial watercourses and near areas populated by oak, buckeye, manzanita, and pine, as well as near a variety of plant and animal resources. The Proposed Project sites are all located within the City of Pacifica in San Mateo County in areas marginal to the Pacific Ocean and inland along areas of the first coastal range. Given the similarity of these environmental factors and the ethnographic and archaeological sensitivity of the area, there is a high potential for unrecorded Native American resources to be within the Proposed Project Planning Area.

Native American Consultation

To determine sensitivity for Native American resources within the Planning Area and comply with AB 52 and SB 18, consultation with NAHC and local Native American groups was conducted. NAHC was contacted in July 2023, with a request for the following information:

- CEQA Tribal Consultation List (AB 52)
- General Plan (SB 18) – per Government Code Section 65352.3
- Identification by NAHC of any Native American resources within the subject lands that are listed in the Sacred Lands File

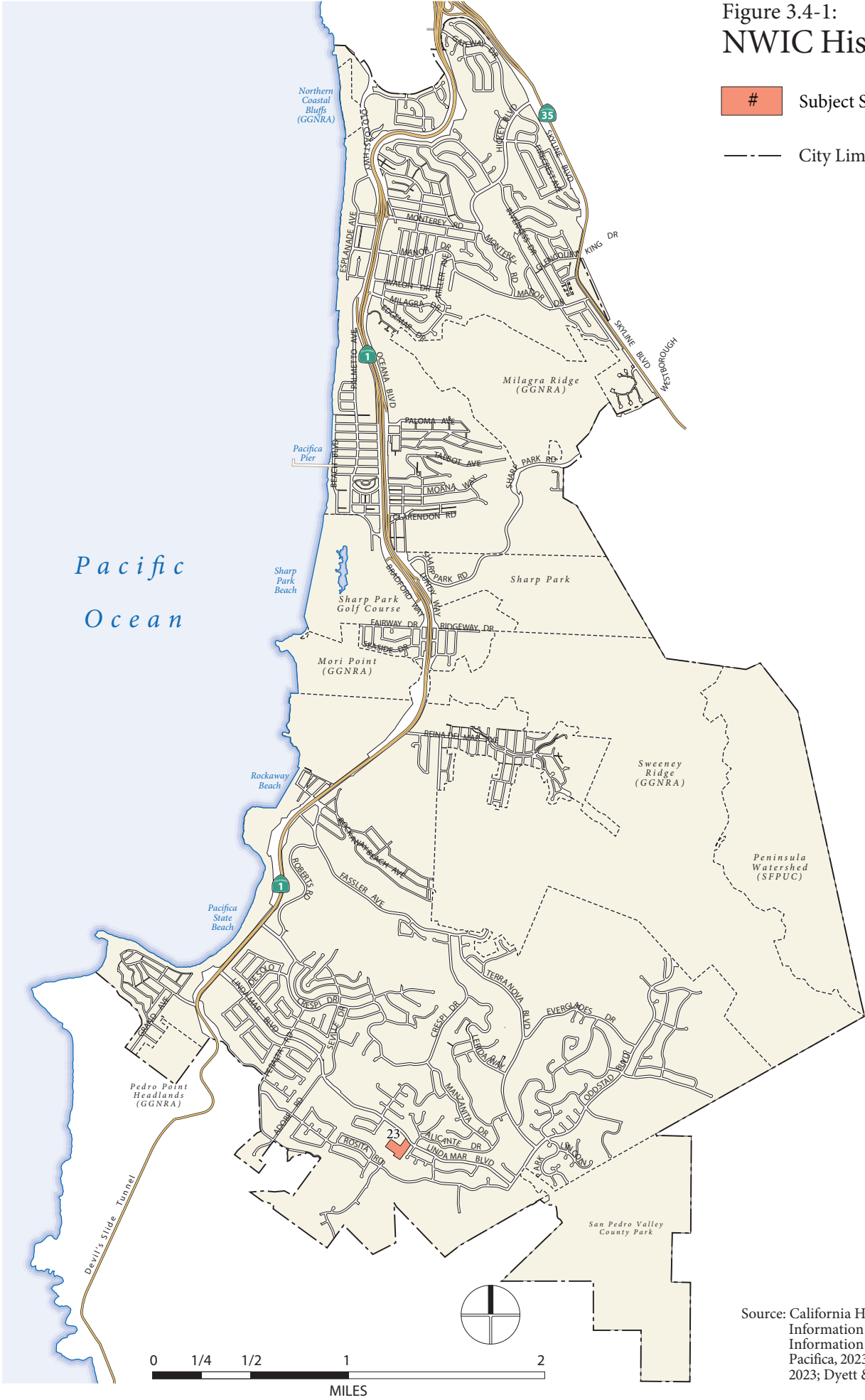
A response from NAHC was received on August 7, 2023, and stated that a search of the Sacred Lands File to identify sacred lands in the Planning Area was positive, indicating there is potential for the Planning Area to contain tribal cultural resources from past Native American activities.

The NAHC also provided a list of six tribes—Amah Mutsun Tribal Band of Mission San Juan Bautista, the Costanoan Rumsen Carmel Tribe, the Indian Canyon Mutsun Band of Coastanoan, the Muwekma Ohlone Indian Tribe of the SF Bay Area, the Ohlone Indian Tribe, and the Wuksachi Indian Tribe/Eshom Valley Band. The City contacted the six listed tribes and received one response from the Amah Mutsun Tribal Band of Mission San Juan Bautista. The response stated that for any project area within one mile of any positive cultural or historic sensitivity, the Amah Mutsun Tribal Band of San Juan Bautista recommends the following:

- All Crews, Individuals and Personnel who will be moving any earth be Cultural Sensitivity Trained.
- A Qualified California Trained Archaeological Monitor is present during any earth movement.
- A Qualified Native American Monitor is present during any earth movement.

Figure 3.4-1:
NWIC Historic Resources

- # Subject Sites
- City Limits



Source: California Historical Resources Information System, 2023; Northwest Information Center, 2023; City of Pacifica, 2023; San Mateo County, 2023; Dyett & Bhatia, 2023.

REGULATORY SETTING

Federal

National Historic Preservation Act

The National Historic Preservation Act (NHPA) is the most prominent federal law dealing with historic preservation. The NHPA established guidelines to “preserve important historic, cultural, and natural aspects of our national heritage, and to maintain, wherever possible, an environment that supports diversity and a variety of individual choice.” The NHPA includes regulations specifically for federal land-holding agencies, and also includes regulations (Section 106) which pertain to all projects that are funded, permitted, or approved by any federal agency and which have the potential to affect cultural resources. All projects that are subject to the National Environmental Policy Act (NEPA) are also subject to compliance with Section 106 of the NHPA. Furthermore, all projects that are carried out by Caltrans are also subject to Section 106. At the federal level, the Office of Historic Preservation (OHP) carries out reviews under Section 106 of the NHPA.

The Section 106 review process normally involves a four-step procedure described in detail in the Section 106 Regulations (36 CFR Part 800):

- Identify and evaluate historic properties in consultation with the State Historic Preservation Officer (SHPO) and interested parties;
- Assess the effects of the undertaking on properties that are eligible for inclusion in the NRHP;
- Consult with the SHPO, other agencies, and interested parties to develop an agreement that addresses the treatment of historic properties and notify the Advisory Council on Historic Preservation; and
- Proceed with the project according to the conditions of the agreement.

National Register of Historic Places

The NHPA authorizes the Secretary of the Interior to establish a National Register of Historic Places (National Register), an inventory of districts, sites, buildings, structures, and objects significant on a national, State, or local level in American history, architecture, archeology, engineering, and culture. The National Register is maintained by the National Park Service, the Advisory Council on Historic Preservation, State Historic Preservation Office, and grants-in-aid programs.

National Environmental Policy Act (NEPA)

Specific projects that are subject to NEPA must also comply with NEPA requirements for the consideration of cultural resources. Compliance with NEPA requirements concerning cultural resources may be addressed through compliance with Section 106 of the NHPA. Reports, agreements, and correspondence documenting compliance with Section 106 of the NHPA are provided to the lead NEPA agency for a specific proposed action that is subject to NEPA.

National Native American Graves Protection and Repatriation Act

The Native American Graves Protection and Repatriation Act (NAGPRA) was passed in 1990 to provide for the protection of Native American graves. The act conveys to Native American's of demonstrated lineal descent, the human remains, including the funerary or religious items, that are held by federal agencies and federally supported museums, or that have been recovered from federal lands. NAGPRA makes the sale or purchase of Native American remains illegal, whether or not they were derived from federal or Native American lands.

State

California Environmental Quality Act

CEQA, as codified in PRC Section 21000 et seq. and implemented through the CEQA Guidelines (14 California Code of Regulations [CCR] Section 15000 et seq.), is the principal statute governing the environmental review of projects in the state. In order to be considered a historical resource, it generally must be at least 50 years old. Section 21084.1 of CEQA and Section 15064.5 of the CEQA Guidelines define a historical resource for purposes of CEQA. A historical resource includes:

- A resource listed in, or determined to be eligible by the State Historical Resources Commission for listing in, the CRHR (PRC Section 5024.1, Title 14 CCR, Section 4850 et seq.);
- A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the PRC or identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the PRC, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant;
- Any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing in the CRHR (PRC Section 5024.1, Title 14 CCR, Section 4852).

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 a historical resources survey meeting the criteria of PRC Section 5024.1(g) does not preclude a lead agency from determining that the resource may be a historical resource, as defined in PRC Sections 5020.1(j) or 5024.1.

California Register of Historical Resources

The CRHR is "an authoritative listing and guide to be used by state and local agencies, private groups, and citizens in identifying the existing historical resources of the state and indicating

which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change” (PRC Section 5024.1(a)). Certain resources are determined by CEQA to be automatically included in the CRHR, including California properties formally eligible for or listed in the NRHP. To be eligible for the CRHR as a historical resource, a resource must be significant at the local, state, and/or federal level under one or more of the following evaluative criteria, as defined in PRC Section 5024.1(c):

1. The resource is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage.
2. The resource is associated with the lives of persons important in our past.
3. The resource embodies the distinctive characteristics of a type, period, region, or method of construction; represents the work of an important creative individual; or possesses high artistic values.
4. The resource has yielded, or may be likely to yield, information important in prehistory or history.

As with the NRHP, a significant historical resource must possess integrity in addition to meeting the significance criteria to be considered eligible for listing in the CRHR. Consideration of integrity for evaluation of CRHR eligibility follows the definitions and criteria from the National Park Service’s *National Register Bulletin 15*.

California Historic Resources

OHP offers four different registration programs, including the California Historical Landmarks, California Points of Historical Interest, CRHR, and the NRHP. Each registration program is unique in the benefits offered and procedures required. If a resource meets the criteria for registration, it may be nominated by any individual, group, or local government to any program at any time. Resources do not need to be locally designated before being nominated to a state program nor do they need to be registered at the state level before being nominated to the National Register. The California Register includes buildings, the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. Resources on the California Register have met criteria for designation or have been included due to their presence on the NRHP, the State Historical Landmark program, or the California Points of Historical Interest program.

State Historical Landmark Program

California Historical Landmarks are buildings, structures, sites, or places that have been determined to have statewide historical significance by meeting at least one of several criteria. The resource must be the first, last, only, or most significant of its type in the state or within a large geographic region; associated with an individual or group having a profound influence on California history; or be a prototype of, or outstanding example of, a period, style, architectural movement, or construction, or be one of the more notable works or best surviving work in a region of a pioneer, designer, or master builder.

California Points of Historical Interest

California Points of Historical Interest are sites, buildings, features, or events of local (city or county) significance, having anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other value. Criteria are the same as those for Historical Landmarks but directed to local areas. Points of Historical Interest designated after December 1997 and recommended by the State Historical Resources Commission are also listed in the California Register. No historical resource may be designated as both a Landmark and a Point; if a Point is subsequently granted status as a Landmark, the Point designation will be retired.

California Government Code Section 65040.2(g)

California Government Code Section 65040.2(g) provides guidelines for consulting with Native American tribes for the following: (1) the preservation of, or the mitigation of impacts on places, features, and objects described in Sections 5097.9 and 5097.993 of the PRC; (2) procedures for identifying through NAHC the appropriate California Native American tribes; (3) procedures for continuing to protect the confidentiality of information concerning the specific identity, location, character, and use of those places, features, and objects; and (4) procedures to facilitate voluntary landowner participation to preserve and protect the specific identity, location, character, and use of those places, features, and objects.

Senate Bill 18

Signed into law in September 2004, and effective March 1, 2005, SB 18 permits California Native American tribes recognized by the NAHC to hold conservation easements on terms mutually satisfactory to the tribe and the landowner. The term “California Native American tribe” is defined as “a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC.” The bill also requires that, prior to the adoption or amendment of a city or county’s general plan, the city or county consult with California Native American tribes for the purpose of preserving specified places, features, and objects located within the city or county’s jurisdiction. SB 18 also applies to the adoption or amendment of specific plans. This bill requires the planning agency to refer to the California Native American tribes specified by the NAHC and to provide them with opportunities for involvement. To comply with SB 18, consultation with NAHC and local Native American groups was conducted as detailed in the Environmental Setting.

Assembly Bill 52

Tribal cultural resources were originally identified as a distinct CEQA environmental category with the adoption of AB 52 in September 2014. For all projects subject to CEQA that received a notice of preparation, notice of negative declaration, or mitigated negative declaration on or after July 1, 2015, AB 52 requires the lead agency on a proposed project to consult with the geographically affiliated California Native American tribes. The legislation creates a broad new category of environmental resources, “tribal cultural resources,” which must be considered under CEQA. AB 52 requires a lead agency to not only consider the resource’s scientific and historical value but also whether it is culturally important to a California Native American tribe.

AB 52 defines tribal cultural resources as sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are included or

determined to be eligible for inclusion in the CRHR; included in a local register of historical resources, as defined in PRC Section 5020.1(k); or determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to the criteria of PRC Section 5024.1(c) (CEQA Section 21074).

AB 52 also sets up an expanded consultation process. For projects initiated after July 1, 2015, lead agencies are required to provide notice of the proposed projects to any tribe that is traditionally and culturally affiliated with the geographic area that requested to be informed by the lead agency, following PRC Section 21018.3.1(b). If, within 30 days, a tribe requests consultation, the consultation process must begin before the lead agency can release a draft environmental document. Consultation with the tribe may include discussion of the type of review necessary, the significance of tribal cultural resources, the significance of the project's impacts on the tribal cultural resources, and alternatives and mitigation measures recommended by the tribe. The consultation process will be deemed concluded when either (1) the parties agree to mitigation measures or (2) any party concludes, after a good-faith effort, that an agreement cannot be reached. Any mitigation measures agreed to by the tribe and lead agency must be recommended for inclusion in the environmental document. If a tribe does not request consultation, or to otherwise assist in identifying mitigation measures during the consultation process, a lead agency may still consider mitigation measures if the agency determines that a project will cause a substantial adverse change to a tribal cultural resource. As of September 2024, the City of Pacifica has received no requests for consultation from geographically affiliated California Native American tribes pursuant to AB 52. However, the City did contact the NAHC and six tribes as discussed above.

Assembly Bill 168

AB 168, adopted in September 2020, provides additional protection for tribal cultural resources as defined in AB 52. This bill applies in situations where a developer seeks to streamline approval under SB 35 and, in doing so, bypass CEQA requirements. AB 168 rectifies a loophole in SB 35 that allowed developers to apply for fast-tracked approval without notifying Native American tribes affiliated with the Planning Area. Instead, under AB 168 projects would be ineligible for SB 35 and subject to CEQA if (1) the site of the proposed development is a tribal cultural resource that is on a national, state, tribal, or local historic register list, (2) the local government and the California Native American tribe do not agree that no potential tribal cultural resource would be affected by the proposed development, or (3) the local government and California Native American tribe find that a potential tribal cultural resource could be affected by the proposed development and the parties do not document an enforceable agreement regarding the methods, measures, and conditions for treatment of those tribal cultural resources, as provided.

California Public Resources Code

Section 5097.98

The treatment of Native American human remains is regulated by PRC Section 5097.98, as amended by Assembly Bill 2641, which addresses the disposition of Native American burials, protects remains, and appoints the NAHC to resolve disputes. In addition, California Health and Safety Code Section 7050.5 includes specific provisions for the protection of human remains in the event of discovery, and Section 7052 makes the willful mutilation, disinterment, or removal of human remains a felony. The Health and Safety Code is applicable to any project where ground disturbance would occur.

Sections 5097–5097.6

Sections 5097–5097.6 of the California PRC outline the requirements for cultural resource analysis prior to the commencement of any construction project on state lands. The state agency proposing the project may conduct the cultural resource analysis or they may contract with the State Department of Parks and Recreation. In addition, this section stipulates that the unauthorized disturbance or removal of archaeological, historical, or paleontological resources located on public lands is a misdemeanor. It prohibits the knowing destruction of objects of antiquity without a permit (expressed permission) on public lands and provides for criminal sanctions. This section was amended in 1987 to require consultation with the California NAHC whenever Native American graves are found. Violations for the taking or possessing remains or artifacts are felonies.

Sections 5097.9-991

The PRC Section 5097.9-991, regarding Native American heritage, outlines protections for Native American religion from public agencies and private parties using or occupying public property. Also protected by this code are Native American sanctified cemeteries, places of worship, religious or ceremonial sites, or sacred shrines located on public property.

Local Regulations

City of Pacifica General Plan 2040

The Conservation Element provides policy guidance to conserve Pacifica's environmental, scenic, natural and cultural resources. The following General Plan policies are related to cultural and tribal cultural resources:

Conservation

Guiding Policy CO-G-17: Historic and Cultural Sites. Conserve designated historic and cultural sites and structures that help define Pacifica's identity and character and increase public awareness and appreciation of them.

Guiding Policy CO-G-18: Ensure Mitigation. Require mitigation for any new development that would adversely affect archaeological or paleontological resources.

Implementing Policy CO-I-65: Historic Preservation Ordinance. Continue to evaluate development projects for their historical significance and preservation value, using the criteria in the Historic Preservation Ordinance.

Implementing Policy CO-I-66: Integration of Historic and Cultural Resources with City Identity. Incorporate historic and cultural resources into the City's marketing and branding efforts. Specific initiatives might include:

- Identifying historic sites in the City's wayfinding scheme;
- Giving priority to streetscape and public realm improvements around historic structures that are visitor destinations;
- Hosting/supporting events and educational programs that feature Pacifica's history and promote its relevance; and
- Linking related historical sites through the City's open space and trail system.

Implementing Policy CO-I-67: Public Agency Support for Local Historic Sites. Seek support from public agencies, such as GGNRA, for local historic preservation programs for designated sites.

Two documents have been prepared for San Mateo County that should guide agency involvement in Pacifica's historic resources: the Sanchez Adobe Historical Site Master Plan (2007) and the Historic Resource Study for Golden Gate National Recreation Area in San Mateo County (2010).

Implementing Policy CO-I-68: Resource Impact Mitigation. Ensure that new development analyzes and avoids potential impacts to historic, archaeological, and paleontological resources by:

- Requiring a records review for development proposed in areas that are considered archaeologically or paleontologically sensitive;
- Requiring pre-construction surveys and monitoring during any ground disturbance for all development in areas of historic or archaeological sensitivity; and
- Implementing appropriate measures as a condition of project approval—such as avoidance, preservation in place, and excavation,—to reduce or avoid impacts.

In the event that historical, archaeological, or paleontological resources are accidentally discovered during construction, grading activity in the immediate area shall cease and materials and their surroundings shall not be altered or collected. A qualified archaeologist or paleontologist must make an immediate evaluation and avoidance measures or appropriate mitigation should be completed, according to CEQA Guidelines. The State Office of Historic Preservation has issued recommendations for the preparation of Archaeological Resource Management Reports that may be used as guidelines.

Implementing Policy CO-I-69: Adaptive Reuse. Promote adaptive reuse of historic structures—preserving their original design and character—as an option for preserving sites that are threatened with demolition or degradation.

Implementing Policy CO-I-70: Native American Sites. Work with local Native American tribes to protect recorded and unrecorded cultural and sacred sites, and educate developers and the community-at-large about the connections between Native American history and the environmental features that characterize the local landscape.

Development on archaeologically sensitive sites requires on-site monitoring by appropriate Native American consultant(s) and a qualified archaeologist of all grading, excavation, and site preparation activities that involve earth-moving operations.

City of Pacifica Historic Preservation Ordinance

In 1985, the City adopted its Historic Preservation ordinance (Chapter 7 of the Municipal Code), to recognize historic structures, sites, and natural features, and to encourage their preservation and continued use. The ordinance established criteria for designation. A site may be designated because it reflects a significant element of the city's history; has special aesthetic or architectural interest; is identified with significant persons or events; is representative of a type of building which was once common but is now rare; is a notable work of a master builder or architect; or contributes to a distinctive area of the city. Designation requires a formal public process.

Repairs and maintenance to locally designated landmarks require no special permission. Permits are required for demolition, alteration, or relocation that affects the exterior appearance of the landmark. In evaluating applications for demolition, the Planning Commission and City Council shall consider the economic feasibility of alternatives to demolition, and the interests of the public in preserving the landmark.¹

The following structures, having been approved by the Planning Commission and Council for designation as historic landmarks pursuant to the City's procedures have final landmark designation:

- a) Sanchez Adobe;
- b) Sharp Park Golf Course Clubhouse;
- c) Little Brown Church;
- d) San Pedro Schoolhouse;
- e) 185 Carmel Avenue;
- f) Vallemar Station, 2125 Cabrillo Highway;
- g) Anderson's Store, 220 Paloma Avenue;
- h) 165 Winona Avenue; and
- i) Dollaradio Station.

¹ City of Pacifica, 1985

Impact Analysis

SIGNIFICANCE CRITERIA

For the purposes of this EIR, a significant impact would occur if the Proposed Project would:

- Criterion 1:** Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5;
- Criterion 2:** Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5,
- Criterion 3:** Disturb any human remains, including those interred outside of dedicated cemeteries,
- Criterion 4:** Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
 - Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
 - A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

METHODOLOGY AND ASSUMPTIONS

The analysis of potential cultural resources impacts is based upon a comprehensive records search conducted at the NWIC, located at Sonoma State University. The records search included a review of all recorded historic and prehistoric cultural resources within the Planning Area. In addition, the California State Historic Property Data File (HRI), which includes the NRHP, California Historical Landmarks, and California Points of Historical Interest was examined. The analysis also included a search of the NAHC Sacred Lands File, Tribal outreach, review of City of Pacifica documents, and Proposed Project actions.

IMPACTS

Impact 3.4-1 Implementation of the Proposed Project would not cause a substantial adverse change in the significance of a historical resource, as defined as physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historic resource would be materially impaired (Guidelines Section 15064.5). (Less than Significant)

A significant impact would occur if implementation of the Proposed Project would result in substantial adverse changes to historical resources through demolition, alterations, changes in ownership, and accidents caused by construction activities. The Proposed Project will redesignate and rezone sites within the city to allow an additional 2,175 housing units. Buildout would occur primarily in previously developed areas of the city which would help avoid impacts on recorded historic resources.

The only potential historic resource on a subject site is the Sanchez Art Center at 1220 Linda Mar Blvd, Site 23, as shown in Figure 3.4-1 above. According to the City's Housing Element, redeveloping the existing buildings on four acres could accommodate mixed-use development incorporating the Art Center and adding 130 lower-income residential units. As such, it is likely the existing Art Center would experience substantial adverse changes under the Proposed Project. However, the Sanchez Art Center is listed with status code 6Y, meaning, this resource was determined ineligible for the National Register (NR) by consensus through the Section 106 process and not evaluated for the California Register (CR) or local listing. Further, the Sanchez Art Center is not considered a local historic landmark per the City's Historic Municipal Code or General Plan. There are no local historic landmarks that overlap with Proposed Project subject sites. As such, given that the Sanchez Art Center was determined ineligible and is not considered a historic resource per national, State, and local registers, and there are no other historic resources on the subject sites, any development under the Proposed Project at Site 23 would not impact a historical resource.

Further, the City's Historic Preservation Ordinance establishes criteria for the designation of historic landmarks. A site may be designated because it reflects a significant element of the City's history; has special aesthetic or architectural interest; is identified with significant persons or events; is representative of a type of building which was once common but is now rare; is a notable work of a master builder or architect; or contributes to a distinctive area of the city. Designation requires a formal public process. According to the ordinance, repairs and maintenance to locally designated landmarks require no special permission. Permits are required for demolition, alteration, or relocation that affects the exterior appearance of the landmark. In evaluating applications for demolition, the Planning Commission and City Council shall consider the economic feasibility of alternatives to demolition, and the interests of the public in preserving the landmark.

All development under the Proposed Project would be required to adhere to the regulations and policies of the City's Historic Preservation Ordinance and General Plan, should there be an additional historical landmark designation. As listed above, the City's General Plan includes multiple policies that attempt to mitigate impacts on historical built resources through protection, rehabilitation, and adaptive reuse.

In summary, the Proposed Project does not anticipate redevelopment of any of Pacifica's historical resources; however, any projects would be required to comply with the General Plan policies noted above. Therefore, the impact of implementation of the Proposed Project on historical resources would be less than significant with implementation of existing regulations.

Mitigation Measures

None required.

Impact 3.4-2 Implementation of the Proposed Project would not cause an adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5. (Less than Significant with Mitigation Incorporated)

A significant impact would occur if implementation of the Proposed Project would cause an adverse change in the significance of an archeological resource pursuant to CEQA Guidelines Section 15064.5. As described in the Environmental Setting, there are no previously recorded historic-period archaeological resources within the Proposed Project sites. However, review of historical literature and maps indicated historic-period activity within the Proposed Project Planning Area. Early San Mateo County maps indicated the project area was located within the lands of several land owners (Bromfield 1894). In addition, other San Mateo County maps indicate buildings and/or roads within or immediately adjacent to these project areas (1896, 1899, 1915). With this in mind, there is a high potential for unrecorded historic-period archaeological resources to be within the Proposed Project Planning Area.

Future development allowed under the Proposed Project may involve grading, excavation, overland vehicle travel, or other ground-disturbing activities, or could facilitate public access to archaeological sites, which could disturb or damage unknown archaeological resources. The impact of such activities would be considered significant if they were to cause a substantial adverse change to the archaeological resources as defined by CEQA Guidelines Section 15064.5.

Although implementation of the Proposed Project may result in actions that could adversely affect archaeological resources, General Plan policies and actions would minimize or avoid impacts by requiring the protection and preservation of such resources. Public Resources Code Section 21083.2 and CEQA Guidelines Section 15064.5(f) recognize that historical or unique archaeological resources may be accidentally discovered during project construction. As such, Implementing Policy CO-I-68 states that if potentially significant cultural resources are discovered during ground-disturbing activities associated with project preparation, construction, or completion, work shall halt in that area until a qualified archaeologist can assess the significance of the find, and, if necessary, develop appropriate treatment measures in consultation with San Mateo County and other appropriate agencies and interested parties. For example, a qualified archaeologist shall follow accepted professional standards in recording any find including submittal of the standard Department of Parks and Recreation (DPR) Primary Record forms (Form DPR 523) and location-specific information to the California Historical Resources Information Center office (Northwestern Information Center). The consulting archaeologist shall also evaluate such resources for significance per California Register of Historical Resources eligibility criteria (Public Resources Code Section 5024.1; Title 14 CCR Section 4852). If the archaeologist determines that the find does not meet the CEQA standards of significance,

construction shall proceed. On the other hand, if the archaeologist determines that further information is needed to evaluate significance, the Community Development Department staff shall be notified and a data recovery plan shall be prepared.

In addition, **Mitigation Measure CUL-1** is recommended which requires developers to conduct cultural resource awareness training as recommended by the NAHC. Specifically, this measure requires construction personnel to receive cultural awareness training on existing regulations and unanticipated discovery protocol.

Therefore, the impact of implementation of the Proposed Project on archaeological resources would be less than significant, with implementation of existing State regulations, local policies, and **Mitigation Measure CUL-1** referenced below.

Mitigation Measures

MM-CUL-1: Conduct Cultural Resources Awareness Training. Prior to the start of any ground disturbance or construction activities, the developer shall retain a qualified professional archaeologist to conduct cultural resource awareness training for construction personnel. This training shall include an overview of what cultural resources are and why they are important, archaeological terms (such as site, feature, deposit), project site history, types of cultural resources likely to be uncovered during excavation, laws that protect cultural resources, and the unanticipated discovery protocol.

Significance After Mitigation: Less than significant

Impact 3.4-3 Implementation of the Proposed Project would not have the potential to disturb human remains, including those interred outside of formal cemeteries. (Less than Significant with Mitigation Incorporated)

Human remains, particularly those interred outside of formal cemeteries, could be disturbed during grading, excavation, or other ground-disturbing activities associated with future development or redevelopment projects allowed under the Proposed Project. Pacifica's environmental setting and its long history of habitation by Native people make it likely that unrecorded cultural resources are present in the Planning Area. As such, there is always the possibility that subsurface construction activities associated with the Proposed Project, such as trenching and grading, could potentially damage or destroy previously undiscovered human remains. In the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5, Health and Safety Code Section 7050.5, and Public Resources Code Section 5097.94 and Section 5097.98 must be followed. Compliance with these existing regulations would reduce impacts to a less than significant level. Further, implementation of **Mitigation Measure CUL-1** would also reduce any potential impact on archaeological resources, including human remains, through cultural awareness training for construction personnel on unanticipated discovery protocol. Therefore, impacts would be less than significant with implementation of existing regulations.

Mitigation Measures

MM-CUL-1: Conduct Cultural Resources Awareness Training.

Significance After Mitigation: Less than significant

Impact 3.4-4 Implementation of the Proposed Project would not cause an 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 California Register of Historical Resources, 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. (*Less than Significant with Mitigation Incorporated*)

The results of the NWIC records search indicate that there is a high potential for unrecorded Native American resources to be within the Planning Area, especially in areas marginal to the coast, and inland on ridges, midslope benches, in valleys, near intermittent and perennial watercourses and near areas populated by oak, buckeye, manzanita, and pine, as well as near a variety of plant and animal resources. Therefore, future development or redevelopment projects allowed under the Proposed Project could result in indirect impacts through grading, overland construction vehicle travel, or other ground-disturbing activities, or through facilitation of public access to culturally significant sites. The impact of such activities would be considered significant if they were to cause a substantial adverse change to the resources as defined by PRC Section 21074. As previously discussed, the response from the NAHC stated that a search of the Sacred Lands File to identify sacred lands in the Planning Area was positive. Further, according to the NWIC records search, one recorded Native American archaeological resource has been found in a site proposed for development. While the exact location of this resource is not public information, consultation with the tribes per SB 18 and AB 52 provides the opportunity for Native American tribes to identify if known resources could be compromised by implementation of the Proposed Project. Such consultation is also intended to arrive at consensus regarding mitigation measures or ways to avoid a significant effect on tribal cultural resources. As detailed in the Environmental Setting, local tribal representatives were sent formal notification under SB 18 in August 2023. Correspondence related to tribal consultation is included as Appendix B of this DEIR. While the City did not receive any formal requests for consultation, they did receive one response from the Amah Mutsun Tribal Band of Mission San Juan Bautista. The response stated that for any project area within one mile of any positive cultural or historic sensitivity, the Amah Mutsun Tribal Band of San Juan Bautista recommends the following:

- All Crews, Individuals and Personnel who will be moving any earth be Cultural Sensitivity Trained.

- A Qualified California Trained Archaeological Monitor is present during any earth movement.
- A Qualified Native American Monitor is present during any earth movement.

In accordance with such recommendations, **Mitigation Measure CUL-1** is required for all developments under the Proposed Project since they are all located in areas marginal to the Pacific Ocean and inland along areas of the first coastal range which have a high potential for uncovering archaeological deposits or tribal cultural resources. This measure requires construction personnel to receive cultural awareness training on existing regulations and unanticipated discovery protocol. In addition, the City's General Plan Implementing Policy CO-I-70 incorporates the final two recommendations from the Amah Mutsun Tribal Band of San Juna Bautista. The policy states that development on archaeologically sensitive sites requires on-site monitoring by appropriate Native American consultant(s) and a qualified archaeologist of all grading, excavation, and site preparation activities that involve earth-moving operations. In addition, the policy requires the City work with local Native American tribes to protect recorded and unrecorded cultural and sacred sites, and educate developers and the community-at-large about the connections between Native American history and the environmental features that characterize the local landscape.

In addition to consultation with tribes required by State law, Pacifica General Plan Implementing Policy CO-I-68 ensures that new development analyzes and avoids potential impacts to archaeological resources by requiring pre-construction surveys and monitoring during any ground disturbance for all development in areas of archaeological sensitivity; and by implementing appropriate measures as a condition of project approval—such as avoidance, preservation in place, and excavation, —to reduce or avoid impacts. In the event that archaeological resources are accidentally discovered during construction, grading activity in the immediate area shall cease and materials and their surroundings shall not be altered or collected. A qualified archaeologist or paleontologist must make an immediate evaluation and avoidance measures or appropriate mitigation should be completed, according to CEQA Guidelines. The State Office of Historic Preservation has issued recommendations for the preparation of Archaeological Resource Management Reports that may be used as guidelines.

Overall, compliance with existing regulations, General Plan policies, and implementation of **Mitigation Measure CUL-1** would reduce impacts to the maximum extent practicable. Impacts would be less than significant with mitigation.

Mitigation Measures

MM-CUL-1: Conduct Cultural Resources Awareness Training.

Significance After Mitigation: Less than significant

3.5 Energy and Greenhouse Gas Emissions

This section analyzes the effect of the Proposed Project on energy resources and greenhouse gas emissions. The section identifies energy laws, plans, and policies; identifies energy sources; and describes existing and projected energy consumption and trends in the Planning Area. This section also analyzes quantitatively how implementation of the Proposed Project may contribute to global climate change (GCC) through greenhouse gas (GHG) emissions related to land use changes and transportation. The analysis of sea level rise impacts is provided in Section 3.8: Hydrology, Flooding, and Water Quality.

There were two comments in response to the Notice of Preparation related to greenhouse gas emissions. Commenters expressed concern about how increased development will impact mobile source emissions. This comment is addressed in the following Impact Analysis.

Environmental Setting

ENERGY

Energy resources in the State of California include natural gas, electricity, water, wind, oil, coal, solar, geothermal, and nuclear resources. Energy production and energy use both result in the depletion of nonrenewable resources, such as oil, natural gas, and coal, and result in the emissions of pollutants. This section discusses the existing conditions related to energy statewide, regionally, and in the Planning Area.

State Energy Resources and Use

California has a diverse portfolio of energy resources that produced 2,152 trillion British thermal units (BTUs) in 2021 (U.S. Energy Information Administration, 2023). Excluding offshore areas, California ranked seventh in the nation in crude oil (petroleum) production in 2022, producing the equivalent of 765.9 trillion BTUs. California ranked second in total renewable energy generation, with 1,053.6 trillion BTUs. Other energy sources in California include natural gas (160.8 trillion BTUs) and nuclear (172.1 trillion BTUs). Additionally, due to the mild Mediterranean climate and strict energy-efficiency conservation requirements, California has lower energy consumption rates than most parts of the United States. According to the U.S. Energy Information Administration (EIA), California consumed approximately 7,359 trillion BTUs of energy in 2021. California's per capita energy consumption of 198 million BTUs is one of the lowest in the country and is ranked 48th in the nation for 2021.

In 2021, natural gas made up the greatest share of energy consumption (2,172.8 trillion BTUs or 31.2 percent); followed by motor gasoline (1494.9 trillion BTUs or 21.5 percent); distillate and jet fuel (950.2 trillion BTUs or 13.7 percent); renewable energy, including hydroelectric power, biomass, and other renewables (814.3 trillion BTUs or 11.7 percent); and interstate electricity (623.9 trillion BTUs or 9.0 percent); with the balance coming from a variety of other sources. Of the natural gas consumed, industrial uses consumed approximately 34.2 percent, followed by electric power generation (30.7 percent), residential uses (21.4 percent), commercial uses (11.4 percent), and transportation uses (2.2 percent).

In 2021, the transportation sector consumed the highest quantity of energy (2,783.9 trillion BTUs or 41.2 percent), followed by the industrial (1,595.5 trillion BTUs or 23.6 percent), residential (1,228.5 trillion BTUs or 18.2 percent), and commercial (1,156.8 trillion BTUs or 17.1 percent) sectors. Per capita energy consumption in general is declining because of improvements in energy efficiency and design. However, despite this reduction in per capita energy use, the State's total overall energy consumption (i.e., non-per capita energy consumption) is expected to increase over the next several decades as a result of growth in population, jobs, and vehicle travel.

Regional Energy Resources and Use

Pacific Gas and Electric (PG&E) provides natural gas and electricity services to the majority of Northern California, including San Mateo County and the Planning Area. PG&E's service extends from Eureka to Bakersfield (i.e., north to south) and from the Sierra Nevada to the Pacific Ocean (i.e., east to west). PG&E purchases gas and power from a variety of sources, including other utility companies. PG&E also obtains energy supplies from power plants and natural gas fields in northern California. PG&E operates a grid distribution system that channels all power produced at the various generation sources into one large energy pool for distribution throughout the service territory. PG&E provides all of the natural gas and electric infrastructure in San Mateo County and in the City of Pacifica. However, Peninsula Clean Energy provides San Mateo County and all 20 of its cities and towns electricity using PG&E infrastructure unless individuals choose to opt out of the program, at which point, the default electricity provider is PG&E.

As a Community Choice Aggregator under Assembly Bill (AB) 117 (2002), Peninsula Clean Energy is the official electricity provider for the City of Pacifica. Peninsula Clean Energy's power comes from a mix of various sources, including solar, wind, geothermal, biomass and biowaste, and hydroelectric generation resources. Peninsula Clean Energy delivers power to its customers via existing utility infrastructure owned by PG&E. Peninsula Clean Energy allows customers to choose between two different electricity product operations: ECOplus, which contains 50 percent renewable and 100 percent clean energy sources, and ECO100, which contains 100 percent renewable resources as electricity sources (Peninsula Clean Energy). In 2022, San Mateo County totaled approximately 4,177 million kWh in energy use from electricity and 204 millions of therms in energy use from natural gas (California Energy Commission, 2020).

Pacifica Energy Use

The energy consumption analysis in this EIR is based on the change in energy consumption from future development under the Proposed Project compared to energy consumed by existing development. Assumptions are consistent with the air quality, GHG emissions, and transportation analyses. PG&E provides natural gas to the Planning Area, and Peninsula Clean Energy provides

electricity using PG&E infrastructure, unless individuals choose to opt out of Peninsula Clean Energy, in which case PG&E provides electricity.

THE GREENHOUSE EFFECT AND GREENHOUSE GASES

The process known as the “greenhouse effect” keeps the atmosphere near Earth’s surface warm enough for the successful habitation of humans and other life forms. The greenhouse effect is created by sunlight that passes through the atmosphere. Some of the sunlight striking Earth is absorbed and converted to heat, which warms the surface. The surface emits a portion of this heat as infrared radiation, some of which is re-emitted toward the surface by GHGs. Human activities that generate GHGs increase the amount of infrared radiation absorbed by the atmosphere, thus enhancing the greenhouse effect and amplifying the warming of Earth.

Increases in fossil fuel combustion and deforestation have exponentially increased concentrations of GHGs in the atmosphere since the Industrial Revolution, resulting in a rise in global surface temperatures – a process commonly referred to as “global warming.” Higher global surface temperatures, in turn, have caused widespread and rapid changes in the atmosphere, ocean, cryosphere, and biosphere—collectively referred to as “climate change”—with evidence of observed changes such as heat waves, heavy precipitation, droughts, tropical cyclones, rising mean sea level, retreating glaciers, and other changes in the ecosystem (IPCC, 2023).

The Intergovernmental Panel on Climate Change (IPCC) was established by the World Meteorological Organization and United Nations Environment Programme to assess scientific, technical, and socioeconomic information relevant to the understanding of climate change, its potential impacts, and options for adaptation and mitigation. The IPCC estimates that human-induced warming reached approximately 1.1 degree Celsius (°C) above 1850-1900 levels in 2010-2019. Near-term global warming is expected to increase by about 1.5°C by 2040. Under an intermediate GHG emissions scenario (representing a plausible socioeconomic future scenario where GHG emissions remain around current levels until the middle of the 21st century), global warming is expected to rise to 3°C (i.e., approximately 37.4°F) by 2100 (IPCC, 2023). Large increases in global temperatures could have substantial adverse effects on the natural and human environments worldwide and in California.

Greenhouse Gases

The principle anthropogenic (human-made) GHGs contributing to global warming are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and fluorinated compounds, including sulfur hexafluoride (SF₆), hydrofluorocarbons (HFCs), and perfluorocarbons. Water vapor, the most abundant GHG, is not included in this list because its natural concentrations and fluctuations far outweigh its anthropogenic sources. The primary GHGs of concern associated with the Proposed Project are CO₂, CH₄, and N₂O, described below.

- **Carbon dioxide** enters the atmosphere through fossil fuels (oil, natural gas, and coal) combustion, solid waste decomposition, plant and animal respiration, and chemical reactions (e.g., manufacture of cement). CO₂ is also removed from the atmosphere (or sequestered) when it is absorbed by plants as part of the biological carbon cycle.

- **Methane** is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and from the decay of organic waste in municipal solid waste landfills.
- **Nitrous oxide** is emitted during agricultural and industrial activities, as well as during combustion of fossil fuels and solid waste.

Methods have been set forth to describe emissions of GHGs in terms of a single gas to simplify reporting and analysis. Current best practice uses the global warming potential (GWP) of various GHG emissions on a normalized scale that recasts all GHG emissions in terms of carbon dioxide equivalent (CO₂e). This method compares each gas to that of the same mass of CO₂, which by definition has a global warming potential of 1. In comparison, CH₄ has a GWP of 27-30, and N₂O has a GWP of 273 (IPCC, 2021). HFCs, PFCs, and SF₆ are sometimes called high-GWP gases because they trap substantially more heat than CO₂, with GWPs in the thousands or tens of thousands (U.S. EPA, 2023).

The California Air Resources Board (CARB) recognizes the importance of short-lived climate pollutants (SLCP) (described in the Regulatory Setting section) and reducing these emissions to achieve the State's overall climate change goals. SLCP have atmospheric lifetimes on the order of a few days to a few decades, and their relative climate forcing impacts, when measured in terms of how they heat the atmosphere, can be tens, hundreds, or even thousands of times greater than that of CO₂ (CARB, 2017). Given their short-term lifespan and warming impact, short-lived climate pollutants are measured in terms of CO₂e using a 20-year time period. The use of GWPs with a time horizon of 20 years captures the importance of the short-lived climate pollutants and gives a better perspective as to the speed at which emission controls will affect the atmosphere relative to CO₂ emission controls. The Short-Lived Climate Pollutant Reduction Strategy (SLCP Reduction Strategy), as discussed in the Regulatory Setting, addresses CH₄, HFC gases, and anthropogenic black carbon. CH₄ has lifetime of 12 years and a 20-year GWP of 72. HFC gases have lifetimes of 1.4 to 52 years and a 20-year GWP of 437 to 6,350. Anthropogenic black carbon has a lifetime of a few days to weeks and a 20-year GWP of 3,200. The Proposed Project's emission sources are not major contributors of HFC and black carbon; thus, they are not discussed herein.

Greenhouse Gas Reporting

A GHG inventory is a quantification of all GHG emissions and sinks (a process, activity, or mechanism that removes a GHG from the atmosphere) within a selected physical and/or economic boundary. GHG inventories can be performed on a large scale (e.g., for global and national entities) or on a small scale (e.g., for a building or person). Although many processes are difficult to evaluate, several agencies have developed tools to quantify emissions from certain sources. **Table 3.5-1** outlines the most recent global, national, statewide, and local GHG inventories to help contextualize the magnitude of potential project-related emissions.

California GHG Emissions

GHG emissions contributing to GCC are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. The State of California alone produced about 380 million metric tons of CO₂ in 2021. Major sources in California include fossil fuel consumption from transportation (39 percent), industry (22 percent),

electricity production (11 percent), residential (eight percent), and agriculture and forestry (eight percent) sectors (CARB, 2023).

Table 3.5-1: Recent Global, National, State, and Regional Greenhouse Gas Emission Inventories

<i>Emissions Inventory</i>	<i>Total Emissions (MTCO₂e)</i>
2022 United Nations Global Inventory ^I	57,400,000,000
2021 United Nations Global Inventory – United States ^I	6,340,228,290
2021 CARB State Inventory	381,300,000
2015 BAAQMD GHG Emissions Inventory	84,700,000
2015 Sustainable San Mateo County Emissions – San Mateo County	5,200,000

MTCO₂e = metric tons of carbon dioxide equivalent

Notes:

- I. Excludes removal of atmospheric carbon due to land use, land use change, and forestry.

Sources: UN Environment Programme Emissions Gap Report, 2023; UN Framework Convention on Climate Change GHG Data Time Series – Annex I; CARB California Greenhouse Gas Emissions for 2000 to 2021, 2023; BAAQMD GHG Emissions Estimates and Draft Forecasts, 2017; SSMC, Greenhouse Gas Emissions San Mateo County, 2015

Bay Area GHG Emissions

In 2015, the Bay Area Air Quality Management District (BAAQMD) completed a region-wide baseline inventory of GHG emissions for the year 2015. According to that inventory, 84.7 million metric tons of CO₂e were emitted in the Bay Area that year. The sectors that contributed to emissions include transportation (on-road and off-road sources; about 41 percent); industrial, mostly refineries and a cement plant (about 26 percent); electricity and cogeneration, including both direct combustion and electricity imports (about 14 percent); and commercial and residential, mostly fuel combustion for heating and cooking (about 11 percent). The remainder is from high GWP gases (about four percent), recycling and waste facilities (about three percent), and Agriculture and Farming operations (about one percent) (BAAQMD, 2017).

San Mateo County GHG Emissions

San Mateo County estimated that in 2006 countywide CO₂ emissions were 5.91 million metric tons, averaging 8.1 metric tons per capita (San Mateo County, 2015). In 2015, San Mateo County estimated that countywide CO₂ emissions were 5.2 million metric tons, a decrease of 10.6 percent (San Mateo County, 2015).

Potential Climate Change Effects

Climate change is a complex process that has the potential to alter local climatic patterns and meteorology. Although modeling indicates that climate change will result in sea level rise (both globally and regionally) as well as changes in climate and rainfall, among other effects, there remains uncertainty about characterizing precise local climate characteristics and predicting precisely how various ecological and social systems will react to any changes in the existing climate at the local level. Regardless of this uncertainty, it is widely understood that substantial climate change is expected to occur in the future, although the precise extent will take further research to define.

The California Climate Change Assessment documents the effect of climate change throughout the state, including rising temperatures and associated extreme heat events, changing precipitation patterns and potential for flooding and drought, declining Sierra Nevada snowpack levels and associated impacts on water supply, coastal sea level rise, and compounded effects of climate impacts such as greater risk for wildfire (California Natural Resources Agency, 2019). These climate change effects pose direct and indirect risks to public health, as people will experience earlier death and worsening illnesses. Indirect impacts on public health include increased vector-borne diseases, stress and mental trauma due to extreme events and disasters, economic disruptions, and residential displacement (California Natural Resources Agency, 2019).

REGULATORY SETTING

Federal

United States Environmental Protection Agency

Greenhouse gases are broadly regulated by the EPA under the Clean Air Act (42 USC §7401 et seq. Section 202[a]), especially where motor vehicles and large stationary sources are concerned. Primarily, the EPA is responsible for measuring greenhouse gas emissions through the annual Inventory of U.S. GHG Emissions and Sinks report and the GHG Reporting Program; reducing emissions through regulatory initiatives and partnership programs; and conducting analyses and research to continually improve energy efficiency and clean energy policies and programs.

In 2021, President Biden issued Executive Order (EO) 13990 (Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis), which seeks to reduce greenhouse gas emissions and bolster resilience to impacts of climate change, among other objectives. In response, EPA has is considering rulemaking proposals that would affect some of the nation's largest sources of climate- and health-harming pollution, such as the transportation, oil and natural gas, and power sectors. These rules would build on recent regulations and efforts such as those that limit chemicals with high GWPs, such as HFCs, revisions to emissions and fuel use standards for new light- and heavy-duty motor vehicles (described below), updated GHG emission limits from fossil fuel-fired power plants, and continual improvements to the GHG Reporting Program (U.S. EPA, 2023).

Corporate Average Fuel Economy (CAFE) Standards

The National Highway Traffic Safety Administration (NHTSA) Corporate Average Fuel Economy (CAFE) standards require substantial improvements in fuel economy and reductions in emissions

of criteria air pollutants and precursors, as well as GHGs, from vehicles sold in the U.S. The CAFE standards regulate how far vehicles must travel on a gallon of fuel, with standards for light-duty vehicles (passenger cars and light trucks) and separately for medium- and heavy-duty trucks and engines. The light-duty vehicle fuel economy standards are established for model years through 2026, and heavy-duty vehicle standards are established for model years through 2027. Current standards are expected to result in more than three billion tons of GHG emissions reductions (overall) through 2050 (National Highway Traffic Safety Administration, 2023). The next phase of standards, applying to model year 2027 and beyond, are currently underway. In parallel, EPA is planning to establish a rule for multi-pollutant emissions standards under the Clean Air Act and other efforts to speed the transition of light-duty vehicles toward zero-emissions, consistent with EO 14037 (Strengthening American Leadership in Clean Cars and Trucks).

Carbon Pollution Standards and Clean Power Plan

On August 3, 2015, the EPA finalized the Carbon Pollution Standards, which established national limits on the amount of carbon pollution that new, modified, and reconstructed power plants would be allowed to emit. On the same date, the EPA also finalized the Clean Power Plan, setting national limits on carbon pollution from existing power plants.

Energy Policy Act and Energy Independence and Security Act

The Energy Policy Act of 2005 (52 USC §13201 et seq.) addresses energy production, energy consumption and security, energy efficiency, energy resources including renewable energy, energy tax incentives, and climate change technology. The act also provides loan guarantees for entities that develop or use innovative technologies that reduce GHG emissions. The Energy Independence and Security Act of 2007 (EISA, Public Law 110-140) aims to move the U.S. toward greater energy independence and security, increase production of clean renewable fuels, protect consumers, increase energy efficiency, promote research on GHG reductions, improve energy performance of the federal government, and improve vehicle fuel economy. The EISA reinforces EO 13423 (Strengthening Federal Environmental, Energy, and Transportation Management, signed by President Bush in 2007). EPA develops, implements, and revises regulations and voluntary programs under the EISA through the CAFE Standards (described above), federal vehicle fleets, Renewable Fuel Standards (RFS) (described below), biofuels infrastructure, and carbon capture and sequestration (U.S. EPA, 2023).

Renewable Fuel Standards Program

As authorized under the Energy Policy Act of 2005 and expanding on the EISA, the RFS Program establishes annual standards to reduce GHG emissions and expand the nation's renewable fuels sector while reducing reliance on imported oil by reducing the quantity of petroleum-based transportation, heating oil, or jet fuel with biomass-based diesel, cellulosic biofuel, advanced biofuel, or total renewable fuel. EPA updated the RFS for 2023-2025 in June 2023; the final rule includes steady growth of biofuels for use in the nation's fuel supply during this time period (U.S. EPA, 2023).

Municipal Solid Waste Landfills Emissions Guidelines

In 2016, EPA updated the 1996 New Source Performance Standards to reduce emissions of methane-rich landfill gas. The 2016 Emissions Guidelines and Compliance Times for Municipal

Solid Waste Landfills are implemented via a federal plan (issued in 2021) that includes the same elements as required for a state plan: identification of implementation mechanisms, inventory of designated facilities, emissions inventory and limits, compliance schedules, process for EPA/state review of design plans for site-specific gas collection and control systems, monitoring and reporting requirements, and public hearing requirements.

State

Global Warming Solutions Act of 2006 (AB 32) and Statewide GHG Objectives

Reducing GHG emissions in California has been the focus of the State government for approximately two decades. GHG emission targets established by the State legislature include reducing statewide GHG emissions to 1990 levels by 2020 (AB 32) and then reducing them to 40 percent below 1990 levels by 2030 (Senate Bill [SB] 32, 2016), consistent with the target in EO B-30-15. EO S-3-05 calls for statewide GHG emissions to be reduced to 80 percent below 1990 levels by 2050. The State has achieved its goal for 2020 and is on track to achieving the goal for 2030, with ambitious plans (per EO B-55-18 and AB 1279 of 2022) to meet a more stringent goal of statewide carbon neutrality as soon as possible but no later than 2045 and maintain net negative emissions thereafter, ahead of the previously established goal for 2050. As detailed in AB 1279, the State's carbon neutrality goal translates to a reduction of GHG emissions to at least 85 percent below 1990 levels.

AB 32 also authorized CARB to administer the State's Cap-and-Trade program, which covers GHG sources that emit more than 25,000 MTCO₂e per year, such as refineries, power plants, and industrial facilities. The Cap-and-Trade Regulation establishes a declining limit on these major sources, which cover approximately 80 percent of the State's GHG emissions, as an economic incentive for significant investment in cleaner, more efficient technologies. All covered entities in the Cap-and-Trade Program are still subject to existing air quality permit limits for criteria and toxic air pollutants.

AB 32 Scoping Plan

Per AB 32, CARB prepares a Scoping Plan that lays out the State's path to achieving its GHG emissions reduction targets. Most recently, the 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan) outlines the main strategies California will implement to achieve the legislated GHG emissions target for 2030 and "substantially advance toward our 2050 climate goals" (CARB, 2017). It also identifies the reductions needed by each GHG emission sector (e.g., industry, transportation, electricity generation), as well as places new emphasis on transitioning natural and working lands from a net emissions source (due to wildfires) to a carbon sink (via carbon sequestration). Unlike previous updates, the 2022 Scoping Plan does not include specific recommendations for local GHG emissions reductions targets or efficiency metrics (which were previously provided on a per capita and per service population basis). Rather, the 2022 Scoping Plan's Appendix D: Local Actions provide recommendations that focus on plans, measures, policies, and actions that local jurisdictions can take to ensure alignment with State climate goals. These "priority GHG reduction strategies" address transportation electrification, vehicle miles traveled (VMT) reduction, and building decarbonization as the primary, most effective ways that local jurisdictions can contribute to statewide GHG emissions reduction. The 2022 Scoping Plan recommends that local jurisdictions adopt these strategies as part of CEQA-qualified climate action

plans (CAPs) and thereby be consistent with the State's Scoping Plan. Methods of determining consistency with the Scoping Plan are discussed in the Impacts Analysis section below.

State CEQA Guidelines

CEQA Guidelines Section 15064.4 provides guidance to lead agencies for determining the significance of environmental impacts pertaining to GHG emissions. CEQA Guidelines Section 15064.4(a) states that a lead agency should make a good-faith effort that is based, to the extent possible, on scientific and factual data to describe, calculate, or estimate the amount of GHG emissions that would result from implementation of a project. CEQA Guidelines Section 15064.4(b) also states that, when assessing the significance of impacts from GHG emissions, a lead agency should consider: (1) the extent to which the project may increase or reduce GHG emissions compared with existing conditions, (2) whether the project's GHG emissions would exceed a threshold of significance that the lead agency has determined to be applicable to the project, and (3) the extent to which the project would comply with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

The California Supreme Court's decision in *Center for Biological Diversity v. Department of Fish and Wildlife* (62 Cal. 4th 204), known as the "Newhall Ranch decision," confirmed that there are multiple potential pathways for evaluating GHG emissions consistent with CEQA. Several air quality management agencies throughout the state have also drafted or adopted varying threshold approaches and guidelines for analyzing GHG emissions in CEQA documents. Common threshold approaches include (1) compliance with a qualified GHG reduction strategy, (2) performance-based reductions, (3) numeric "bright-line" thresholds, (4) efficiency-based thresholds, and (5) compliance with regulatory programs. While the Newhall Ranch decision upheld use of the Scoping Plan's statewide goal of reducing GHG emissions as a threshold of significance for GHG emissions, if applied to a local project, the EIR must provide supporting evidence that the project emissions relate to the Scoping Plan. (See *Tsakopoulos Investments v. County of Sacramento* (2023) 95 Cal.App.5th 280.)

Low Carbon Fuel Standards

Approved in 2009 and implemented beginning in 2011, the Low Carbon Fuel Standards (LCFS) are one of the early action measures of the AB 32 Scoping Plan to reduce statewide GHG emissions by improving vehicle technology, reducing fuel consumption, and increasing transportation mobility options. The LCFS assess direct emissions associated with producing, transporting, and using fuels and indirect emissions such as from land use changes for biofuels. Transportation fuel providers that must demonstrate that the mix of fuels they supply for use in California meets the LCFS carbon intensity standards for each annual compliance period. The LCFS were last updated in 2020 and reflect carbon intensity benchmarks through 2030, in line with SB 32.

Pavley Rules (AB 1493) and Advanced Clean Cars Program

Building on AB 1493 (also known as "Pavley I"), which requires CARB to adopt light-duty vehicle emissions standards beginning in 2009, the Advanced Clean Cars Program (formerly referred to as "Pavley II") combines several regulations, including the Low-Emission Vehicle (LEV) criteria and GHG regulations and the zero-emission vehicle (ZEV) regulation, into a single package. Advanced Clean Cars I, adopted in 2012, addressed vehicle model years 2015 through 2025 and was developed in coordination with EPA and NHTSA to harmonize GHG and fuel economy standards. The

Advanced Clean Cars II regulations were adopted in 2022, imposing increasingly stringent low-emission and zero-emission vehicle standards for model years 2026 through 2035. Advanced Clean Cars II implements EO N-79-20, issued in September 2020, that established a statewide goal that 100 percent of in-state sales of new passenger cars and trucks will be zero-emission by 2035, 100 percent of medium-and heavy-duty vehicles in the State will be zero-emission by 2045 for all operations where feasible, and 100 percent of all drayage trucks will be zero-emission by 2035 where feasible. EO N-79-20 also establishes a goal to transition to 100 percent zero-emission off-road vehicles and equipment by 2035 where feasible. Amendments to Advanced Clean Cars II, including updates to tailpipe GHG emissions standard and limited revisions to the LEV and ZEV regulations, were proposed in October 2023 and are currently under consideration (CARB, Clean Cars).

Electric Vehicle Charging Infrastructure (SB 454, SB 123, and EO B-48-18)

In complement to the Advanced Clean Cars Program, CARB's Electric Vehicle Supplement Equipment (EVSE or EV Charging Station) Standards Regulation establishes requirements for EV charging stations to implement SB 454 (Electric Vehicle Charging Stations Open Access Act of 2013). Signed in 2018, EO B-48-18 includes a \$2.5-billion initiative to construct 250,000 vehicle charging stations and 200 hydrogen fueling stations in California by 2025. In July 2023, SB 123 modified SB 454 to better harmonize with the National Electric Vehicle Infrastructure (NEVI) Program established in 2022, and the legislation also grants the California Energy Commission (CEC) authority to develop a new regulation that will supersede the current CARB-adopted rule (CARB, Electric Vehicle).

Vehicle Miles Traveled Metrics (SB 743)

Per SB 743 (2013), the Governor's Office of Planning and Research (OPR) implemented changes to the California Environmental Quality Act (CEQA) Guidelines, including the addition of Section 15064.3, which requires CEQA transportation analyses to move away from a focus on vehicle delay and level of service (LOS). In support of these changes, OPR published a Technical Advisory on Evaluating Transportation Impacts in CEQA, which recommends that the determination of the transportation impact of a project be based on whether project-related VMT per capita (or VMT per employee) would be 15 percent lower than that of existing development in the region. OPR's technical advisory explains that this criterion is consistent with Section 21099 of the California Public Resources Code, which states that the criteria for determining significance must "promote the reduction in greenhouse gas emissions" (OPR, 2018).

Renewable Portfolio Standards (SB 1078 and SB 107) and 100 Percent Clean Energy Act (SB 100)

The Renewable Portfolio Standards (RPS) were established in 2002 under SB 1078 and accelerated in 2006 under SB 107. The RPS requires increasing proportions of energy production from renewable sources including solar, wind, geothermal, and biomass generation. Electricity providers, such as PG&E, have been required to increase their renewable portfolio by one percent year over year. SB 100 (the 100 Percent Clean Energy Act of 2018) updated the RPS to ensure that by 2030, at least 60 percent of California's electricity is renewable. The legislation also sets a 2045 goal of powering all (100 percent) retail electricity sold in California and State agency electricity needs with renewable and zero-carbon resources.

Clean Energy and Pollution Reduction Act of 2015 (SB 350)

The Clean Energy and Pollution Reduction Act (SB 350) established clean energy, clean air, and GHG reduction goals. Specifically, SB 350 increases California's renewable electricity procurement goal from 33 percent by 2020 to 50 percent by 2030, utilizing RPS eligible resources (described above). To double statewide energy efficiency savings in electricity and natural gas by 2030, SB 350 also requires large utilities to submit integrated resource plans (IRPs) that detail how they will meet their customers' resource needs, reduce GHG emissions, and ramp up the use of clean energy resources. The CPUC, CARB, and CEC coordinate to support transportation electrification. They also identify and assess barriers to and opportunities for solar photovoltaic energy generations, access to other renewable energy, barriers to energy efficiency and weatherization investments, barriers to contracting opportunities for local small businesses, and access to zero- and near-zero-emission transportation options – specifically for low-income customers, including those in disadvantaged communities.

AB 802, also signed into law in 2015, supports SB 350 by authorizing the CEC to create a building energy-use benchmarking and disclosure program to improve the development and evaluation of policy and programs and the state's energy infrastructure planning efforts. AB 802 also authorizes electrical and gas corporations to provide financial incentives to their customers that increases the energy efficiency of existing buildings based on all estimated energy savings and energy usage reductions (California Energy Commission, SB 350).

Building Energy Efficiency Standards (Title 24, Part 6)

The energy consumption of new residential and nonresidential buildings in California is regulated by the California Code of Regulations (CCR), Title 24, Part 6, Building Energy Efficiency Standards (also referred to as the Energy Code). The CEC updates the Energy Code every three years with more stringent design requirements to reduce energy consumption, resulting in lower GHG emissions. The 2022 Energy Code, which was adopted in August 2021 and took effect on January 1, 2023, encourages efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, strengthens ventilation standards, and more. The 2022 Energy Code also introduces new requirements for low-rise multifamily buildings. According to the Impact Analysis of the 2022 Energy Code, the 2022 update would save 5,472 giga BTUs (GBTUs) of site energy, 1,565 gigawatt-hours (GWh) of electric energy, 14.39 million therms of gas energy, 46,782 giga time-dependent valuation energy, 2,954 GBTUs of hourly source energy, and 285,214 MTCO₂e per year over the 2019 Energy Code, while also providing an annual non-coincident peak demand reduction of 123 megawatts (MW) (California Energy Commission, 2022 Energy Code).

Green Building Standards Code (Title 24, Part 11)

CCR, Title 24, Part 11 constitutes the California Green Building Standards Code, known as CALGreen, which is the nation's first mandatory green building standards code developed by the California Building Standards Commission (CSBSC) in 2007 to meet the goals of AB 32. CALGreen applies to nonresidential structures including new buildings or portions of new buildings, additions and alterations, and all occupancies where no other state agency has the authority to adopt green building standards applicable to the occupancies. The code features: regulations for energy efficiency, water efficiency and conservation, material conservation and resource efficiency, environmental quality, and more; mandatory provisions for commercial, residential, and public

school buildings; appendices with voluntary provisions for all of these occupancies, plus hospitals; and residential and nonresidential provisions. Voluntary measures are often referred to by their level of achieving enhanced construction or incorporation of additional green building measures beyond the minimum mandatory requirements; “Tier 1” requirements are more stringent than the base mandatory provisions, and “Tier 2” achieves an even higher standard. CALGreen undergoes triennial updates, mostly recently including the 2022 CALGreen Code, which took effect on January 1, 2023.

Solid Waste Diversion (AB 939 and AB 341)

In 2011, AB 341 modified the California Integrated Waste Management Act of 1989 (AB 939) and directed the California Department of Resources Recycling and Recovery (CalRecycle) to develop and adopt regulations for mandatory commercial recycling. AB 341 also established a statewide recycling goal of 75 percent, while the 50-percent disposal reduction mandate established under AB 939 still applies to cities and counties. Although California’s infrastructure currently only diverts about half of the state’s waste stream and is not large enough to handle the large amount of potentially recyclable materials collected by local governments and partners in the solid waste industry, the State has shifted focus on reducing GHG emissions that have the most immediate impact on climate (i.e., SLCP).

Short-Lived Climate Pollutant Reduction Strategy (SB 1383)

In 2016, SB 1383 directed CARB to approve and implement the SLCP Reduction Strategy to achieve 40 percent reduction in CH₄, 40 percent reduction in HFC gases, and 50 percent reduction in anthropogenic black carbon, relative to 2013 levels by 2030. SB 1383 also establishes targets for reducing organic waste in landfills (50 percent reduction in organic waste disposal relative to 2014 levels by 2020 and 75 percent by 2025) as well as CH₄ emissions from dairy and livestock operations (40 percent reduction relative to the livestock and dairy sectors’ 2013 levels by 2030).

CARB adopted the SLCP Reduction Strategy in March 2017 as a framework for achieving the CH₄, HFC, and anthropogenic black carbon reduction targets set by SB 1383. The SLCP Reduction Strategy includes 10 measures to reduce SLCPs, which fit within a wide range of ongoing planning efforts throughout the state. For example, in 2019, CARB and CalRecycle proposed new and amended regulations to CCR Title 14 and Title 27 that set forth minimum standards for organic waste collection, hauling, and composting that took effect on January 1, 2022. Since then, 75 percent of California communities report they have residential organic waste collection in place. According to CalRecycle, California now has 206 organic waste processing facilities, with 20 more on the way (CalRecycle).

Water Conservation Act of 2009 (SB X7-7) and 2018 Water Conservation Legislation (SB 606 and AB 1668)

The Water Conservation Act of 2009 (SB X7-7) requires all water suppliers to increase their water use efficiency and establishes the “20x2020 Water Use Targets” to reduce per capita urban water use by 20 percent as of December 31, 2020. Reductions in water consumption reduce the amount of energy, as well as the emissions, associated with conveying, treating, and distributing the water; emissions from wastewater treatment are also reduced.

The California Department of Water Resources (DWR) collects data and monitors compliance with water use targets and objectives established by SB X7-7 in addition to other reporting requirements (e.g., validated distribution system water loss audits, Urban Water Management Plans, and Model Water Efficient Landscape Ordinances). DWR, in coordination with the State Water Board, also implements the 2018 Water Conservation Legislation (AB 1668 and SB 606), which establish standards to exceed SB X7-7 targets and establish a new framework for long-term improvements in urban water use efficiency and drought planning. The standards do not apply to certain commercial, industrial, and institutional (CII) water uses that are separately subject to CII water use performance measures.

Regional and Local Regulations

Metropolitan Transportation Commission

The MTC is the Metropolitan Planning Organization for the nine counties that comprise the San Francisco Bay Area and the San Francisco Bay Area Air Basin (SFBAAB), which includes San Mateo County and the City of Pacifica. The first per-capita GHG emissions reduction targets for the SFBAAB were seven percent by 2020 and 15 percent by 2035 from 2005 levels. MTC adopted an SCS as part of their RTP for the SFBAAB in 2013 known as Plan Bay Area (MTC, 2017). On July 26, 2017, the strategic update to this plan, known as Plan Bay Area 2040, was adopted by the Association of Bay Area Governments (ABAG) and the MTC. As a limited and focused update, Plan Bay Area 2040 builds upon the growth pattern and strategies developed in the original Plan Bay Area but with updated planning assumptions that incorporate key economic, demographic, and financial trends since 2013. The next update to Plan Bay Area, Plan Bay Area 2050, was adopted in October 2021. Plan Bay Area 2050 serves as a roadmap for the San Francisco Bay Area's future through 2050 (MTS, 2021). For the San Francisco Bay Area, the per capita GHG emissions reduction target applicable to Plan Bay Area 2050 is 19 percent by 2035 (i.e., emissions from vehicles and light-duty trucks compared with 2005 levels).

Bay Area Air Quality Management District

The Bay Area Air Quality Management District (BAAQMD) is the primary agency responsible for addressing air quality concerns in the San Francisco Bay Area, including San Mateo County. BAAQMD has adopted advisory emission thresholds to assist CEQA lead agencies in determining the level of significance of a project's GHG emissions, including long range plans (e.g., general plans, specific plans), which are outlined in *its California Environmental Quality Act: Air Quality Guidelines* (CEQA Guidelines) (BAAQMD, 2017). The CEQA Guidelines also outline methods for quantifying GHG emissions, as well as potential mitigation measures.

San Mateo County

San Mateo County adopted the long-term reduction target set by the U.S. Cool Counties Climate Stabilization Declaration in October 2007. This declaration calls for the County to work closely with local, state, and federal governments and other leaders to develop a regional plan to reduce county geographical GHG emissions to 80 percent below current levels by 2050.

San Mateo County has two Climate Action Plans currently in place – a Government Operations Climate Action Plan and a Community Climate Action Plan. In 2012, the Board of Supervisors adopted the County's Government Operations Climate Action Plan, which focuses on the County's

facilities and operations. This Plan outlines GHG reduction measures to implement in the areas of energy, transportation, and solid waste in order to meet our goal of a 15 percent reduction in GHG emissions by the year 2020. In 2013, the County also completed the Community Climate Action Plan (also known as the Energy Efficiency Climate Action Plan). This Plan includes a GHG inventory of all the emissions that resulted from unincorporated San Mateo County and a list of various proposed measures to reduce these emissions. The Office of Sustainability is currently working with the Planning and Building Department to update the existing Community Climate Action Plan.

City of Pacifica General Plan 2040

The City of Pacifica General Plan 2040 (General Plan) includes the following goals and policies associated with energy and greenhouse gases:

Land Use

Guiding Policy LU-G-2: Concentrated Development. Focus new development in or directly adjacent to already-developed areas, where it can be served by existing public services and where it will not have significant impacts on coastal or other resources.

Guiding Policy LU-G-4: Higher-Density Housing. Locate higher-density housing outside of Coastal Vulnerability Zones and in accessible places close to community

Guiding Policy LU-G-5: Commercial Area Revitalization. Facilitate the revitalization of shopping areas and the creation of distinct commercial districts in Pacifica, resulting in wider shopping and dining opportunities for residents, enhanced attractions for visitors, increased sales tax revenues, and a stronger community image.

Implementing Policy LU-I-10: Walkable and Transit-Oriented Development. Facilitate higher-density, mixed use development at specific locations along the coastline where an active, pedestrian environment is desired as shown

Implementing Policy LU-I-15: Transfer of Development Rights. Amend the Transfer of Development Rights (TDR) program to reflect the following changes:

- Use the City's TDR ordinance to relocate development rights from Coastal Vulnerability zones and other hazardous areas (sending sites) to receiving sites out-side of Coastal Vulnerability zones or other hazardous areas. Identify areas where densities and heights may be increased using TDR credits, including to facilitate affordable housing.
- Apply receiving status to appropriate sites designated for mixed use development in addition to the residential land use categories.

Implementing Policy LU-I-16: Density Bonus. Continue to facilitate housing affordable to moderate-, low- and extremely-low-income households by providing a density bonus of up to 50 percent over the maximum allowed by zoning.

Implementing Policy LU-I-17: Second Units. Update the zoning ordinance to ensure that regulations governing second residential units conform with current State requirements.

Currently second units are permitted by right if they meet parking, setback, height, and other development regulations, in compliance with State requirements.

Implementing Policy LU-I-18: Parking Requirements. Update commercial and mixed use parking requirements as appropriate based on best practices. Provide for shared parking between commercial uses; car-sharing availability for residential uses, reductions for transit-accessible locations, and other strategies.

Circulation

Guiding Policy CI-G-2: Serve All Users. Plan, design, build, and maintain transportation improvements to support safe and convenient access for all users with priority for “complete streets” projects that facilitate walking, bicycling and transit use wherever possible.

Implementing Policy CI-I-1: Connective Street Network. Require new streets created as part of new development to continue existing street patterns, and include stub access points to adjacent undeveloped areas.

Implementing Policy CI-I-2: Complete Streets Design Approach. Update the City’s engineering design standards to implement Complete Streets concepts, and include Complete Streets design principles in the planning of all circulation improvement projects. These principles include, but are not limited to:

- Maximizing connections with the existing circulation network;
- Minimizing ingress and egress points and consolidating entries;
- Providing public transit facilities and improvements;
- Providing bicycle and pedestrian facilities (bike lanes and sidewalks);
- Minimizing pedestrian crossing distances by providing curb extensions; medians with safety refuges, and other treatments;
- Improving safety by providing lighting and traffic calming devices for residential streets;
- Including landscaping (trees, medians, key intersections and gateways);
- Providing appropriate signage, including street signs, entry signs, directional signs, and coastal access identification signs;
- Providing street furniture; and
- Maintaining on--street parking.

Implementing Policy CI-I-3: Complete Streets in the Project Development Process. Incorporate complete streets concepts at each stage of the development process for projects affecting the right-of-way, including the following:

- As part of design review, both at Phase I and Phase II, require documentation of how the “routine accommodation” of bicyclists and pedestrians has been satisfied in planning and design.;
- During project review and approval, ensure that the objectives and purpose are consistent with MTC directives on Complete Streets and Routine Accommodation;
- For projects subject to MTC’s Resolution 3765, as amended, work with MTC to secure approval of the Complete Streets checklist and submittal to MTC of all required documents.

Integrating Complete Streets considerations should require only minor additions to normal design, acquisitions, and approval guidelines.

Implementing Policy CI-I-4: Roadway Retrofits. Identify opportunities to retrofit existing roadways to create complete streets, giving priority to arterial and collector streets where travel lanes may be narrowed or where four lanes may be converted to three, including a center left turn lane, with bicycle facilities added in both cases.

Linda Mar Boulevard, Terra Nova Boulevard, Fassler Avenue, Palmetto Avenue, Esplanade Avenue, Monterey Road, Hickey Boulevard, Rosita Road, Crespi Drive, Oddstad Boulevard, Everglades Drive, Alicante Drive, Talbot Avenue, Inverness Drive, and Gateway Drive may all present opportunities for roadway retrofits. Roadway retrofits will also help to complete the bicycle network, as described in Section 5.4, and provide safety for cyclists. Ten- and eleven-foot travel lanes are often acceptable for auto and transit use, respectively, without adversely affecting capacity. Roadway retrofits will require additional analysis.

Implementing Policy CI-I-5: Streetscape in Mixed Use Areas. Require pedestrian-oriented amenities and design in visitor-oriented commercial and mixed use areas, including wider sidewalks, curb bulb-outs at key intersections, outdoor seating, and public art.

Priority streetscapes include Palmetto between Paloma and Clarendon; Montecito, Santa Rosa, and San Jose Avenues in West Sharp Park; Rockaway Beach Avenue and Dondee Way in Rockaway Beach; lower Crespi Drive and Linda Mar Boulevard in Linda Mar; Manor Drive and Aura Vista Drive in West Edgemar-Pacific Manor; and Oddstad and Terra Nova Boulevards and new streets created as part of redevelopment of the Park Mall site.

Implementing Policy CI-I-13: Hickey Boulevard and Gateway Drive Intersection Improvements. Add signal control to the intersection of Hickey Boulevard and Gateway Drive, with signal timing to facilitate traffic movement.

Implementing Policy CI-I-14: Strategies to Reduce School-Related Peak Hour Auto Congestion. Work with Pacifica School District and Jefferson Union High School District to promote adoption of staggered hours, car-pooling, and use of transit to reduce traffic congestion during peak hours. This policy applies especially to Vallemar School and the Pacifica School District offices, where trips contribute to traffic congestion around SR 1 and Reina del Mar Avenue.

Implementing Policy CI-I-15: Multi-modal Level of Service (LOS) Performance Measures. Develop performance measures for LOS for pedestrians, cyclists, and transit users, based on the criteria in this chapter and on “best practices.” Measures may be both quantitative (for example, sidewalk width) and qualitative (perceived safety and attractiveness.) Measures should use data that is readily available or can be readily collected, while providing an accurate assessment.

Implementing Policy CI-I-16: LOS for Pedestrians, Cyclists and Transit Users. Strive to maintain LOS C or better for pedestrians, cyclists, and transit users on all roadways, and impose mitigation measures as needed to achieve multi-modal service objectives.

Implementing Policy CI-I-17: Vehicle Level of Service on Roadways Included in the Congestion Management Program. Accept an LOS E on SR 1 and SR 35, consistent with the C/CAG Congestion Management Program (CMP), in planning improvements.

Implementing Policy CI-I-27: Sharp Park Specific Plan Streetscape. Complete and implement streetscape improvements in the Sharp Park Specific Plan to widen sidewalks, provide bike lanes, landscaping, and make other improvements that will upgrade the appearance of the area and make it more attractive to pedestrians.

Implementing Policy CI-I-28: Additional Pedestrian Facilities on Large Sites. Enhance the pedestrian network with an interconnected system of walkways, continuous sidewalks on both sides of the street, and pedestrian crossings as part of higher-intensity redevelopment of large sites.

Implementing Policy CI-I-29: Safe Routes to Schools. Partner with Pacifica School District and Jefferson Union School District to develop and implement a Safe Routes to Schools program.

Implementing Policy CI-I-32: Class II Facility Design. Wherever Class II facilities are designated, make bike lanes at least 5 feet wide along local streets and at least 6 feet wide on arterials or highways. Separate Class II facilities from vehicle traffic with a solid stripe and mark them with bike lane symbols.

Implementing Policy CI-I-33: Class III Facility Design. Demarcate Class III bicycle facilities by painting “sharrows” on streets, where appropriate.

Implementing Policy CI-I-34: Signage Program. Develop and implement a signage program for the bikeway system in order to:

- Alert motorists to the presence of cyclists on the road;
- Alert cyclists to route turns junctions, and changes in the class of bicycle facility; and
- Provide a clear identity for each bicycle route, and periodically provide distance to key destinations.

Implementing Policy CI-I-35: Obstructions. Align designated bikeways to avoid obstructions such as light posts, signage, trees, and curb cuts, and relocate or modify these obstructions as necessary.

Implementing Policy CI-I-36: Priorities for Improvements. Make designated bicycle routes a priority for pavement repair, as needed, and for regular maintenance to remove sand, gravel or other debris.

Implementing Policy CI-I-37: Improved Bikeway Visibility. Use strategies to improve bikeway visibility, including but not limited to: Using visual cues such as brightly-colored paint on bike lanes or a one-foot painted buffer strip;

- Upgrading a Class III facility to Class II and providing additional signage; and
- Removing on-street parking, if feasible.

Implementing Policy CI-I-38: Bicycle Lockers at Public Parking Lots. Replace existing bicycle lockers at the public parking lot on Crespi Drive, and add lockers at the park-and-ride lot on Linda Mar Boulevard.

Implementing Policy CI-I-41: Bicycle Parking at Schools and Workplaces. Work with the school districts and employers to provide adequate bicycle parking at all schools and workplaces with 30 or more employees.

Implementing Policy CI-I-45: Service Optimization. Continue coordination efforts with transit agencies (i.e., SamTrans) to maintain transit service that is safe and efficient, provides convenient connections to high-use activity areas and key destinations outside the City, and responds to the needs of all passengers, including seniors, youth, and persons with disabilities.

Implementing Policy CI-I-46: Improved Transit Stops. Work with transit agencies to improve transit stops and access to facilities.

Implementing Policy CI-I-50: Transportation Demand Management Measures. Incorporate conditions of approval for development projects that exceed the Congestion Management Program (CMP) threshold for impacts to the CMP transportation network to require adoption of transportation demand management (TDM) measures authorized by the CMP to make measurable reductions in their trip generation and to require a monitoring plan to determine if established trip reduction targets are met or exceeded. Require TDM measures for development projects below the CMP threshold whenever feasible, but do not require a monitoring plan for these smaller projects.

Implementing Policy CI-I-51: Local Transportation Services. Support expanded funding for local transportation services tailored to the schedules and destinations of students, seniors, and recreational visitors.

Implementing Policy CI-I-57: Shared Parking. Facilitate efficient use of parking areas by allowing uses whose primary activity occurs at different times of day or days of the week to

share parking, and provide less than the sum total of parking spaces each use would be required to provide individually. Require a shared parking agreement and approval of the Planning Director.

Implementing Policy CI-I-58: Accessible Parking. Require convenient and accessible parking facilities for persons with disabilities, consistent with Americans with Disabilities Act (ADA) requirements.

Implementing Policy CI-I-60: In-Lieu Parking Fees. Allow developers to meet their minimum parking requirements via shared parking between uses, payment of in-lieu fees, or off-site parking within a reasonable walking distance.

Implementing Policy CI-I-61: Environmental Benefits. Amend the Zoning Ordinance to establish “green” parking design standards that have multiple benefits, including photovoltaic panels to generate energy for parking lot lighting, and pervious paving to improve groundwater recharge.

See also policies on stormwater management and sustainable planning and design in Chapter 7. See Chapter 3: Community Design for additional policies on designing parking to create a strong urban fabric

Conservation

Guiding Policy CO-G-5: Water Conservation. Work with the NCCWD to meet water conservation objectives as required by State law.

Pacifica’s water conservation efforts will include water efficient landscaping requirements, incentives for water conservation, and expansion of the system to use recycled wastewater for landscaping irrigation.

Guiding Policy CO-G-10: Trees. Conserve trees and encourage native forestation and planting of appropriate trees and vegetation.

Guiding Policy CO-G-15: Energy Conservation. Support efforts to reduce energy use by increasing energy efficiency in buildings and promoting awareness of energy use.

Guiding Policy CO-G-17: Historic and Cultural Sites. Conserve designated historic and cultural sites and structures that help define Pacifica’s identity and character and increase public awareness and appreciation of them.

Implementing Policy CO-I-16: Runoff Capacity Management. Require new development for all project types to include storm drainage design that results in runoff below or equal to pre-development conditions.

Implementing Policy CO-I-20: Incentives for Water Conservation. Encourage the NCCWD to continue and expand its water conservation incentive programs, including free water-efficient fixtures and rebates for water-efficient appliances.

Implementing Policy CO-I-21: Water Recycling. Continue to support implementation and expansion of NCCWD's water recycling project, involving new pipes and pumping stations, to allow treated wastewater from the Calera Creek Water Recycling Plant to be used for irrigation of landscaped areas.

The feasibility of expanding this project to include other potential uses of recycled water such as linkages with fire hydrants will be evaluated.

Implementing Policy CO-I-22: Water Storage. Support the NCCWD in its efforts to provide adequate emergency water storage in Pacifica.

Implementing Policy CO-I-46: Mineral Resources. If significant mineral resources are discovered with regional agencies to determine a course of action to protect the resources and, if applicable, extract them in an environmentally sensitive manner.

Implementing Policy CO-I-47: Recreational Uses. Promote recreational uses, such as horse boarding and trail riding, which retain open space character while contributing to a visitor-based economy.

Implementing Policy CO-I-48: Regional Cooperation. Cooperate with the Bay Area Air Quality Management District (BAAQMD) and other public agencies in implementing plans to achieve State and Federal Ambient Air Quality Standards.

Implementing Policy CO-I-49: Impact Guidelines. Use the BAAQMD's *Air Quality Guidelines*, to determine and mitigate project air quality impacts.

The City consults with the BAAQMD during CEQA review for projects that require air quality impact analysis and BAAQMD is on the distribution list for CEQA documents.

Implementing Policy CO-I-50: Sensitive Receptors. Work with BAAQMD to develop and implement a Community Risk Reduction Plan to address the exposure of sensitive populations to toxic air contaminant emissions in Pacifica.

Implementing Policy CO-I-52: Dust Abatement. Require contractors to use best management practices to reduce particulate emissions and dust associated with construction activities.

BMPs include, but are not limited to: regular materials and vehicle tire watering; covering of stockpiles; phasing or extension of grading operations; suspension of grading during high wind periods; and revegetation of graded areas.

Implementing Policy CO-I-56: Solar Orientation. When possible, require buildings to be oriented such that the use of passive and active solar strategies is maximized, in order to promote energy efficiency.

To achieve ideal solar orientation conditions, the long axis of the building should be oriented east-west, within 15 degrees.

Implementing Policy CO-I-57: Encourage Solar Power Generation. Promote use of passive and active solar devices such as solar collectors, solar cells, and solar heating systems in buildings and parking areas by incentive programs and streamlining review.

Implementing Policy CO-I-58: Clean City Fleet. Establish City budget for clean fuels and electric or hybrid vehicles to replace and improve the existing fleet of gasoline and diesel powered vehicles.

Implementing Policy CO-I-59: City Purchasing of Renewable Energy. Pursue opportunities for the City to lower the cost of purchasing and producing renewable energy, such as through Peninsula Clean Energy or other energy provider at the best value to the City.

Implementing Policy CO-I-60: Waste Collection. Periodically evaluate the City's waste collection contract to ensure that Pacifica residents and businesses receive high-quality and cost effective service.

Implementing Policy CO-I-61: Waste Reduction and Diversion. Seek to continually reduce Pacifica's output of solid waste and increase the proportion of waste diverted from landfills, setting targets and monitoring progress.

Implementing Policy CO-I-62: Energy Efficiency in Public Buildings. Prepare and implement a plan to increase energy efficiency in existing public buildings.

Measures may include:

- *Conduct energy audits for all municipal facilities;*
- *Retrofit municipal facilities for energy efficiency where feasible and when remodeling or replacing components, including increased insulation, installing green or reflective roofs, installing automated lighting controls, and retrofitting heating and cooling systems.*
- *Require that any newly constructed, purchased, or leased municipal space meet minimum standards, such as exceeding Title 24 energy efficiency by 20 percent;*

Implementing Policy CO-I-63: Wastewater and Water System Efficiency. Maximize the efficiency of City-operated wastewater treatment, water treatment, pumping, and distribution equipment.

Implementing Policy CO-I-64: Outdoor Lighting. Establish outdoor lighting performance standards to minimize energy use while ensuring appropriate light levels. These can be met by :

- Greater use of photocells or astronomical time switches;
- Directional and shielded LED lights;
- Security lights with motion detectors; and

- Prohibitions against continuous all-night outdoor lighting unless needed for security reasons.

Implementing Policy CO-I-67: Public Agency Support for Local Historic Sites. Seek support from public agencies, such as GGNRA, for local historic preservation programs for designated sites.

Two documents have been prepared for San Mateo County that should guide agency involvement in Pacifica's historic resources: the Sanchez Adobe Historical Site Master Plan (2007) and the Historic Resource Study for Golden Gate National Recreation Area in San Mateo County (2010).

Implementing Policy CO-I-69: Adaptive Reuse. Promote adaptive reuse of historic structures—preserving their original design and character—as an option for preserving sites that are threatened with demolition or degradation.

Pacifica Climate Action Plan

In July 2014, the City Council adopted the City of Pacifica Climate Action Plan (CAP), designed to be a blueprint of the community's response to the challenges posed by climate change. The CAP presents a baseline greenhouse gas inventory, energy consumption, emissions forecast, reduction targets, and climate action strategies to meet the reduction targets. The CAP establishes a goal of reducing total community-wide emissions by 35 percent below 2005 levels by 2020, and 80 percent below 1990 levels by 2050.

Pacifica's Climate Action Plan was last updated in 2014 and in May 2023, Pacifica City Council directed the formation of a Climate Action and Adaptation Plan Task Force (CAAP Force) to develop an update to the Plan. The CAAP Force's 11-members were appointed on July 10, 2023, and began meeting in September 2023. As of August 2024, the update to the Plan is still in progress.

Impact Analysis

SIGNIFICANCE CRITERIA

Implementation of the Proposed Project would have a potentially significant adverse impact if it would:

- Criterion 1:** **Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment;**
- Criterion 2:** **Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing emissions of GHG;**
- Criterion 3:** **Cause wasteful, inefficient, and unnecessary consumption of energy during project construction, operation, and/or maintenance; or,**
- Criterion 4:** **Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.**

METHODOLOGY AND ASSUMPTIONS

Energy

The energy analysis for the Proposed Project evaluates the following sources of energy consumption associated with existing conditions and implementation of the Proposed Project:

- Short-term construction – gasoline and diesel consumed by vehicles and off-road construction equipment associated with new land uses in the Planning Area.
- Operational building energy – electricity and natural gas consumed by the existing and new land uses in the Planning Area.
- Operational on-road vehicles – gasoline consumed by the existing and future service populations.

With an anticipated buildout year of 2040, construction of new land use developments allowable under the Proposed Project would occur intermittently in the Planning Area throughout the course of the buildout period. As the timing and intensity of future development projects is not known at this time, the energy consumption resulting from construction activities associated with buildout of the Planning Area cannot be accurately quantified at this time. Thus, the evaluation of potential construction-related impacts related to energy consumption from implementation of the Proposed Project is conducted qualitatively in this EIR.

For transportation energy use, the analysis uses DKS Associates estimates of the daily VMT generated in 2015 and estimates of daily VMT generated for the 2040 Proposed Project buildout. Energy use associated with fuel consumption during operations (vehicle trips) by existing uses and future land uses under the Proposed Project was calculated by converting GHG emissions predicted by the GHG analysis using the rate of CO₂ emissions emitted per gallon of combusted gasoline (8.78

kilograms/gallon) and diesel (10.21 kilograms/gallon). The estimated fuel consumption was converted to BTUs, assuming an energy intensity of 122,364 BTUs per gallon of gasoline and 138,490 per gallon of diesel (EIA, 2021). Fuel efficiency is assumed to be higher in the future than today, as a result of implementation of existing State policy. To the extent that the analysis incorporates transportation energy, it reflects a cumulative impact analysis because the projected future VMT assumes the implementation of the Proposed Project as well as wider regional growth, development, and regulatory efforts.

Operational electricity and natural gas consumption for the existing uses and future land uses under the Proposed Project was drawn from the modeling performed to support the GHG analysis. California Emissions Estimator Model (CalEEMod), version 2020.4.0 outputs for natural gas consumption are provided in BTU; outputs for electricity consumption, which are provided in kWh, were converted to BTU assuming an energy intensity of 3,414 BTU per kWh.

The Proposed Project's incremental (net) increase in energy consumption is determined by comparing the future with Proposed Project conditions against existing conditions. To determine whether the Proposed Project would result in wasteful and inefficient energy usage, a per capita energy consumption value is determined for the Proposed Project by dividing its net increase in energy use by its service population. This value is then compared to the per capita energy consumption under existing (2015) conditions to ascertain whether energy use would increase or decrease under the Proposed Project.

Greenhouse Gases

GHG emissions associated with the Proposed Project would result from operation of future land uses that would be developed in the Planning Area and from traffic volumes generated by these new developments. These emissions would not occur at once but over the course of the Proposed Project's buildout period. Construction activities would also generate GHG emissions within the Planning Area and on roadways resulting from construction-related traffic.

For this analysis, impacts of the proposed Project on GHG emissions and energy resources from construction were assessed qualitatively, while impacts from operations were assessed quantitatively using standard and accepted software tools, techniques, and emission factors. The primary assumptions and key methods used to quantify emissions and estimate potential impacts are described below. Model inputs and calculation files are provided in Appendix C: Air Quality and Greenhouse Gas Data.

This analysis provides a program-level overview of construction and operational emissions that could occur with buildout of the Proposed Project. Subsequent project-level environmental review, including quantification of construction GHG emissions, would be conducted during the processing of individual applications for future projects associated with the proposed Project.

Construction GHG Emissions

Land uses that could be developed under the Proposed Project would generate construction-related GHG emissions from mobile and stationary construction equipment exhaust and employee and haul truck vehicle exhaust. With an anticipated buildout year of 2040, development of the various land uses associated with the Proposed Project would occur over an extended period of time and

would depend on factors such as local economic conditions, market demand, and other financing considerations. However, the specific size, location, and construction techniques and scheduling that would be utilized for each individual development project occurring within the Planning Area from implementation of the Proposed Project is not currently known. Without specific project-level details it is not possible to develop a refined construction inventory,¹ and the determination of construction emission impacts associated with GHGs for each individual development project, or a combination of these projects, would require the City to speculate regarding such potential future project-level environmental impacts. Thus, in the absence of the necessary construction information required to provide an informative and meaningful analysis, the evaluation of potential construction-related impacts resulting from implementation of the Proposed Project is conducted qualitatively in this EIR and assessed against applicable BAAQMD criteria.

Operational GHG Emissions

Operation of the land uses introduced by the Proposed Project would generate long-term emissions of CO₂, CH₄, and N₂O. Five types of GHG sources are expected during operation of the land uses associated with the Proposed Project: area, energy, mobile, waste, and water. Area sources include landscaping activities and consumer products (e.g., personal care products). Energy sources include electricity consumption and natural gas combustion for lighting and heating requirements. Mobile sources are vehicle trips that are generated by the service population associated with the Proposed Project. The waste category refers to CH₄ from the decomposition of waste generated from the new land use developments in the Planning Area. Finally, the water source includes electricity consumption for the supply, treatment, and distribution of water for the new land uses.

Operational emissions of GHGs under the Proposed Project were quantified using CalEEMod. Mobile-source emissions of GHGs were modeled based on the daily vehicle trips and VMT data provided by DKS, the Proposed Project's traffic engineers. Daily VMT data for existing conditions (2020, based on 2015 VMT given limited development during the five-year period) and future buildout (2040) year conditions with the Proposed Project were provided. VMT data for the Proposed Project accounts for trip reductions achieved by General Plan policies that increase proximity to transit and mixed-use design.

Area, energy, water, and waste emissions were modeled according to the size and type of land uses proposed. Emissions were quantified for existing (2020) conditions and future (2040) buildout conditions with and without the Proposed Project based on current and anticipated land uses. CalEEMod defaults were assumed, with the exception of wood burning stoves and fireplaces, which were assumed to be prohibited for all new development under the proposed Project per BAAQMD Regulation 6, Rule 3. Additionally, the CAP goal of achieving 75 percent diversion of solid waste community-wide was incorporated into the 2040 forecast that includes Proposed Project and CAP policies. The Proposed Project's operational emission estimates also assume implementation of applicable State regulations designed to reduce GHG emissions, primarily passenger vehicle

¹ Project-level information includes details such as the size and scale of the project to be constructed, construction schedule, equipment fleet, construction worker crew estimates, and demolition and grading quantities.

emission standards (Pavley) and the RPS. Refer to Appendix C for the land use assumptions and CalEEMod output files.

GHG Emissions Thresholds

CEQA Guidelines Section 15064.4 directs lead agencies to “make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate, or estimate the amount of greenhouse gas emissions resulting from a project.” In alignment with existing laws and regulations (as described in the Regulatory Settings), OPR guidance suggests that lead agencies may take a qualitative or quantitative approach to analyze potential significance of climate change impacts on the environment.

Unlike criteria air pollutants, which are generally considered regional or local concerns, GHGs are global pollutants that are driving global climate change. As discussed in the Environmental Setting, GHGs have long atmospheric lifetimes, and continuous GHG emissions generated worldwide cumulatively contribute to past, present, and future carbon in the atmosphere. Accordingly, generation of GHG emissions by the Proposed Project are assessed cumulatively, using a combination of qualitative and quantitative methods, where feasible.

The Newhall Ranch decision establishes that lead agencies must reasonably substantiate the applicability of quantitative statewide emissions thresholds, such as those provided in the 2017 and 2022 Scoping Plans, in determining the significance of GHG impacts from a project – especially in consideration of the specific location and scope of the project. As discussed in the Regulatory Setting, existing State laws and regulations have continued to shift the trajectory of statewide GHG emissions downward, most recently aiming for carbon neutrality by 2045. In response, regulatory programs like the Advanced Clean Cars Program, the Cap-and-Trade program, LCFS, and RPS are examples of market-based approaches that target reductions from significant emissions sources and specific sectors throughout the state. Such regulations are expected to continue to impact local GHG emissions inventories; however, they are not considered sufficient or appropriate measures for mitigating a project’s impacts, and local jurisdictions have limited influence over such actions. Rather, recent State guidance encourages local jurisdictions to support statewide objectives to reduce GHG emissions through climate action planning and land use control. Specifically, the 2022 Scoping Plan recommends adoption of a CEQA-qualified CAP and incorporation of key project attributes that reduce GHGs by electrifying transportation, reducing VMT, and decarbonizing buildings.² OPR guidance also maintains that a “land use development project that produces low VMT, achieves applicable building energy efficiency standards, uses no natural gas or other fossil fuels, and includes Energy Star appliances where available, may be able to demonstrate a less-than-significant greenhouse gas impact associated with project operation.”

² CARB has only developed recommendations for Proposed Projects and residential and mixed-use (with at least two-thirds residential square footage) development project types at this time and “plans to continue to explore new approaches for other land use types in the future.” California Air Resources Board, “Section 3.2: Evaluating Plan-Level and Project-Level Alignment with the State’s Climate Goals in CEQA GHG Analyses,” 2022 Scoping Plan Appendix D: Local Actions, November 2022, <https://ww2.arb.ca.gov/sites/default/files/2022-11/2022-sp-appendix-d-local-actions.pdf>.

There are three quantitative emissions thresholds commonly used to determine the significance level of a project's GHG impacts. These thresholds and their limitations are described below:

- Efficiency-based thresholds are useful for assessing projects of various types, sizes, and locations because they can be expressed on a per-capita basis for residential projects, a per-employee basis for commercial project, or a per-service-population (the sum of jobs and residents) basis for a mixed-use project. Although CARB provided efficiency metrics in the 2017 Scoping Plan (6.0 MTCO₂e per capita by 2030 and no more than 2.0 MTCO₂e per capita by 2050), these are no longer supported in the 2022 Scoping Plan.
- Numeric bright lines (i.e., not-to-exceed values) provide clear quantitative thresholds, but they are correspondingly specific and therefore limited to certain conditions and applications.
- Performance-based thresholds (e.g., percent reductions from baseline) are established by AB 32, SB 32, EO S-3-05, and EO B-55-18 and are useful for tracking progress toward targets, such as those adopted in the City of Pacifica CAP. This is the most applicable threshold for the Proposed Project. It is noted that this approach requires an accurate “apples-to-apples” comparison between the baseline (e.g., 1990 or 2005) and analysis year emissions in order to properly contextualize the performance levels; it is assumed that quantification methods (described further below) are sufficient to analyze the general magnitude, under a conservative estimate, of the Proposed Project's impact.

Given the programmatic nature of the Proposed Project and the corresponding lack of sufficient information about specific project details, comprehensive and precise levels of GHG emissions cannot be quantified for the Proposed Project to accurately determine significance based on quantitative thresholds alone. As required under CEQA, GHG emissions generated by the Proposed Project have been estimated (as feasible), disclosed, and discussed relative to these metrics, but evaluation of the Proposed Project's impacts is ultimately assessed in combination with the qualitative analysis.

Qualitative thresholds include compliance with a qualified GHG reduction strategy and compliance with applicable regulatory programs. The qualified GHG reduction strategy is the City of Pacifica CAP, adopted in 2016. Most, but not all, of the existing State laws and regulations pertaining to GHGs are incorporated into the CAP and its GHG reductions targets, which are established for 2020, 2030, and 2050. As described in the Regulatory Setting, applicable plans, policies, and regulations adopted for the purpose of reducing GHG emissions include AB 32, SB 32, EO S-3-05, EO B-55-18, the 2022 Scoping Plan, and SB 375. According to CARB and OPR, consistency with State efforts for transportation electrification, VMT reduction, and building decarbonization would constitute compliance with these regulations and result in a less-than-significant impact. Consistency with SB 375 is also assessed qualitatively, and conflict with any applicable strategies of Plan Bay Area 2050 would constitute a significant impact. The Proposed Project must align with both qualitative and quantitative

IMPACTS

Impact 3.5-1 Development under the Proposed Project would generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. (Significant and Unavoidable with Mitigation Incorporated)

Construction

Construction activities associated with future individual development projects under the Proposed Project would result in the generation of GHG emissions during the construction period only. BAAQMD has not established a quantitative threshold for assessing construction-related GHG emissions. Rather, the air district recommends evaluating whether construction activities would conflict with statewide emission reduction goals and implement feasible Best Management Practices (BMPs). The City's General Plan includes several policies that would reduce construction-related GHG emissions. Policy CO-I-56 requires all construction equipment to meet appropriate EPA and CARB emission requirements, while policy CO-I-57 requires contractors to use BMPs to reduce particulate emissions associated with construction activities. Policy CO-I-60 also requires monitoring effectiveness of the California Green Building Code in bringing about energy efficiency in building construction. Additionally, goal CO-G-17 would limit construction and demolition waste and promote waste diversion during construction and through building materials selection.

Overall, as BAAQMD does not have thresholds of significance for construction-related GHG emissions and GHG emissions from future construction activities within the planning area are one-time, short-term emissions, construction-related emissions from buildout of the Proposed Project are not assumed to significantly contribute to long-term cumulative GHG emissions impacts of the Proposed Project. Further, as discussed above, compliance with State and local requirements and policies would further mitigate any impacts. Therefore, construction emissions associated with the Proposed Project are less than significant.

Operation

The operation of the land uses introduced by the Proposed Project would generate direct and indirect GHG emissions. Sources of direct emissions would include mobile vehicle trips, natural gas combustion, and landscaping activities. Indirect emissions would be generated by electricity consumption, waste and wastewater generation, and water use. Unmitigated operational emissions for existing (2020) and 2040 buildout conditions (without quantifiable General Plan policies) are summarized in **Table 3.5-2**. Emissions under 2040 buildout conditions are further differentiated between "General Plan without Proposed Project" conditions and "General Plan with Proposed Project conditions". Operational emissions associated with the Proposed Project account for emissions benefits achieved through an emphasis on pedestrian and bicycle accessibility and mixed-use design in the Planning Area, both of which would contribute to reductions in the overall VMT associated with project operation.

Table 3.5-2: Unmitigated Proposed Project Operational Emissions (Annual)

Condition/Source	CO ₂ e Metric tons CO ₂ e/year
Existing (2020)	
Area Sources	1,528
Energy Sources	38,918
Mobile Sources	68,394
Waste Generation	9,400
Water Consumption	2,301
Total Existing^b	120,542
2040 General Plan Without Proposed Project	
Area Sources	1,491
Energy Sources	38,154
Mobile Sources	55,352
Waste Generation	9,481
Water Consumption	2,079
Total 2040 General Plan Without Proposed Project^b	106,557
2040 General Plan with Proposed Project	
Area Sources ^c	1,634
Energy Sources	40,148
Mobile Sources	60,135
Waste Generation	10,017
Water Consumption	2,249
Total 2040 With Proposed Project^b	114,183
Notes:	
^a Metric tons/year	
^b Values may not add due to rounding	
^c Includes refrigerant sources	

Source: Dyett & Bhatia, 2024.

As shown in **Table 3.5-2**, annual unmitigated operational emissions under the General Plan with Proposed Project conditions would decrease by 6,491 MTCO₂e at full buildout in 2040 compared to 2020 existing conditions. However, unmitigated operational emissions resulting from the Proposed Project would increase by 7,494 MTCO₂e in comparison to buildout under the 2040 General Plan without the Proposed Project. Even so, a cumulative 2040 buildout scenario that includes the Proposed Project would still result in a decrease of operational emissions compared to existing conditions.

GHG Reductions from General Plan Policies

As the transportation and energy sectors are the largest source of emissions within the Planning Area in 2020 and are projected to remain the largest sources in 2040, these sectors have the most opportunity for reductions. There are many General Plan policies that aim to reduce GHG emissions. While most policies do not contain quantifiable targets, the potential impacts of the following measures could be reasonably estimated to utilize in CalEEMod modeling of GHG emissions reductions, shown in **Table 3.5-3**:

Pedestrian Improvements and Increased Connectivity

There are numerous improvements described in the General Plan that would enhance connectivity for non-motorized transportation, including pedestrians and bicycles. Policies that enhance overall safety, connectivity, and accessibility include policies CI-I-1, CI-I-2, CI-I-3, CI-I-4 and CI-I-5. Additional policies specifically support connectivity for pedestrians (policies CI-I-13, CI-I-16, CI-I-17, CI-I-27, CI-I-28, CI-I-29, CI-I-31) and bicycles (policies CI-I-32, CI-I-33, CI-I-34, CI-I-35, CI-I-36, CI-I-37, and CI-I-38). Policy CO-I-58 would also implement the most recent BAAQMD Clean Air Plan's Transportation Control Measures, which are aimed at reducing vehicle trips and vehicle miles traveled; increasing access to and support of alternative modes of transportation; promoting compact, walkable land use patterns; and increasing public education and awareness. Providing an improved pedestrian and bicycle network and increasing connectivity encourages people to choose alternatives to driving, causing a reduction in VMT per capita, compared to current rates.

Streetscape Improvements and Traffic Calming Measures

As discussed, the General Plan would increase connectivity and safety for pedestrians and bicycles to promote alternative forms of transportation. General Plan policy CI-I-5 details streetscape improvements to increase walkability along Palmetto Drive, Rockaway Beach Avenue, Linda Mar Boulevard, Manor Drive, and secondary streets in the planning area. This would prioritize walkability and a pedestrian-friendly environment in the Planning Area, thus encouraging residents and visitors to walk and reduce vehicle trips. General Plan policies CI-I-2, CI-I-3, and CI-I-4 identify opportunities to incorporate Complete Streets concepts in the planning of all circulation improvement projects and roadway retrofits. Implementation of the Proposed Project would increase pedestrian safety in the Planning Area and lead to a reduction in traffic-related GHG emissions.

Transit Service

Pacifica is accessible to neighboring communities by the SamTrans bus line and is located about eight miles from the San Bruno BART and Caltrain Stations. The proposed General Plan includes several policies focused on expanding transit services within the Planning Area by coordinating with local transit agencies. Goal CI-G-17 advocates for public transit providers to improve and expand transit service and facilities to enable trips made without the use of a car. Policies CI-I-46, CI-I-47, CI-I-48, and CI-I-49 call for the City to work with transit agencies to maintain safe and efficient service, provide convenient connections to high-use activity areas and key destinations outside of the city, improve transit stops and access to facilities, improve convenience of park-and-ride facilities to increase ridership, and facilitate transit-oriented development. Policy CI-I-52 would expand Local Transportation Services tailored to the schedules and destinations of students,

seniors, and recreational visitors. Finally, policy CI-I-50 would lead an initiative to promote transit use and reduce reliance on the private automobile to reduce congestion and GHG emissions. Expanding transit service and improving efficiency while enhancing public knowledge of and access to transit options in the Planning Area would cause an increase in their use and a subsequent reduction in single-occupancy vehicle trips, VMT, and therefore GHG emissions.

Trip Reduction Programs

General Plan policy CI-I-51 establishes Transportation Demand Management (TDM) programs for City employees that could include transit passes or subsidies, preferential carpool parking, car share programs, bicycle lockers, and other incentives to encourage alternative transportation modes. Pacifica School District and Jefferson Union High School District both provide school bus services; however, in order to reduce school-related peak hour traffic congestion, policy CI-I-15 would also promote adoption of staggered hours, carpooling, and the use of transit. Establishment of these two programs would reduce vehicle use for two common activities, thereby reducing VMT and traffic-related GHG emissions.

Clean City Fleet

General Plan policy CO-I-63 would prioritize clean fuels and electric or hybrid vehicles to replace and improve the existing City fleet of gasoline and diesel-powered vehicles. This policy would reduce GHG emissions associated with municipal operations and transportation.

Increased Density and Affordability

General Plan policy LU-I-16 would provide a density bonus of up to 50 percent over the maximum allowed by zoning to facilitate affordable housing for moderate-, low-, and extremely low-income households. This increase in density and affordability housing would provide greater opportunity for lower income families to live closer to jobs centers and achieve jobs/housing match near transit, and therefore can be correlated to a decrease in VMT and reduced transportation emissions.

Reduced Parking

General Plan policy LU-I-18 would update commercial and mixed-use parking requirements to allow developers to provide for shared parking, car-sharing, reductions in parking minimums for transit-accessible locations, and policy CI-I-57 would update parking requirements to include provisions for reduced parking and parking maximums. Policies CI-I-58 and CI-I-61 also support shared parking in existing and new developments. Implementation of these policies would have a dual benefit of reducing traffic congestion and vehicle-related GHG emissions by encouraging “smart growth” development and alternative transportation choices by residents and employees.

Water Conservation

General Plan goal CO-G-5 establishes targets of reducing per capita urban water use by 10 percent by 2015 and 20 percent by 2020. Through implementation of this goal and policies CO-I-20, CO-I-21, and CO-I-22, Pacifica's water conservation efforts will include water efficient landscaping requirements, incentives for water conservation, and expansion of a system to use recycled wastewater. Additionally, policy CO-I-63 would maximize the efficiency of City-operated wastewater treatment, water treatment, pumping, and distribution equipment. Conserving water would reduce the electricity and indirect GHG emissions associated with water supply and transport.

Waste Reduction

The Pacifica CAP established a goal of 75 percent diversion community-wide by 2020. To support this, General Plan goal CO-G-17 would limit packaging, control construction and demolition waste, and promote composting and recycling. Policy CO-I-61 seeks to continually reduce Pacifica's output of solid waste and increase the proportion of waste diverted from landfills, setting targets and monitoring progress. Choosing waste management practices which reduce the amount of waste sent to landfills will reduce GHG emissions.

As shown in **Table 3.5-3**, mass GHG emissions would be further reduced to a total of 86,864 MTCO₂e in 2040 with implementation of Proposed Project and General Plan policies that are quantifiable using CalEEMod. In addition, General Plan policies related to energy and transportation that would reduce GHG emissions and can be quantified based on ranges of effectiveness identified in "Quantifying Greenhouse Gas Mitigation Measures" by the California Air Pollution Control Officers Association and other academic literature are discussed below and quantified in **Table 3.5-4** based on emissions calculated in **Table 3.5-2**.

Commute Trip Reduction Programs

General Plan policy CO-I-58 would implement the 2017 Clean Air Plan's Transportation Control Measures. Measure TR2 would require employers with 50 or more employees to provide commuter benefits in order to reduce transit costs to employees and develop innovative ways to encourage rideshare, cycling, and walking for work trips. As shown in **Table 3.5-4**, implementation of this policy would reduce transportation-related emissions by 7,577 MTCO₂e.

Table 3.5-3: Mitigated Proposed Project Operational Emissions (Annual)

Condition/Source	CO ₂ e
	Metric tons CO ₂ e/year
Existing (2020)	
Area Sources	1,528
Energy Sources	38,918
Mobile Sources	68,394
Waste Generation	9,400
Water Consumption	2,301
Total Existing^b	120,542
2040 General Plan Without Proposed Project (Including Policies)	
Area Sources	1,491
Energy Sources	31,589
Mobile Sources	43,081
Waste Generation	2,370
Water Consumption	1,319
Total 2040 General Plan Without Proposed Project^b	79,851
2040 General Plan with Proposed Project (Including Policies)	
Area Sources ^c	1,634
Energy Sources	33,540
Mobile Sources	47,849
Waste Generation	2,397
Water Consumption	1,444
Total 2040 With Proposed Project^b	86,864
Notes:	
^a Metric tons/year	
^b Values may not add due to rounding	
^c Includes refrigerant sources	

Source: Dyett & Bhatia, 2024.

Table 3.5-4: Additional GHG Emissions Reduction from General Plan Policies

<i>Policy</i>	<i>Range of Effectiveness</i>	<i>Assumed Effectiveness</i>	<i>Emissions Reduction (MTCO₂e)</i>
CO-I-58	4.2-21.0% (CAPCOA)	12.6%	7,577
CO-I-58	0.07-5.5% (CAPCOA)	5.5%	3,307
CO-I-67 (green or reflective roofs)	10-43% (NRDC)	25%	1,506
CO-I-67 (retrofitted heating systems)	1.2-18.4% (CAPCOA)	9.8%	590
CO-I-67 (exceed Title 24)	0.2-5.5% (electricity) 0.7-10% (natural gas) (CAPCOA)	5.5%	331
CO-I-69	16-40%	28%	899
Total Emissions Reduction			14,210
Total 2040 Proposed Project Emissions with General Plan Policies			72,654

Source: Dyett & Bhatia, 2024; CAPCOA, "Quantifying Greenhouse Gas Mitigation Measures", 2010; NRDC "Looking Up: How Green Roofs and Cool Roofs Can Reduce Energy Use, Address Climate Change, and Protect Water Resources in Southern California," 2012.

Teleworking

General Plan policy CO-I-58 would implement the 2017 Clean Air Plan's Transportation Control Measures. Measure TR1 would develop best practices for employers and strategies to promote telecommuting. As shown in **Table 3.5-4**, implementation of this policy would reduce transportation-related emissions by 3,307 MTCO₂e.

Municipal Energy Efficiency

General Plan policy CO-I-67 would prepare and implement a plan to increase energy efficiency in existing and newly constructed public buildings. All municipal facilities would undergo energy audits and retrofits where feasible, including increased insulation, installation of green or reflective roofs, installation of automated lighting controls, and retrofitted heating and cooling systems. Any newly constructed, purchased, or leased municipal space would be required to exceed Title 24 standards by 20 percent. Based on projected land uses, municipal facilities comprise 15.7 percent of all non-residential square footage in 2040. As shown in **Table 3.5-4**, implementation of this policy could reduce energy-related GHG emissions by about 2,427 MTCO₂e per year.

Outdoor Lighting

General Plan policy CO-I-69 would establish outdoor lighting performance standards to minimize energy use. To achieve these standards, this policy recommends greater use of photocells, LED lighting, motion detectors, and astronomical time switches and would generally prohibit continuous all-night outdoor lighting. The U.S. Energy Information Administration estimates that in 2020, about 8 percent of total electricity consumed by residential and commercial sectors was used for lighting. As shown in **Table 3.5-4**, implementation of this policy could reduce energy-related GHG emissions by about 899 MTCO₂e per year.

As shown in **Table 3.5-4**, with the consideration of additional General Plan policies, GHG operational emissions under the 2040 General Plan with Proposed Project scenario were reduced an additional 14,210 MTCO₂e, from 86,864 MTCO₂e to 72,654 MTCO₂e. **Table 3.5-5** shows how the Proposed Project’s performance-based metrics compare with reduction targets established by the City’s CAP and the State. At a minimum, the Proposed Project would need to meet the 2030 target, which is within the planning period. Operational emissions under the Proposed Project are on track to meet the target of 40 percent below 1990 levels by 2030 with an estimated 54 percent reduction in emissions. However, the emissions under the Proposed Project would need to be reduced by an additional 48,773 MTCO₂e in order to meet the State’s more stringent 2045 goal of carbon neutrality or 85 percent below 1990 levels.

Table 3.5-5: City of Pacifica GHG Reduction Targets and Performance-Based Metrics

<i>Year/Source</i>	<i>Percent Below 1990 Levels¹</i>	<i>Mass Emissions (MTCO₂e)</i>
GHG Emissions Reduction Targets		
2030 (SB 32) ²	40%	95,525
2045 (EO B-55-18)	85%	23,881
2050 (City of Pacifica CAP, EO S-3-05)	80%	31,842
GHG Emissions Estimates		
2020 Existing	24%	120,542
2040 Mitigated Proposed Project	54%	72,654

Notes:

1. 1990 levels are derived from 2005 levels reported in the City of Pacifica CAP. 2014 CAP identifies 2005 emissions as 183,090 MTCO₂e. 1990 levels are thus estimated to be 159,208 MTCO₂e. See note below for methodology.
2. The City of Pacifica CAP establishes GHG reduction targets relative to the 2005 baseline, which is estimated to be 15% above 1990 levels. The 2030 goal of 25% reduction below 2005 is therefore equivalent to 40% reduction below 1990 levels.

Source: Dyett & Bhatia, 2024.

General Plan policies that would generally reduce GHG emissions, but cannot be quantified, are discussed below.

Renewable Energy

The General Plan includes multiple policies aimed at expanding renewable energy within the Planning Area. Goal CO-G-15 supports the use and development of renewable energy through City purchasing and facilitation of local renewable energy generation. Policies CO-I-61, CO-I-62, and CI-I-62 encourage installation of passive and active solar devices in buildings and parking areas. Additionally, under policy CO-I-64, the City would pursue opportunities to lower the cost of purchasing and producing renewable energy. Implementation of these policies would expand the use of solar and other renewable energy, significantly reducing energy-related GHG emissions compared to non-renewable options. However, given that these policies do not contain quantifiable

targets, the GHG emissions reduction potential cannot be quantified for the purposes of this analysis.

Energy Efficiency

The General Plan includes multiple policies aimed at increasing energy efficiency in existing and new buildings. Goal CO-G-15 supports efforts to reduce energy use by increasing energy efficiency in buildings and promoting awareness of energy use. Policy CO-I-60 would monitor the effectiveness of CalGREEN in improving energy efficiency in the design and construction of new buildings, while policy CO-I-61 would require new buildings to be oriented such that the use of passive and active solar strategies is maximized in order to promote energy efficiency. Implementation of these policies would improve energy efficiency in all sectors and reduce energy consumption and therefore energy-related GHG emissions. However, given that these policies do not contain quantifiable targets, the GHG emissions reduction potential cannot be quantified for the purposes of this analysis.

Trees and Native Vegetation

The General Plan includes multiple policies that support planting of trees and native vegetation, which can reduce water consumption and sequester carbon, therefore reducing overall GHG emissions. Goal CO-G-10 calls for the City to conserve trees and encourage planting of appropriate trees and other native vegetation. Policy CO-I-16 calls for all small projects to incorporate stormwater management techniques including rain gardens, landscaped drainage swales, green roofs, and trees. Multiple other policies in the Conservation Element call for conservation of natural resources in Pacifica. Implementation of these policies would reduce water consumption and therefore water-related GHG emissions and would contribute to carbon sequestration. However, given that these policies do not contain quantifiable targets, the GHG emissions reduction potential cannot be quantified for the purposes of this analysis.

Climate Action Plan

As discussed, the Pacifica CAP was adopted in 2014 and includes GHG emissions reduction strategies and targets for 2020 and 2050. Proposed General Plan policy CO-I-59 requires the City to maintain and update the CAP, and that the updated CAP should:

- Establish a baseline inventory of all known or reasonably discoverable sources of GHGs that currently exist in Pacifica and that existed in 1990;
- Project GHG emissions expected in 2040 under this General Plan and foreseeable municipal operations;
- Set a target for the reduction of GHG emissions, in line with targets established by the California Air Resources Board;
- Present a list of feasible—and to the greatest extent possible, quantifiable—GHG reduction measures to meet the reduction target, in the areas of energy use (in all sectors), transportation and land use, solid waste, water, and education/outreach; and

- Establish an implementation plan, including strategies and funding for monitoring and making improvements.

The updated CAP could identify different GHG emissions reduction targets than those found in the 2014 Pacifica CAP, which is used in this analysis to evaluate consistency and impact of GHG emissions. The updated CAP would also include additional quantifiable GHG reduction measures that would allow Pacifica to meet the reduction target. However, implementation of this CAP does not necessarily guarantee that an updated CAP will be prepared or that all GHG reduction measures included will be capable of meeting an updated, and potentially lower, GHG emissions reduction target. Given that the updated CAP and GHG reduction measures are not yet available, the GHG reduction potential cannot be quantified for the purposes of this analysis.

Implementation of the Proposed Project would reduce generation of GHG emissions by 40 percent compared to existing conditions. This reduction is on track to meet the State's 2030 goal, however, it is not on track to meet the State's 2045 goal nor Pacifica's 2050 CAP goal. Therefore, on a local scale, implementation of the Proposed Project would generate GHG emissions that could have a significant impact on the environment and this impact would be potentially significant and mitigation measures would be required.

Mitigation Measures

Mitigation of GHG emissions is required because total GHG emissions are not expected to fall below the threshold of significance without additional measures. The following mitigation measures would reduce impacts due to GHG emissions:

- MM-GHG-1:** For new residential and commercial development, require installation of the electric vehicle recharging station network and other alternative fuel vehicle support infrastructure and adopt requirements for electric vehicle parking in new developments, consistent with Title 24 requirements, with the goal of increasing electric vehicle ownership by 20 percent.
- MM-GHG-2:** In order to build upon the requirements of existing State law, require installation of photovoltaic systems in new single family residential, multifamily residential, and commercial to increase solar capacity, with a target of an equivalent of 15 percent of projected electricity by 2040. Photovoltaic panel installation is already required for new low-rise residential buildings which include single-family dwellings, and multi-family dwellings with three habitable stories or less pursuant to California Energy Code section 150.1.c.14. Photovoltaic panel installation is also required for new nonresidential buildings with three habitable stories or fewer, other than health care facilities; hotel/motel occupancies; and, high-rise multi-family buildings with 10 habitable stories or fewer, pursuant to a local amendment to the California Energy Code codified in PMC section 8-6.08.
- MM-GHG-3:** Develop and implement a program to encourage the use of available grants for residential and commercial efficiency retrofits and voluntary cool roofing practices in new development with the goal of a 50 percent energy reduction compared to

baseline in 30 percent of the total existing residential units and non-residential square feet citywide by 2040. This measure is voluntary.

Implementation of MM-GHG-1 and MM-GHG-2 would reduce transportation- and energy-related GHG emissions because they include quantifiable targets for the expansion of Zero Emissions Vehicles and renewable energy; and voluntary **Mitigation Measure MM-GHG-3** would support energy efficiency in the Planning Area. However, it is conservatively assumed that additional reductions are needed in order to meet the CAP's 2050 and State's 2045 targets. Without further State action, it is unlikely that local efforts alone would be sufficient to meet carbon neutrality by 2045 and thereby reduce the impact to a less-than-significant level. Moreover, CARB's 2022 Scoping Plan indicates that carbon sequestration from natural and working lands will not be enough to attain carbon neutrality, and doing so will require research, development, and implementation of additional measures. CARB maintains authority to adopt regulations as necessary to meet future GHG targets under SB 32, EO S-3-05, EO B-55-18, and AB 1279, but the specific path to carbon neutrality is unknown and dependent on development of technologies and programs that are not currently known or available.; therefore, this impact remains significant and unavoidable after mitigation.

Significance After Mitigation: Significant and Unavoidable.

Impact 3.5-2 Development under the Proposed Project would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. (Significant and Unavoidable with Mitigation Incorporated)

City of Pacifica Climate Action Plan

As discussed above, the City of Pacifica adopted a CAP in 2014 to reduce community and municipal GHG emissions. The City's CAP is a roadmap that outlines a path for the City to achieve its GHG reduction goals of 35 percent below 2005 levels by 2020, and 80 percent below 1990 levels by 2050. The CAP features goals and reduction strategies in the categories of energy, transportation and land use, solid waste, water, and education and outreach. As detailed in the Pacifica General Plan Draft EIR, General Plan policies, which development under the Proposed Project must adhere to, directly support all CAP measures.

The CAP also establishes GHG emissions reduction targets of 35 percent below 2005 levels by 2020, and 80 percent below 1990 levels by 2050, as shown in **Table 3.5-4**. General Plan policy CO-I-59 requires the City to maintain and update the CAP based on the General Plan update, which would include the Proposed Project. As part of the update, the CAP must set a target for the reduction of GHG emissions, in line with targets established by the State, which would include the 2045 carbon neutrality target. However, as discussed in Impact 3.5-1, it is conservatively assumed that additional reductions are needed in order to meet the CAP's 2050 and State's 2045 targets. Without further State action, it is unlikely that local efforts alone would be sufficient to meet carbon neutrality by 2045 and thereby reduce the impact to a less-than-significant level. CARB maintains authority to adopt regulations as necessary to meet future GHG targets under SB 32, EO S-3-05, EO B-55-18, and AB 1279, but the specific path to carbon neutrality is unknown and dependent on development

of technologies and programs that are not currently known or available; therefore, this impact is significant and unavoidable.

SB 375 and Plan Bay Area

Climate protection and transportation system effectiveness are two major goals addressed in MTC's Plan Bay Area 2050, which provides a long-range framework to minimize transportation impacts on the environment, improve regional air quality, protect natural resources, and reduce GHG emissions. The Plan Bay Area 2050 applies smart growth principles, promotes infill development, and proactively links land use, air quality, and transportation needs in the region. Plan Bay Area 2050 is consistent with SB 375, which requires MTC to adopt an SCS that outlines policies to reduce per capita GHG emissions from automobiles and light trucks. The SCS policies include a mix of strategies that encourage compact growth patterns, mixed-use design, alternative transportation, transit, mobility and access, network expansion, transportation investment, and environmental justice.

Implementation of the SCS is intended to improve the efficiency of the transportation system and achieve a variety of housing types throughout the Bay Area that meet market demands in a balanced and sustainable manner. Development under the Proposed Project would be required to adhere to the City's General Plan policies that support PBA goals and strategies. As such, the Proposed Project supports increased residential and employment density near transit, incorporates mixed-use and transit-oriented development, and encourages a variety of housing types (goals LU-G-2, LU-G-4, LU-G-5, CI-G-2, policies LU-I-10, LU-I-16, CI-I-41).

Consistent with MTC goals, the Proposed Project would support a land use pattern with higher-density and infill developments where appropriate, including mixed-use development at existing commercial shopping centers. The Proposed Project would also adhere to the City's Complete Streets requirements in the project development process (Implementing Policy CI-I-3). This in turn would support alternative transportation within the Planning Area, which could help reduce per capita GHG emissions from passenger vehicles consistent with Plan Bay Area goals. Thus, the Proposed Project would be consistent with the goals of SB 375 and Plan Bay Area.

2022 CARB Scoping Plan

As described in the Regulatory Setting, the CARB Scoping Plan is a framework for achieving AB 32 and subsequent regulations, including SB 32, EO S-3-05, and EO B-55-18. While State programs including RPS, LCFS, Advanced Clean Cars, Cap-and-Trade, and others will help achieve the State's near- and long-term climate change goals, local actions are more limited in scope and influence. As such, local jurisdictions are encouraged to adopt CAPs and use land use control to support electrifying transportation, reducing VMT, and decarbonizing buildings. CARB recognizes the complexities involved in local GHG target-setting and, as a result, does not recommend a specific GHG target or target-setting method for local governments. The CARB 2022 Scoping Plan suggests that a project including all key project attributes in these categories would have a less-than-significant impact. **Table 3.5-6** below assesses whether the Proposed Project is consistent with these project attributes that are applicable to long-range plans.

Table 3.5-6: Consistency with CARB 2022 Scoping Plan Key Residential and Mixed-Use Project Attributes to Reduce GHGs

<i>Key Project Attribute</i>	<i>Proposed Project Programs/Policies</i>	<i>Consistent?</i>
Transportation Electrification		
Provides EV charging infrastructure that, at minimum, meets the most ambitious voluntary standard in the California Green Building Standards Code (CALGreen) at the time of project approval.	CALGreen is adopted into the Pacifica Municipal Code. General Plan Policy CO-I-53 ensures compliance with the most current Bay Area Clean Air Plan by implementing the Plan's recommended Transportation Control Measures. The 2017 Clean Air Plan identifies 17 TCMs aimed at reducing vehicle trips and vehicle miles traveled; increasing access to and support of alternative modes of transportation; promoting compact, walkable land use patterns; and increasing public education and awareness. General Plan Policy CO-I-58 establishes City budget for clean fuels and electric or hybrid vehicles to replace and improve the existing fleet of gasoline and diesel powered vehicles.	Yes
Reduction of Vehicle Miles Traveled (VMT)		
Is located on infill sites that are surrounded by existing urban uses and reuses or redevelops previously undeveloped or underutilized land that is presently served by existing utilities and essential public services (e.g., transit, streets, water, sewer).	Policies in the General Plan Land Use Element support mixed use development and a walkable street grid. The Proposed Project would support a land use pattern with higher-density and infill developments where appropriate, including mixed-use development at existing commercial shopping centers.	Yes
Does not result in the loss or conversion of natural and working lands.	The Proposed Project would support a land use pattern with higher-density and infill developments where appropriate, including mixed-use development at existing commercial shopping centers. Development under the Project would not result in the loss or conversion of natural and working lands.	Yes
Consists of transit-supportive densities (minimum of 20 residential dwelling units per acre), <u>or</u> Is in proximity to existing transit stops (within a half mile), <u>or</u> Satisfies more detailed and stringent criteria specified in the region's SCS.	All proposed densities under the Proposed Project range from 30 – 60 dwelling units per acre.	Yes
Reduces parking requirements by: Eliminating parking requirements or including maximum allowable	General Plan Policy CI-I-56 includes provisions for reduced parking, and, if acceptable, parking maximums. Policy CI-I-60 also allows developers to meet their minimum parking requirements via shared parking between uses, payment of in-lieu	Yes

Table 3.5-6: Consistency with CARB 2022 Scoping Plan Key Residential and Mixed-Use Project Attributes to Reduce GHGs

Key Project Attribute	Proposed Project Programs/Policies	Consistent?
parking ratios (i.e., the ratio of parking spaces to residential units or square feet); or • Providing residential parking supply at a ratio of less than one parking space per dwelling unit; or • For multifamily residential development, requiring parking costs to be unbundled from costs to rent or own a residential unit.	fees, or off-site parking within a reasonable walking distance.	
At least 20 percent of units included are affordable to lower-income residents.	It is not yet known if complete project buildout would result in at least 20 percent affordable units. However, the City's 2023-2031 Housing Element exceeds their Regional Housing Needs Allocation (RHNA) for low, very low-, and moderate-income housing.	No
Results in no net loss of existing affordable units.	For the City's 2023-2031 RHNA Cycle, the City includes a buffer of approximately 36 percent additional units to meet the State's No Net Loss Requirements.	Yes
Building Decarbonization		
Uses all-electric appliances without any natural gas connections and does not use propane or other fossil fuels for space heating, water heating, or indoor cooking.	The General Plan includes multiple policies aimed at increasing energy efficiency in existing and new buildings. Goal CO-G-15 supports efforts to reduce energy use by increasing energy efficiency in buildings and promoting awareness of energy use. Policy CO-I-60 would monitor the effectiveness of CalGREEN in improving energy efficiency in the design and construction of new buildings, while policy CO-I-61 would require new buildings to be oriented such that the use of passive and active solar strategies is maximized in order to promote energy efficiency. However, no policies in the existing CAP or General Plan pertain to all-electric appliances.	No

Source: CARB 2022 Scoping Plan, Appendix D: Local Actions [Table 3], 2022.

As demonstrated above, the Proposed Project supports many of the key project attributes but would potentially conflict with the following: building decarbonization and require at least 20 percent of units included are affordable to lower-income residents. Even so, several General Plan policies are

related to and making progress toward meeting these key project attributes. As such, there would be a less than significant impact regarding conflicts with the 2022 CARB Scoping Plan.

Consistency with Other State Regulations

As discussed above, systemic changes will be required at the state level to achieve California's future GHG reduction goals. Regulations, such as future amendments and updates to the State's low-carbon and renewable energy, energy efficiency, water conservation, and waste reduction regulations will be necessary to attain the magnitude of reductions required for the State's goals. New development under the Proposed Project would be required to comply with these regulations, and vehicle trips and energy consumption would be less carbon-intensive due to statewide compliance with future LCFS amendments and increasingly stringent RPS. Thus, the Proposed Project would not conflict with any other applicable existing State-level regulations pertaining to GHGs.

Mitigation Measures

See **Mitigation Measures MM-GHG-1, MM-GHG-2, and MM-GHG-3** under Impact 3.5-1.

Significance After Mitigation: Significant and Unavoidable.

Impact 3.5-3 Implementation of the Proposed Project would not cause wasteful, inefficient, and unnecessary consumption of energy during project construction, operation, and/or maintenance. (*Less than Significant*)

CEQA requires that EIRs include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. As noted in Appendix G of the CEQA Guidelines, the means of achieving the goal of conserving energy include the following:

1. Decreasing overall per capita energy consumption.
2. Decreasing reliance on fossil fuels such as coal, natural gas, and oil.
3. Increasing reliance on renewable energy sources.

Construction associated with future developments under the Proposed Project would consume gasoline and diesel fuel through operation of heavy-duty, off-road construction equipment, and on-road vehicles. The amount of fuel consumed by these activities would vary substantially depending on the level of activity, length of the construction period, specific construction operations, types of equipment, and number of personnel. Because the Proposed Project does not propose any specific development projects, the precise level and intensity of construction activities that would occur in the Planning Area is currently unknown.

For the purposes of this analysis, it is assumed that the types of land uses envisioned under the Proposed Project, which includes residential and mixed uses, would involve construction activities typical of most land use developments within the Planning Area and in the SFBAAB. None of the

proposed land uses are expected to require an extraordinary amount of energy consumption during construction, as may occur with large, industrial facilities, like new power plants or dams, because no such land uses are proposed or permitted by the Proposed Project. Additionally, because construction emissions are considered to be relatively short-term emissions that would cease once construction of a project is complete, they would represent a relatively short demand on local and regional fuel supplies that would be easily accommodated. Off-road diesel construction equipment and heavy-duty diesel trucks (e.g., concrete trucks, building materials delivery trucks), which are sources of diesel exhaust particulate matter, are regulated under three airborne toxic control measures (ATCMs) adopted by CARB. The ATCM for diesel construction equipment specifies particulate matter emission standards for equipment fleets, which become increasingly stringent over time. Furthermore, most newly-purchased construction equipment introduced into construction fleets after 2013–2015, depending on the engine horsepower rating, are equipped with high-efficiency diesel particulate filters. One of ATCMs for heavy-duty diesel trucks specifies that commercial trucks with a gross vehicle weight rating over 10,000 pounds are prohibited from idling for more than five minutes unless the engines are idling while queuing or involved in operational activities. In addition, starting in model year 2008, new heavy-duty trucks must be equipped with an automatic shutoff device to prevent excessive idling or meet stringent NO_x requirements. Lastly, fleets of diesel trucks with a gross vehicle weight rating greater than 14,000 pounds are subject to another ATCM. This ATCM requires truck fleet operators to replace older vehicles and/or equip them with diesel particulate filters, depending on the age of the truck. Therefore, construction activities associated with the Proposed Project would not result in a wasteful, inefficient, and unnecessary usage of direct or indirect energy.

Once operational, future development under the Proposed Project would generate vehicle trips, which would consume gasoline and diesel. Developments would also result in the consumption of electricity and natural gas for power, heating, and cooking. Operational energy consumption (expressed in terms of million BTU or MMBTU) under existing (2020) and future (2040) conditions, with and without the Proposed Project, is summarized in **Table 3.5-7**. The future 2040 scenarios do not include the impact of General Plan policies or mitigation and represents a conservative analysis. **Table 3.5-8** shows the estimated energy consumption per service population under the existing (2020) and future (2040) conditions.

Table 3.5-7: Estimated Operational Energy Consumption

<i>Analysis Year/Source</i>	<i>Million BTU/Year</i>
2020	
Electricity	407,132
Natural Gas	517,303
Mobile (gasoline and diesel)	940,450
Total	1,864,885
2040 General Plan Without Proposed Project	
Electricity	417,447
Natural Gas	540,069
Mobile (gasoline and diesel)	761,110
Total	1,718,626
2040 General Plan With Proposed Project	
Electricity	425,830
Natural Gas	562,822
Mobile (gasoline and diesel) ¹	761,110
Total	1,749,762
Net Increase from 2020 with General Plan and Proposed Project	(-115,123)
Net Increase from 2040 General Plan with Proposed Project	(31,136)
¹ I. It is conservatively assumed that with the Proposed Project, mobile energy consumption would be roughly equivalent as under the General Plan buildout scenario. However, this represents a conservative estimate, as VMT is expected to decrease under the Proposed Project scenario (see Chapter 3.11: Transportation for more information).	

Source: Dyett & Bhatia, 2024.

As shown in **Table 3.5-7**, implementation of the General Plan and Proposed Project would result in a net energy consumption decrease of 115,123 million BTUs at buildout in 2040. This is related to a significant decrease in energy consumption by mobile sources. Even so, there is a net increase from the 2040 General Plan scenario and 2040 General Plan with Proposed Project scenario of 31,136 million BTUs at buildout. While implementation of the General Plan and Proposed Project would introduce new development into the Planning Area, the Plan contains multiple policies aimed at reducing vehicular emissions of GHG by increasing walkability, promoting the use of transit, and discouraging single-occupant vehicle trips. Further, the Proposed Project would support a land use pattern that supports reduction in vehicular emissions with higher-density and infill developments where appropriate, including mixed-use development at existing commercial shopping centers.

General Plan policies and implementing actions aim to reduce vehicular travel and consequently would all help decrease GHG emissions. While many of the policies and implementing actions do not set specific and quantifiable goals, they do address general concepts expanding access to transit, fostering bicycle and pedestrian infrastructure, and supporting sustainable land use patterns, including mixed-use design and increased density (goal CO-G-5 and policies LU-I-15, LU-I-17, CI-I-4, CI-I-5, CI-I-14, CI-I-45, CI-I-46, CI-I-50, CI-I-51, CI-I-60, CO-I-56, CO-I-63, CO-I-62).

When implemented, these actions would further decrease energy consumption from natural gas, electricity, and gasoline and diesel fuels.

By decreasing demand for energy- and fuel-related energy resources, operation of future land uses associated with the Proposed Project would not result in a wasteful, inefficient, and unnecessary usage of direct or indirect energy. Therefore, this impact is considered less than significant.

Mitigation Measures

None required.

Impact 3.5-4 Implementation of the Proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. (*Less than Significant*)

State and local renewable energy and energy efficiency plans that apply to the Proposed Project are discussed above under Regulatory Setting. State plans include the Advanced Clean Cars regulations, LCFS, Energy Code standards, SB 350, and SB 100. Each of these plans contain required standards related to energy efficiency and renewable energy development. Local plans that address energy efficiency and are designed to achieve the State's RPS mandates and include PG&E's Integrated Resource Plans (IRP).

As discussed under Impact 3.5-3, implementation of the Proposed Project would increase energy consumption relative to existing conditions. However, the General Plan includes multiple policies that support sustainability through energy efficiency, water conservation, waste reduction, and promotion of alternative transportation. The Proposed Project also contains a land-use strategy that actively promotes higher density residential and infill mixed-use development where appropriate, which would result in greater energy efficiency overall for Planning Area residents and operations.

Future development under the Proposed Project would be subject to increasingly robust regulations to meet the State's renewable energy mandates and would be required to comply with Energy Code and CALGreen requirements. Development under the Proposed Project would be required to comply with State and local renewable energy and energy efficiency plans. As a result, it would benefit from renewable energy development and increases in energy efficiency. Specifically, vehicles and energy use from increased VMT and average daily trips within the Planning Area and the state is expected to become increasingly more efficient as a result of the regulations included in the Advanced Clean Cars regulations, which address average fuel economy and commercialization of zero-emission vehicles. Building energy efficiency is also anticipated to increase as a result of compliance with CALGreen and the Energy Code, which are expected to move toward zero net energy for newly constructed buildings, and shift toward 100-percent renewable energy under SB 350 and SB 100 regulations. With implementation of the Proposed Project, PG&E would continue to pursue procurement of renewable energy sources to meet its RPS portfolio goals and to comply with State regulations. PG&E's 2022 IRP portfolio meets its climate strategy goal of 70 percent RPS by 2030. PG&E is on a trajectory to meet its broader, net zero energy system, climate goal by 2040 (PG&E, 2022). Therefore, buildout of the Proposed Project would not conflict with or obstruct State or local plans for renewable energy or energy efficiency and this impact would be less than significant.

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3.6 Geology, Soils, and Seismicity

This section describes the environmental and regulatory setting for geology, soils, and seismicity, including those related to geologic and seismic hazards and soil stability. It also describes impacts related to geology, soils, and seismicity that would result from implementation of the Proposed Project and mitigation for significant impacts where feasible and appropriate. Geocon Consultants evaluated the feasibility of six Housing Element sites to represent a range of site geologic conditions in the Planning Area, including liquefaction, earthquake induced landslides, and slope stability (though all sites in Earthquake Zones of Required Investigation will require further study/project-specific geotechnical investigation. Analysis of sites 22, 27, A and B, 38, I, J are presented in Appendix D.

There were two responses to the Notice of Preparation (NOP) received regarding geologic or soils issues, particularly sites in highly sloped areas. These comments are addressed in this section and incorporated into the following analysis.

Environmental Setting

PHYSICAL SETTING

Geology and Soils

Regional Geology

The City of Pacifica lies within the geologically complex region of California referred to as the Coast Ranges geomorphic province.¹ The Coast Ranges province lies between the Pacific Ocean and the Great Valley (Sacramento and San Joaquin valleys) provinces and stretches from the Oregon border to the Santa Ynez Mountains near Santa Barbara. Much of the Coast Range province is composed of marine sedimentary deposits and volcanic rocks that form northwest trending mountain ridges and valleys, running subparallel to the San Andreas Fault Zone. The Coast Ranges can be further divided into the northern and southern ranges, separated by the San Francisco Bay. West of the San Andreas Fault lies the Salinian Block, a granitic core that extends from the southern end of the province to north of the Farallon Islands.

Modern seismic activity within the Coast Range continues to be associated with movement along the San Andreas system of faults. Regionally, this fault system is the boundary between large

¹ A geomorphic province is an area that possesses similar bedrock, structure, history, and age. California has 11 geomorphic provinces (CGS, 2002).

sections, or plates, of the earth's crust known as the North American Plate and Pacific Plate. This boundary is a complex system of generally parallel, northwest trending faults that extend across the greater San Francisco Bay Area. The San Andreas is also the closest active fault to the Planning Area as it transects across the northeastern tip of the Planning Area.² Other nearby active faults are the San Gregorio and Hayward faults.

Planning Area Geology

The Planning Area includes coastal areas as well as part of the Santa Cruz Mountains, one of the northwest trending ridges typical of the Coast Ranges. The Santa Cruz Mountains form the mountainous spine of the San Francisco Peninsula. Much of the upland areas are underlain by granitic bedrock associated with the Salinian Block creating rugged steep terrain in areas. The Salinian Block consists of highly fractured and weathered granite, granodiorite and quartz diorite much of which has been subject to a lot of tectonic forces. More competent granitic rocks can be found in areas such as Montara and San Pedro Mountains located to the south. Other geologic units in the area include sandstones associated with the Franciscan Formation, greenstones, and alluvial materials from drainages that head towards the Pacific Ocean.

Soil Properties

Soil is generally defined as the unconsolidated mixture of mineral grains and organic material that mantles the land surfaces of the earth. The characteristics of soil reflect the five major influences on their development: topography, climate, biological activity, parent (source) material, and time. The U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) (formerly known as the Soil Conservation Service) has mapped soils in the Planning Area in a soil survey for San Mateo County. Soils are characterized according to various properties and grouped into soil associations. The soils within the Planning Area include the Barnabe-Candlestick complex, the Candlestick-Kron-Buriburi complex, Orthents Cut and Fill-Urban Land complex, and Candlestick-Barnabe Complex. The soils of these complexes typically include sand loams, clay loams, and sandy clay loams. In the upland regions these soils are generally shallow and found on slopes ranging from 30 to 75 percent. The Orthents and Urban Land complex soils are often located in the gentler slopes of 0 to 30 percent. Soils found in developed areas have generally been reworked to the point that most of the native soils are only found at depth, if at all.

SEISMICITY

Regional Faults

The Hayward, San Andreas, and Calaveras Faults pose the greatest threat of significant damage in the San Francisco Bay Area according to the USGS Working Group (USGS, 2016). These three faults exhibit strike-slip orientation and have experienced movement within the last 150 years.³

² An "active" fault is defined by the State of California as a fault that has had surface displacement within Holocene time (approximately the last 11,000 years)

³ A strike-slip fault is a fault on which movement is parallel to the fault's strike or lateral expression at the surface (Bates and Jackson, Glossary of Geologic Terms, second edition, 1984).

Other principal faults capable of producing significant ground shaking in the San Francisco Bay Area are the Concord–Green Valley, Marsh Creek–Greenville, San Gregorio and Rodgers Creek Faults.

An “active” fault is defined by the State of California as a fault that has had surface displacement within approximately the last 11,000 years. A “potentially active” fault is defined as a fault that has shown evidence of surface displacement during the last 1.6 million years, unless direct geologic evidence demonstrates inactivity for the last 11,000 years or longer. This definition does not, of course, mean that faults lacking evidence of surface displacement are necessarily inactive. “Sufficiently active” is also used to describe a fault if there is some evidence that displacement occurred in the last 11,000 years on one or more of its segments or branches. These faults are considered either active or potentially active. Inactive faults are located throughout the San Francisco Bay Area. Inactive faults with a long period of inactivity do not provide any guarantee that a considerable seismic event could occur. Occasionally, faults classified as inactive can exhibit secondary movement during a major event on another active fault (Hart, 1997).

San Andreas Fault

The San Andreas Fault Zone is a major structural feature that forms at the boundary between the North American and Pacific tectonic plates, extending from the Salton Sea in Southern California near the border with Mexico to north of Point Arena, where the fault trace extends out into the Pacific Ocean. The main trace of the San Andreas Fault through the San Francisco Bay Area trends northwest through the Santa Cruz Mountains and the eastern side of the San Francisco Peninsula. As the principal strike-slip boundary between the Pacific plate to the west and the North American plate to the east, the San Andreas is often a highly visible topographic feature, such as between Pacifica and San Mateo, where Crystal Springs Reservoir and San Andreas Lake clearly mark the rupture zone. Near San Francisco, the San Andreas Fault trace is located immediately offshore near Daly City and continues northwest through the Pacific Ocean approximately 6 miles due west of the Golden Gate Bridge.

In the San Francisco Bay Area, the San Andreas Fault Zone was the source of the two recent major seismic events that affected the San Francisco Bay region. The 1906 San Francisco earthquake was estimated at magnitude (M) 7.9 and resulted in approximately 290 miles of surface fault rupture, the longest of any known continental strike slip fault. Horizontal displacement along the fault approached 17 feet near the epicenter. The more recent 1989 Loma Prieta earthquake, with a moment magnitude (Mw) of 6.9, resulted in widespread damage throughout the Bay Area.

Hayward Fault

The Hayward Fault Zone is the southern extension of a fracture zone that includes the Rodgers Creek Fault (north of San Pablo Bay), the Healdsburg fault (Sonoma County), and the Maacama fault (Mendocino County). The Hayward fault trends to the northwest within the East Bay, extending from San Pablo Bay in Richmond, 60 miles south to San Jose. The Hayward fault in San Jose converges with the Calaveras fault, a similar type of fault that extends north to Suisun Bay. The Hayward fault is designated by the Alquist-Priolo Earthquake Fault Zoning Act as an active fault.

Historically, the Hayward fault generated one sizable earthquake in the 1800s.⁴ In 1868, a M 7 earthquake on the southern segment of the Hayward Fault ruptured the ground for a distance of about 30 miles. Recent analysis of geodetic data indicates surface deformation may have extended as far north as Berkeley. Lateral ground surface displacement during these events was at least 3 feet.

A characteristic feature of the Hayward fault is its well-expressed and relatively consistent fault creep. Although large earthquakes on the Hayward fault have been rare since 1868, slow fault creep has continued to occur and has caused measurable offset. Fault creep on the East Bay segment of the Hayward fault is estimated at 9 millimeters per year (mm/yr) (Peterson, 1996). However, a large earthquake could occur on the Hayward fault with an estimated Mw of about 7.1. The USGS Working Group on California Earthquake Probabilities includes the Hayward–Rodgers Creek Fault Systems in the list of those faults that have the highest probability of generating earthquakes of M 6.7 or greater in the Bay Area (USGS, 2014).

Calaveras Fault

The Calaveras fault is a major right-lateral strike-slip fault that has been active during the last 11,000 years. The Calaveras Fault is located in the eastern San Francisco Bay region and generally trends along the eastern side of the East Bay Hills, west of San Ramon Valley, and extends into the western Diablo Range, and eventually joins the San Andreas Fault Zone south of Hollister. The northern extent of the fault zone is somewhat conjectural and could be linked with the Concord Fault.

The fault separates rocks of different ages, with older rocks west of the fault and younger sedimentary rocks to the east. The location of the main, active fault trace is defined by youthful geomorphic features (linear scarps and troughs, right-laterally deflected drainage, sag ponds) and local groundwater barriers. The Calaveras fault is designated as an Alquist-Priolo Earthquake Hazard Zone (see discussion on this zone designation below). There is a distinct change in slip rate and fault behavior north and south of the vicinity of Calaveras Reservoir. North of Calaveras Reservoir, the fault is characterized by a relatively low slip rate of 5–6 mm/yr and sparse seismicity. South of Calaveras Reservoir, the fault zone is characterized by a higher rate of surface fault creep that has been evidenced in historic times. The Calaveras Fault has been the source of numerous moderate magnitude earthquakes, and the probability of a large earthquake (greater than M 6.7) is much lower than on the San Andreas or Hayward Faults (USGS, 2014). However, this fault is considered capable of generating earthquakes with upper bound magnitudes ranging from Mw 6.6 to M 6.8.

⁴ Prior to the early 1990s, it was thought that an M 7 earthquake occurred on the northern section of the Hayward Fault in 1836. However, a study of historical documents by the California Geological Survey concluded that the 1836 earthquake was not on the Hayward Fault (Bryant, Bryant, W.A., and Cluett, S.E., compilers, Fault number 55a, Hayward fault zone, Northern Hayward section, in Quaternary fault and fold database of the United States, ver 1.0: U.S. Geological Survey Open-File Report 03-417, http://geohazards.usgs.gov/cfusion/qfault/qf_web_disp.cfm?qfault_or=1319&ims_cf_cd=cf&disp_cd=C, 2000).

San Gregorio Fault

The San Gregorio Fault Zone is a complex of faults that skirt the coastline North of Big Sur, run northwestward across Monterey Bay, briefly touching the shoreline of the San Mateo County coastline at Point Año Nuevo and at Seal Cove, just North of Half Moon Bay. This fault is an active fault that has been recently recognized as capable of producing large earthquakes. Recent studies have shown Holocene displacement on the San Gregorio Fault, as recently as 1270 AD to 1400 AD (USGS and CGS). Additionally, a 1929 earthquake with magnitude above 6.0, thought to have occurred on the Monterey Fault, may have actually ruptured an offshore segment of the San Gregorio Fault Zone. According to the working group on earthquake probabilities, the San Gregorio Fault has a six percent chance of producing one or more M 6.7 earthquakes in the next 30 years (USGS, 2016).

Groundshaking

The Planning Area is located within a region of California that is considered an area of high seismic activity. The USGS along with the California Geological Survey and the Southern California Earthquake Center formed the 2014 Working Group on California Earthquake Probabilities which has evaluated the probability of one or more earthquakes of M 6.7 or higher occurring in the state of California over the next 30 years. The result of the evaluation indicated a 72 percent likelihood that such an earthquake event will occur in the Bay Area before 2043 (USGS, 2016). As mentioned above, the San Andreas Fault transects the northeastern tip of the Planning Area. According to mapping compiled by the Association of Bay Area Governments, a characteristic magnitude 7.2 earthquake on the San Andreas Fault (Peninsula segment) could cause strong to very violent groundshaking in the Planning Area.

Areas underlain by bedrock tend to experience less ground shaking than those underlain by unconsolidated sediments such as artificial fill. The composition of underlying materials in areas located relatively distant from faults can intensify ground shaking. For example, portions of the Bay Area that experienced the worst structural damage due to the Loma Prieta earthquake were not those closest to the fault, but rather those with soils that amplified the effects of ground shaking. The Modified Mercalli (MM) intensity scale (see **Table 3.6-1**) is a common measure of earthquake effects due to ground shaking intensity. The MM values for intensity range from I (earthquake not felt) to XII (damage nearly total), and intensities ranging from IV to X could cause moderate to significant structural damage.⁵

⁵ The damage level represents the estimated overall level of damage that will occur for various MM intensity levels. The damage, however, will not be uniform. Some structures will experience substantially more damage than this overall level, and others will experience substantially less damage. Not all structures perform identically in an earthquake. The age, material, type, method of construction, size, and shape of a structure all affect its performance.

Table 3.6-1: Modified Mercalli Intensity Scale

	<i>Intensity Description</i>	<i>Average Peak Acceleration¹</i>
I	Not felt except by a very few persons under especially favorable circumstances.	<0.0017g
II	Felt only by a few persons at rest, especially on upper floors on buildings. Delicately suspended objects may swing.	<0.014g
III	Felt quite noticeably indoors, especially on upper floors of buildings, but many persons do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibration similar to a passing of a truck.	<0.014g
I V	During the day felt indoors by many, outdoors by few. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.	0.014g- 0.039g
V	Felt by nearly everyone, many awakened. Some dishes, windows, broken; a few instances of cracked plaster; unstable objects overturned. Disturbances of trees, poles, and other tall objects sometimes noticed. Pendulum clocks may stop.	0.039g- 0.092g
V I	Felt by all, many frightened and run outdoors. Some heavy furniture moved; a few instances of fallen plaster or damaged chimneys. Damage slight.	0.092g- 0.18g
V II	Everybody runs outdoors. Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable in poorly built or badly designed structures; some chimneys broken. Noticed by persons driving motor cars.	0.18g-0.34g
V III	Damage slight in specially designed structures; considerable in ordinary substantial buildings, with partial collapse; great in poorly built structures. Panel walls thrown out of frame structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned. Persons driving motor cars disturbed.	0.34g-0.65g
I X	Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb; great in substantial buildings, with partial collapse. Buildings shifted off foundations. Ground cracked conspicuously. Underground pipes broken.	0.65g-1.24g
X	Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations; ground badly cracked. Rails bent. Landslides considerable from riverbanks and steep slopes.	> 1.24g
X I	Few, if any, masonry structures remain standing. Bridges destroyed. Broad fissures in ground. Underground pipelines completely out of service. Earth slumps and land slips in soft ground. Rails bent greatly.	> 1.24g
X II	Practically all works of construction are damaged greatly or destroyed. Waves seen on ground surface. Lines of sight and level are distorted. Objects are thrown upward into the air.	> 1.24g

Table 3.6-1: Modified Mercalli Intensity Scale

<i>Intensity Description</i>	<i>Average Peak Acceleration¹</i>
Note:	
1. g (gravity)= 980 centimeters per second squared. Acceleration of 1.0 g is equivalent to a car traveling 328 feet from rest in 4.5 seconds.	

Source: USGS. *The Severity of an Earthquake*, <http://pubs.usgs.gov/gip/earthq4/severitygip.html>, January 11, 2013.

Fault Rupture

Fault rupture is the surface displacement of the earth's surface due to the movement along a fault associated with an earthquake. Ground displacement is generally experienced on or within the immediate vicinity of the mapped fault trace. The Alquist-Priolo Earthquake Fault Zoning Act of 1972 established the requirement to regulate development within established earthquake fault zones associated with active faults. Development in fault zones is allowed but requires detailed geologic and seismic evaluations by certified professionals prior to approval of a building permit. An Alquist-Priolo fault hazard zone associated with the San Andreas Fault is located within the Planning Area, and is shown in **Figure 3.6-1**, Seismic Hazard Zones. There are approximately 218 acres of the Planning Area within the Alquist-Priolo fault hazard zone.

Seismic Hazard Zones

The Seismic Hazards Mapping Act (SHMA) established the requirement to identify and map areas prone to earthquake hazards of liquefaction, earthquake-induced landslides and amplified ground shaking. The purpose of the SHMA is to reduce the threat to public safety and to minimize the loss of life and property by identifying and mitigating these seismic hazards. The City is required to use the official California Geological Survey Seismic Hazard Zone Maps in their land use planning and building permit processes. As shown in **Figure 3.6-1**, a majority of the Planning Area is prone to either of these hazards, with liquefaction zones following the alluvial drainage zones and landslide zones following areas with steep slopes. More information on liquefaction and landsliding can be found in later sections.

Liquefaction

Liquefaction is a transformation of soil from a solid to a liquefied state during which saturated soil temporarily loses strength resulting from the buildup of excess pore water pressure, especially during earthquake-induced cyclic loading. Soil susceptible to liquefaction includes loose to medium dense sand and gravel, low-plasticity silt, and some low-plasticity clay deposits. Four kinds of ground failure commonly result from liquefaction: lateral spread, flow failure, ground oscillation, and loss of bearing strength. Liquefaction and associated failures can damage foundations, roads, underground cables and pipelines, and disrupt utility service. The depth to groundwater influences the potential for liquefaction, in that sediments need to be saturated to have a potential for liquefaction.

Hazard maps produced by the Association of Bay Area Governments (ABAG) depict liquefaction for the greater Bay Area in the event of a significant seismic event. According to these maps, the

majority of the Planning Area is in an area expected to have a very low potential to experience liquefaction, although areas surrounding some of the alluvial drainages (i.e., San Pedro Creek Valley and Sanchez Creek Valley) contain some areas of very high potential. Medium liquefaction potential exists in many low-lying neighborhoods, including West Edgemar-Pacific Manor, West Sharp Park, Rockaway Beach and Quarry, and parts of Pedro Point, as well as in the valley neighborhoods along San Pedro, Rockaway, and Calera creeks, as shown in **Figure 3.6-2** (ABAG, 2003).

Subsidence

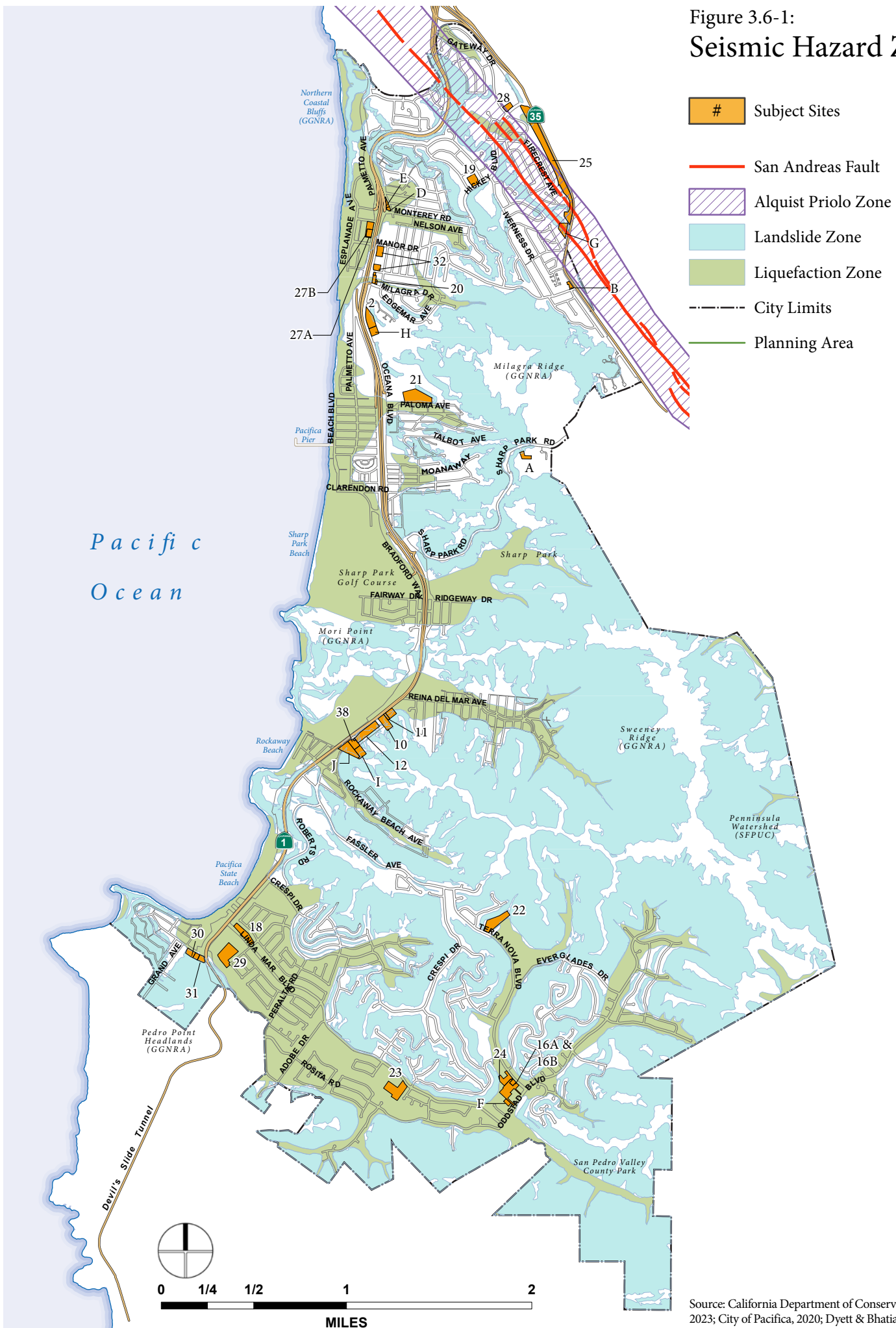
Subsidence or settlement can occur from immediate settlement, consolidation, shrinkage of expansive soil, and liquefaction. Immediate settlement occurs when a load from a structure or placement of new fill material is applied, causing distortion in the underlying materials. This settlement occurs quickly and is typically complete after placement of the final load. Consolidation settlement occurs in saturated clay from the volume change caused by squeezing out water from the pore spaces. Consolidation occurs over a period of time and is followed by secondary compression, which is a continued change in void ratio under the continued application of the load.

Soils tend to settle at different rates and by varying amounts depending on the load weight or changes in properties over an area, which is referred to as differential settlement. Areas underlain by soft sediments or undocumented fills are most prone to settlement.

Soil Erosion

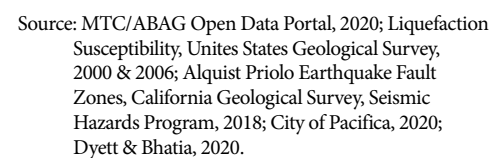
Erosion is the wearing away of soil and rock by processes such as mechanical or chemical weathering, mass wasting, and the action of waves, wind and underground water. Excessive soil erosion can eventually lead to damage of building foundations and roadways. The parts of the Planning Area where soils are most susceptible to erosion caused by wind or rainfall include the northern slope of Mori Point; upper Sharp Park; Shamrock Ranch; and along San Pedro Creek in San Pedro Valley County Park. Typically, the soil erosion potential is reduced once the soil is graded and covered with concrete, structures, asphalt, or slope protection.

Figure 3.6-1:
Seismic Hazard Zones



Source: California Department of Conservation, 2023; City of Pacifica, 2020; Dyett & Bhatia, 2023.

Subject Sites



Landslides and Slope Failure

Slope failures, commonly referred to as landslides, include many phenomena that involve the downslope displacement and movement of material, either triggered by static (i.e., gravity) or dynamic (i.e., earthquake) forces. A slope failure is a mass of rock, soil, and debris displaced downslope by sliding, flowing, or falling. Exposed rock slopes undergo rockfalls, rockslides, or rock avalanches, while soil slopes experience shallow soil slides, rapid debris flows, and deep-seated rotational slides. Landslides may occur on slopes of 15 percent or less; however, the probability is greater on steeper slopes that exhibit old landslide features such as scarps, slanted vegetation, and transverse ridges. Landslide-susceptible areas are characterized by steep slopes and downslope creep of surface materials. Debris flows consist of a loose mass of rocks and other granular material that, if saturated and present on a steep slope, can move downslope. The rate of rock and soil movement can vary from a slow creep over many years to a sudden mass movement. Landslides occur throughout the state of California, but the density of incidents increases in zones of active faulting.

Slope stability can depend on a number of complex variables. The geology, structure, and amount of groundwater in the slope affect slope failure potential, as do external processes (i.e., climate, topography, slope geometry, and human activity). The factors that contribute to slope movements include those that decrease the resistance in the slope materials and those that increase the stresses on the slope. Slope failure under static forces occurs when those forces initiating failure overcome the forces resisting slope movement. For example, a soil slope may be considered stable until it becomes saturated with water (e.g., during heavy rains or due to a broken pipe or sewer line). Under saturated conditions, the water pressure in the individual pores within the soil increases, reducing the strength of the soil. Cutting into the slope and removing the lower portion, or slope toe, can reduce or eliminate the slope support, thereby increasing stress on the slope.

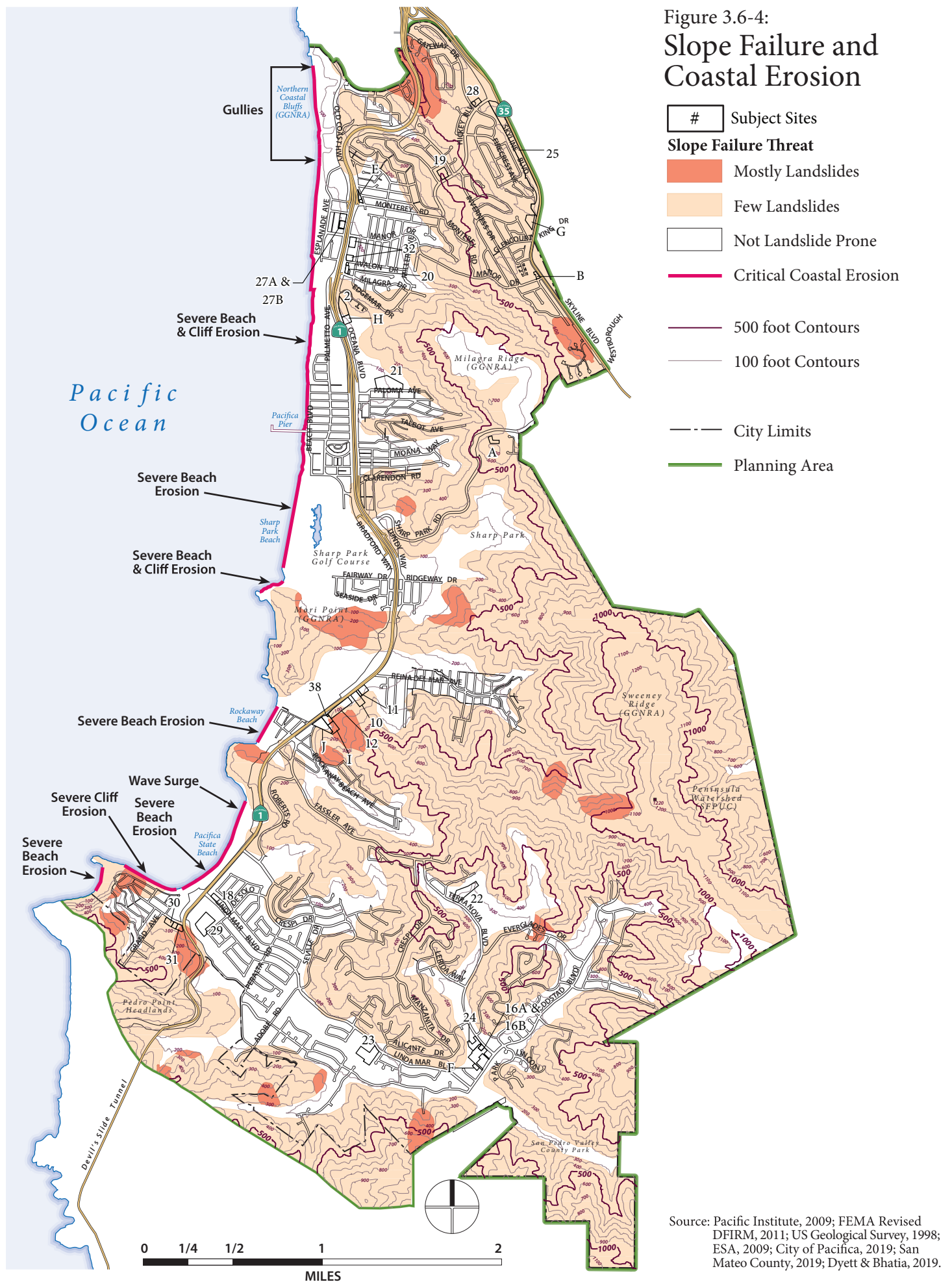
The coastline of San Mateo County includes steep upland areas that are susceptible to slope failures. Most notably, the large coastal slide known as Devil's Slide, is located at the southern end of the Planning Area. Devil's Slide has a long history of slope failures and rockslides that have caused closures of Highway 1. The Devil's Slide Tunnels Project was completed in 2013 to avoid this area. Within the planning boundary, steep slopes on Mori Point, Sweeney Ridge, Cattle Hill, Gypsy Hill, and Montara Mountain are identified as likely sites of slope failures, as are small portions of areas in or near development in the Pedro Point and Fairmont neighborhoods and along the west side of Skyline Boulevard. **Figure 3.6-3, Slope Failure and Coastal Erosion**, identifies the relative likelihood of landslides in the Planning Area. The map shows three slope failure threat categories: Mostly Landslides, Few Landslides, and Not Landslide Prone (USGS, 1997). Mostly Landslide areas consist of mapped landslides, intervening areas typically narrower than 1,500 feet, and narrow borders around landslides; defined by how groups of mapped landslides are clustered. Areas mapped as Few Landslides contain few, if any, large mapped landslides, but locally contain scattered small landslides and questionably identified larger landslides; defined in most of the region by excluding groups of mapped landslides. Two hundred and seventy eight acres within the Planning Area are classified as Mostly Landslides, and 5,496 acres are classified as Few Landslides. Not Landslide Prone refers to areas of gentle slope at low elevation that have little or no potential for the formation of slumps, translational slides, or earth flow except along stream banks and terrace margins; defined by the distribution of surficial deposits.

Beaches and Coastal Erosion

Northern California is characterized by rugged coastline areas where mountain ranges extend to the shoreline with narrow slivers of sand at their base. Rocky bluffs interspersed with small sandy coves are common. Under natural conditions the sand is provided by sediment transport along the coast through wave action as well as from deposition through rivers and streams that empty into the ocean. Winter storms tend to cause heavy wave action which reduces sand content at beaches that will typically recover during milder summer conditions. Whereas 30 to 50 years ago engineering methods of introducing hard barriers to protect shoreline improvements were common, soft stabilization methods have proven more effective in maintaining natural systems of sand transport. Soft stabilization methods include sand and cobble beach fills which can more closely mimic natural conditions and respond to changes in wave action.

According to a study done by the U.S. Geological Survey following the heavy winter storms of 1982–1983, the entire coastline of San Mateo County contains areas susceptible to severe erosion and slope failure (USGS, 1983). Coastal areas within the Planning Area include locations that the USGS have determined to have critical erosion hazards and unstable segments where the sedimentary rocks are susceptible to failure from heavy wave action. A similar study of the winter storms of 1997–1998 showed that sea cliffs in the Planning Area were particularly impacted and a number of homes were impacted as a result. The long-term average erosion rate for cliffs in this general area was determined to be roughly 0.2 m/year based on a 1983 study; and winter storms of 1997–1998 caused approximately 50 years' worth of erosion at the location where 12 homes were condemned (USGS, 2005). More recently, in 2009-10, erosion on the northern coast of Pacifica resulted in the evacuation of two apartment buildings in the 300 block of Esplanade Avenue. Further severe weather in 2015 led to the City-mandated demolition of these buildings in 2016 to prevent their collapse onto the beach below. The property owner demolished a 12-unit apartment building at 330 Esplanade Avenue and City demolished two 20-unit apartment buildings in common ownership at 310 and 320 Esplanade Avenue. Pacifica's 2021 Annex to the San Mateo County Multi-jurisdictional Local Hazard Mitigation Plan (MJ-LHMP) identifies coastal erosion as the top hazard in Pacifica (under the "Landslide/Mass Movements" category) and has noted at least eight significant coastal erosion events since 1997. Coastline segments that have experienced substantial coastal erosion are shown in **Figure 3.6-3**.

Figure 3.6-4:
Slope Failure and
Coastal Erosion



Effects of Sea Level Rise

Sea level rise resulting from global climate change is projected to cause more extensive erosion of beaches, dunes, bluffs and cliffs. A 2009 study of the impacts of sea level rise on the California Coast from the California Climate Change Center developed erosion models for dune and cliff/bluff backshore environments. For both types of shoreline, erosion is projected based on Total Water Level (TWL), calculated as the sum of high tide line, wave run-up, and sea-level rise. According to the study, a majority of the dune shoreline along the northern California coast is currently accreting, but this is projected to reverse between 2050 and 2100. Mean lateral erosion of dunes is estimated at 115 to 116 meters (m) by 2025, 119m to 128m by 2050, and 132m to 175m by 2100. Bluffs, meanwhile, are projected to have eroded by 8m to 9m by 2025, 23m to 24m by 2050, and 58m to 64m by 2100, with geology, wave exposure, and bluff toe elevation all playing important roles in producing variation (Pacifica Institute, 2009). The City of Pacifica's 2018 Vulnerability Assessment utilizes an updated methodology originally developed for the Pacific Institute Study and includes accelerated erosion in response to SLR, projections of future beach widths, and modifications for a range of potential adaptation alternatives.

It is important to reiterate that these models are approximate, and not meant to be used for parcel-specific land use planning. These models indicate that there could be new risks of erosion along the length of Pacifica's coastline in areas that are not currently exposed to wave action erosion, which could impact all of the coastal neighborhoods and coastal habitats.

Shoreline Protection Programs

In the early 1990s, the City of Pacifica, the California Coastal Conservancy, and the Pacifica Land Trust collaborated to improve steelhead trout habitat and preserve the sandy beach at Pacifica/Linda Mar State Beach, with the removal of vulnerable structures along the shore. The stabilization methods were used to expand and enhance the tidally influenced wetlands at the mouth of San Pedro Creek and restore more than 1,900 feet of eroding creek banks. This restoration both enhanced steelhead trout habitat and achieved 100-year flood protection for the nearby community.

To address the remaining flood threat to homes and businesses, the City removed the most vulnerable structures. In 2002, the City partnered with the Pacifica Land Trust and the California Coastal Conservancy to purchase two homes and their surrounding acreage and delivered 4,000 cubic yards of sand to rebuild dunes and restore four acres of beach and the nearby estuary. Within the Coastal Zone, the City requires new development to be set back from coastal bluffs enough to accommodate a 100-year event, whether caused by seismic, geotechnical, or storm conditions (unless this limitation makes a property undevelopable). Areas determined by the study to be unsuitable for development shall be set aside for permanent environmental protection as part of any development.

In addition, the City is continuing to maintain and improve the existing seawall and revetment originally constructed in 1962 at Rockaway Beach. Repairs in the past have consisted of retrieval of displaced rip-rap, importation of additional rip-rap and repair of the revetment. Other revetments are placed along the beaches of the Planning Area and a seawall/revetment structure (which ranges from 25 to 31 feet tall north of the pier, and 22 to 24 feet tall south of the pier) has been constructed

along Beach Boulevard between Paloma Avenue and Clarendon Road. The structure has required maintenance on several occasions to repair areas where beach erosion has undermined the structure. The backshore along the Sharp Park, West Fairway Park and Mori Point sub-area is low enough such that assets and property are subject to wave run-up and overtopping under existing conditions.

Paleontological Resources

Paleontological resources are the fossil remains or traces of past life forms, including vertebrate and invertebrate species as well as plants. Paleontological resources are considered *significant* if they are identifiable vertebrate fossils; uncommon invertebrate, plant, and trace fossils; or other data that provide information important to the scientific record. Paleontological resources are older than the middle Holocene (i.e., older than approximately 5,000 years).

The Planning Area is located in the Monterey Bay Peninsula, which forms part of the northern portion of the Coast Ranges Geomorphic Province of California (CGS, 2002). The area is bounded by the Pacific Ocean to the west and the Great Valley Geomorphic Province to the east.

Geologic units in the northern portion of the Peninsula are primarily Holocene Older Dune Sand and Dune Sand, with Pleistocene Aromas Sand lying further inland. The Planning Area is underlain with Holocene marine terrace deposits and the Miocene Monterey Formation (Wagner, 2002).

According to a records search of the University of California Museum of Paleontology specimen search, Pleistocene-age deposits in Monterey County have yielded numerous fossils, including *Cetotherium* (extinct genus of baleen whales) from the Miocene-age formation, *Bison* (genus of bison), *Camelops* (extinct genus of camel), and *Squatina* (genus of angel sharks) from the Pleistocene-age Aromas Sand, and *Straitolamia* (extinct genus of sharks) (University of California Museum of Paleontology, 2023). Therefore, paleontological resources could be discovered in the Planning Area during ground disturbance.

REGULATORY SETTING

Federal Regulations

Earthquake Hazards Reduction Act of 1977

Federal laws codified in United States Code Title 42, Chapter 86, were enacted to reduce risks to life and property from earthquakes in the United States through the establishment and maintenance of an effective earthquake hazards reduction program. Implementation of these requirements are regulated, monitored, and enforced at the State and local levels. Key regulations and standards applicable to the Proposed Project are summarized below.

U.S. Geological Survey Landslide Hazard Program

The USGS created the Landslide Hazard Program in the mid-1970s; the primary objective of the program is to reduce long-term losses from landslide hazards by improving our understanding of the causes of ground failure and suggesting mitigation strategies. The federal government takes the

lead role in funding and conducting this research, whereas the reduction of losses due to geologic hazards is primarily a state and local responsibility.

Disaster Mitigation Act of 2000

The Disaster Mitigation Act of 2000 (DMA2K) (Public Law 106-390) amended the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988 to establish a Pre-Disaster Mitigation (PDM) program and new requirements for the federal post-disaster Hazard Mitigation Grant Program (HMGP). DMA2K encourages and rewards local and state pre-disaster planning. It promotes sustainability and seeks to integrate state and local planning with an overall goal of strengthening statewide hazard mitigation. This enhanced planning approach enables local, tribal, and state governments to identify specific strategies for reducing probable impacts of natural hazards such as floods, fire, and earthquakes. In order to be eligible for hazard mitigation funding after November 1, 2004, local governments are required to develop a Hazard Mitigation Plan (HMP) that incorporates specific program elements of the DMA2K law. The City of Pacifica participated in the County of San Mateo 2021 Multi-Jurisdictional Hazard Mitigation Plan, as described under Local Regulations, below.

State Regulations

California Multi-Hazard Mitigation Plan

The State of California Multi-Hazard Mitigation Plan, also known as the State Hazard Mitigation Plan (SHMP), was approved by FEMA in 2018 (CalOES, 2018). The SHMP outlines present and planned activities to address natural hazards. The adoption of the SHMP qualifies the State of California for federal funds in the event of a disaster. The State is required under the Disaster Mitigation Act of 2000, described above, to review and update its SHMP and resubmit for FEMA approval at least once every 5 years to ensure the continued eligibility for federal funding. The SHMP provides goals and strategies which address minimization of risks associated with natural hazards and response to disaster situations. The SHMP notes that the primary sources of losses in the state of California are fire and flooding; and while earthquakes occur less frequently, they account for the greatest combined losses.

California Building Code

The California Building Code (CBC) is Part 2 of Title 24 of the California Code of Regulations. The CBC incorporates the International Building Code, a model building code adopted across the United States. The CBC is updated every three years, and the current 2022 version took effect January 1, 2023. With the exception of certain additions, deletions, and amendments, the City adopted the CBC by reference pursuant to Chapter 9, Article 1 of the City of Monterey City Code. Through the CBC, the State provides a minimum standard for building design and construction. Of particular relevance, Chapter 16 of the CBC contains specific requirements for structural (building) design, including seismic loads. Chapter 18 of the CBC includes requirements for soil testing, excavation and grading, and foundation design. The 2022 CBC (based on the 2021 International Building Code) has been amended and adopted as the Building Code of the City of Pacifica, regulating the erection, installation, alteration, repair, relocation replacement, addition to use or maintenance of buildings within the city.

California Alquist–Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act (formerly the Alquist-Priolo Special Studies Zone Act), signed into law December 1972, requires the delineation of zones along active faults in California. The Alquist-Priolo Act regulates development on or near active fault traces to reduce the hazard of fault rupture and to prohibit the location of most structures for human occupancy across these traces. The law requires the State Geologist to establish regulatory zones (known as Earthquake Fault Zones or Alquist–Priolo Zones) around the surface traces of active faults, and to issue appropriate maps. The maps are then distributed to all affected cities, counties and State agencies for their use in planning and controlling new or renewed construction. Generally, construction within 50 feet of an active fault zone is prohibited.⁶ Cities and counties must regulate certain development projects within the delineated zones, and regulations include withholding permits until geologic investigations demonstrate that development sites are not threatened by future surface displacement (Hart, 1997). Surface fault rupture, however, is not necessarily restricted to the area within an Alquist-Priolo Zone. The law only addresses the hazard of surface fault rupture and is not directed toward other earthquake hazards, such as groundshaking or landslides. An Alquist-Priolo fault hazard zone associated with the San Andreas Fault is located within the Planning Area, at the northeastern boundary of the Planning Area, parallel to Skyline Boulevard. According to the City’s 2021 Annex to the San Mateo County MJLHMP, there are approximately 952 single-family homes, 399 multiple-family units, 200 acres, and six miles of road within the Alquist-Priolo Study Zone. Three of the Housing Element sites, sites 28, 25, and G, are located in the Alquist Priolo Zone and require geotechnical study.

Seismic Hazards Mapping Act, California Public Resources Code Sections 2690–2699.6

The Seismic Hazards Mapping Act was developed to protect the public from the effects of strong groundshaking, liquefaction, landslides, or other ground failure, and from other hazards caused by earthquakes. This act requires the State Geologist to delineate various seismic hazard zones and requires cities, counties, and other local permitting agencies to regulate certain development projects within these zones. Before a development permit is granted for a site within a Seismic Hazard Zone, a geotechnical investigation of the site must be conducted and appropriate mitigation measures incorporated into the project design. Geotechnical investigations conducted within Seismic Hazard Zones must incorporate standards specified by the California Geologic Society (CGS) Special Publication 117, Guidelines for Evaluating and Mitigating Seismic Hazards (CGS, 1997). Much of the Planning Area is at risk of seismic hazard. In addition to the Alquist-Priolo Zone associated with the San Andreas Fault, many of the slopes in the Planning Area are classified as landslide zones. Areas surrounding some of the alluvial drainages in the Planning Area, such as the San Pedro Creek Valley and Sanchez Creek Valley, as well as some of the low-lying neighborhoods, including West Edgemar-Pacific Manor, West Sharp Park, Rockaway Beach, and Quarry, as well as in the valley neighborhoods along San Pedro, Rockaway, and Calera creeks are all classified as liquefaction zones (CGS, 2021). Due to the significant extent of seismic hazards in

⁶ A “structure for human occupancy” is defined by the Alquist-Priolo Act as any structure used or intended for supporting or sheltering any use or occupancy that has an occupancy rate of more than 2,000 person-hours per year.

Pacifica, a majority of Proposed Project sites lie within one or more seismic hazard zones (liquefaction and landslides) and require geotechnical investigation and mitigation, if needed.

California Department of Transportation (Caltrans)

Jurisdiction of the California Department of Transportation (Caltrans) includes State and interstate routes within California. Any work within the right-of-way of a federal or State transportation corridor is subject to Caltrans regulations governing allowable actions and modifications to the right-of-way. Caltrans standards incorporate the CBC and contain numerous rules and regulations to protect the public from seismic hazards such as surface fault rupture and ground shaking. In addition, Caltrans standards require that projects be constructed to minimize potential hazards associated with cut and fill operations, grading, slope instability, and expansive or corrosive soils, as described in the Caltrans Highway Design Manual (HDM). Caltrans and local project sponsors, as part of the project development and delivery process, are obligated to conduct paleontological studies in response to federal, state, and local laws, regulations, and ordinances. For example, Section 305 of the Federal Aid Highway Act of 1956 (20 USC 78, 78a) gives authority to use federal funds to salvage archaeological and paleontological sites affected by highway projects.

National Pollution Discharge Elimination System Permits

In California, the State Water Resources Control Board (SWRCB) and its Regional Water Quality Control Board (RWQCB) administer the National Pollution Discharge Elimination System (NPDES) program. The NPDES permit system was established as part of the Federal Clean Water Act to regulate both point source discharges and non-point source discharges to surface water of the United States, including the discharge of soils eroded from construction sites. The NPDES program consists of characterizing receiving water quality, identifying harmful constituents (including siltation), targeting potential sources of pollutants (including excavation and grading operations), and implementing a comprehensive stormwater management program. Construction and industrial activities typically are regulated under statewide general permits that are issued by the SWRCB. Additionally, the SWRCB issues Water Discharge Requirements that also serve as NPDES permits under the authority delegated to the RWQCBs, under the Clean Water Act. See EIR Section 3.9: *Hydrology and Water Quality*, for more information about the NPDES.

California Public Resources Code

Sections 5097–5097.6 of the California Public Resources Code outline the requirements for cultural resource analysis prior to the commencement of any construction project on state lands. The state agency proposing the project may conduct the cultural resource analysis or they may contract with the State Department of Parks and Recreation. In addition, this section stipulates that the unauthorized disturbance or removal of archaeological, historical, or paleontological resources located on public lands is a misdemeanor. It prohibits the knowing destruction of objects of antiquity without a permit (expressed permission) on public lands and provides for criminal sanctions. As used in this section, "public lands" means lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof.

Local Regulations

City of Pacifica General Plan 2040

The City of Pacifica General Plan (General Plan) includes the following goals and policies associated with geology, soils, and seismicity:

Community Design

Implementing Policy CD I-13: Hillside Preservation District Requirements. Continue to implement the requirements of the Hillside Preservation District (HPD), including submission of siting and grading plans. Update the HPD to ensure that all steep slopes are covered and that sites on other terrain are not included.

Implementing Policy CD I-14: Design Review. Continue to use Design Guidelines to evaluate proposed projects in Planned Development, Hillside Development, and Special districts.

Implementing Policy CD I-15: Minimize Impacts of Coastal Development on Landforms. Ensure that negative visual impacts resulting from new development in the Coastal Zone are minimized. In areas characterized by bluffs and landforms. Strategies to implement this policy include:

- Prohibiting development on slopes in excess of 35 percent and highly visible tops of prominent landforms;
- Requiring blufftop development to minimize impacts on the view from the ocean and beach below by implementing a setback from the bluff edge;
- Requiring that development be clustered and contoured into the existing slope; and
- Requiring that new development be scaled and designed to be subordinate to landforms in the Coastal Zone.

Land Use

LU I-14: Hillside Preservation. Update the Hillside Preservation District and the zoning map to ensure that all steep and sensitive terrain is subject to these regulations. The Hillside Preservation map (Figure 4-4) should be used as a guide.

Safety

Guiding Policy SA G-1: Reduce Risk. Minimize risks of property damage and personal injury posed by geologic and seismic hazards.

Implementing Policy SA I-1: Fault Zone. New development shall be sited and designed to minimize risks from seismic events. Buildings for human occupancy shall avoid surface

traces of active faults, consistent with the Alquist-Priolo Earthquake Fault Zone Act and other relevant state laws. (See the Seismic Hazards map, Figure 8-1).

Implementing Policy SA I-2: Development in Hazardous Areas. Prohibit development in areas of mostly landslides or high or very high liquefaction risk as shown in Figure 8-2, or on slopes steeper than 35 percent, unless detailed site investigations ensure that risks can be reduced to acceptable levels and the structure will be protected for its design life.

Implementing Policy SA I-3: Real Estate Disclosure. Require real estate transactions, development approval processes, and property titles to declare known or suspected seismic or geologic hazards on a property, including Alquist-Priolo Fault Zones and areas suspected of high or very high risk of liquefaction, subsidence, or landslide.

Implementing Policy SA I-4: Code Enforcement. Continue to maintain and enforce appropriate building standards to ensure new development is designed to meet current safety standards associated with seismic activity.

Implementing Policy SA-I-7: Erosion Prevention. Require erosion prevention of hillside areas by revegetation or other acceptable methods.

Implementing Policy SA I-6: Restrictions on Mitigation Measures. Prohibit development which would require mitigation measures for potential geotechnical hazards if those measures could adversely affect surrounding property, including the use of public rights-of-way or adversely affect public health, safety, and welfare.

Implementing Policy SA I-8: Geotechnical Studies. Within the Coastal Zone and hillside areas, continue to require geotechnical site investigation for proposed development on sites located in any of the following areas, prior to allowing site development:

- On slopes greater than 15 percent.
- In areas showing evidence of landslides or landslide potential.
- In areas showing evidence of ground shaking or earth movement
- Within 50 feet of a coastal bluff
- Within sand dune areas.

Geotechnical studies shall identify any geologic hazards affecting the proposed project site, any necessary mitigation measures, and a statement of the site's suitability for the proposed development and whether or not it will be safe from geologic hazard for its expected life. The study shall identify net developable areas, if any, based on landslide or ground shaking potential and/or erosion risk. Impacts from the development, such as those resulting from increased water runoff, shall also be determined. Such studies must be signed by a licensed Certified Engineering Geologist or Geotechnical Engineer and are subject to review and approval by City staff. As detailed in Policy SA-I-2, further technical reports may be required for applicable projects.

Implementing Policy SA I-9: Maintain Restrictions on Hazardous Areas. Continue enforcing the existing Coastal Zone Combining District and Hillside Preservation District regulations that restrict development in hazardous areas where access is impractical and areas prone to hillside and coastal erosion, landslides, seismic shaking, tsunami inundation, or flooding.

Implementing Policy SA I-10: Soil Study. Require any geotechnical studies to include study of expansive and creeping soils, as well as analysis of erosion, seismic, tsunami, and other geotechnical hazards and make recommendations, as warranted.

Implementing Policy SA-I-11: Grading and Drainage Plans. Continue to require a grading and drainage plan for proposed development requiring a coastal development permit and a grading permit. The Plan should demonstrate how the project will maintain natural surface drainage and existing vegetation to the greatest extent feasible, by minimizing alteration of natural topography and removal of existing trees and vegetation; stabilizing cut-and-fill surfaces with native vegetation; restricting the movement of heavy equipment and machinery; and other means. Prohibit development-related grading and vegetation clearance on slopes steeper than 35 percent. Driveways and utilities may be allowed in the case that there is no less environmentally damaging alternative for providing access to the building site.

Implementing Policy SA-I-12: Bluff Drainage and Erosion. The City will pursue feasible funding mechanisms to investigate areas that may be significantly contributing to groundwater flows to the bluffs and determine whether improving drainage and/or reducing irrigation could reduce bluff erosion. Measures to improve drainage and reduce over-watering shall be communicated to the public and property owners as part of existing water conservation outreach programs, and included as conditions on new development where applicable.

Implementing Policy SA-I-15: New Development in Coastal Zone. Continue to enforce provisions of the California Coastal Act requiring new development within the Coastal Zone to:

- Minimize risks to life and property in areas of high geologic, flood, or fire hazard;
- Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs;
- Not accelerate the need for a shoreline structure or increase the likelihood of a future seawall beyond the existing development's expected life; and
- Not violate required setback provisions.
- Small improvement projects are exempt, including improvements that would increase height, bulk or floor area by less than ten percent.

Implementing Policy SA I-14: Geologic Hazard Abatement District. Amend the Municipal Code to include provisions for formation of geologic hazards abatement district for coastal bluffs and hillside areas at risk of landslides in Pacifica to enable cooperative efforts among property owners for protection of coastal bluffs from erosion and improvement and maintenance of drainage and protective infrastructure.

The Geologic Hazard Abatement District (GHAD) is a potentially useful tool to effectively abate a landslide hazard that crosses property boundaries. It is a mechanism that responds to the physical realities of landslides, and allows property owners to cooperate in solving a common problem. It removes much of the stigma of legal liabilities among adjacent landowners and allows them to cooperate rather than litigate. It also provides for a cost-effective solution, requiring only one geotechnical engineering firm and one plan to solve the problems of several landowners. The City may require the establishment of GHADs as a condition for new development proposed in areas of known bluff erosion or geologic hazard, such as areas identified in Figure 8-2 of the General Plan as "mostly landslides." The City will undertake the following actions to facilitate formation of GHADs:

- Identify where GHADs are appropriate or necessary;
- Advance funds for preparation of a Plan of Control for each proposed GHAD by a Certified Engineering Geologist describing the GHAD's boundaries, the geologic hazards affecting the GHAD, and a plan for the prevention, mitigation, abatement, or control of the hazards, with costs to be reimbursed by the GHADs.
- Establish a public education and outreach program to inform property owners of the benefits and responsibilities of participating in a GHAD; and
- Provide ongoing support of GHADs, with funding provided by the districts.
- The establishment of a GHAD would not allow development that is otherwise restricted on the basis of hazard risk, bluff erosion or geologic instability.

Implementing Policy SA-I-70: Technical Reports. Development proposed on the shoreline shall include coastal engineering, geomorphology and other relevant technical reports unless on-site hazards already identified in a recent Coastal Vulnerability Zone Map or assessment approved within the last five years are adequate for evaluating and ensuring compliance with the LCP, including through use of permit conditions to address any uncertainty. Reports shall

- Be prepared by a licensed civil engineer or other suitably qualified professional;
- Use the best available science;
- Consider the impacts from the med-high projection (CalNRA & OPC 2018) of sea-level rise for the anticipated duration of the proposed development;
- Demonstrate that the development will avoid (or if unavoidable, minimize) impacts from coastal hazards to the maximum extent feasible; and
- Evaluate the foreseeable effects that the development will have on coastal resources over time and mitigate the impacts where they are unavoidable.

- Reports may be waived for temporary events, temporary development structures or other minor, short-term development where it is clear there will be no significant hazard risks over the project's life.

Implementing Policy SA-I-71: Siting and Design. New development on vacant shoreline property shall be sited and designed to be safe from erosion, bluff failure, wave run-up, flooding and other coastal hazards for at least 100 years without shoreline protection, considering projected sea level rise and other climate change effects to be determined from best available science and current guidance at the time of approval of the proposed development. Permit approvals shall prohibit shoreline protection structures for the authorized development, require the property owner to record an acknowledgement that the development does not qualify as an existing structure entitled to construction of a shoreline protection structure under Coastal Act Section 30235 and a waiver of any rights to such protection structures and where necessary require a removal and restoration plan, including bonding for large projects, to avoid future shoreline protection structures or project failure.

Implementing Policy SA-I-80: Subdivision Limitations. Update the Zoning Ordinance to prohibit the division of shoreline property that creates hazardous or unbuildable parcels due to erosion, bluff failure, wave run-up, flooding and other coastal hazards for at least 100 years without shoreline protection, considering projected sea level rise and other climate change effects to be determined from best available science and current guidance at the time of approval of the proposed development. Only allow new lots to be created if they can be developed without ever requiring shoreline protection for the development.

Conservation

Guiding Policy CO G-2: Watershed Management. Recognize the interrelated nature of Pacifica's hydrology system, its watersheds, and development in the Planning Area, and protect water resources through comprehensive management of entire watersheds.

Implementing Policy CO I-10: Stormwater Discharge. Ensure compliance with the Municipal Regional Permit, the Construction General Permit, and the Construction Dewatering Permit, which regulate stormwater discharge from new and existing development.

These permits are established by the National Pollutant Discharge Elimination System (NPDES) and administered by the Regional Water Quality Control Board. They require that new development incorporate Best Management Practices (BMPs) and Green Infrastructure Plan requirements in site design, construction, and management to minimize storm water runoff rates and volumes, control water pollution, and maximize infiltration.

Implementing Policy CO-I-11: Protect Water Quality through Best Management Practices. Continue to require the use of best management practices to reduce water quality impacts from construction and development. Measures include:

Site Design and Source Control. Ensure that all new development incorporates site design and source control BMPs into the project design in order to preserve the infiltration, purification, and retention functions of each site's natural drainage systems, and to prevent or minimize the runoff of pollutants, sediments, waste, and pathogens from the site.

- Construction Pollution Control. Require all construction projects to adopt measures to avoid when possible, or minimize erosion and runoff of pollutants and sediments from construction-related activities, and to limit activities that result in the disturbance of land or natural vegetation.
- Construction projects will be required to use appropriate erosion prevention techniques, sediment control measures, and best management practices in accordance with City specifications and the San Mateo Countywide Water Pollution Prevention Program.
- Treatment Control. Require that new development implement treatment control BMPs (or structural treatment BMPs) where the combination of site design and source control BMPs is not sufficient to protect water quality and comply with applicable water quality permits.
- Stormwater treatment systems must meet the numeric sizing criteria established in the NPDES Permit, and must be operated and maintained in compliance with the NPDES Permit.
- Green Infrastructure. Require development projects to provide or pay for their share of new stormwater infrastructure or improvements necessitated by that development as required by the C.3 requirements of the MRP and the City's Green Infrastructure Plan.

Implementing Policy CO I-12: Infrastructure and Water Quality. Ensure that the design and construction of new infrastructure elements does not contribute to stream bank or hillside erosion or creek or wetland siltation, and incorporates site design and source control BMPs, construction phase BMPs, and treatment control BMPs to minimize impacts to water quality, in compliance with the NPDES Permit.

Implementing Policy CO-I-13: Erosion Control. Manage erosion in the Planning Area, particularly in watershed areas, through on-site erosion control.

Construction projects will be required to use appropriate erosion prevention techniques, sediment control measures, and best management practices in accordance with City Specifications and General Conditions of Approval and the San Mateo Countywide Water Pollution Prevention Program.

Implementing Policy CO I-14: Minimize Site Disturbance. Require use of best practices during development design and construction to preserve natural resources, such as soil, trees, native plants, and permeable surfaces.

Implementing Policy CO I-15: Reduce Impervious Surfaces. Enable natural drainage by reducing the amount of impervious surfaces on a development site, whenever feasible.

Techniques that help accomplish this objective:

- Designing development projects to share driveways;
- Placing parking lots under buildings, whenever feasible; and
- Using permeable paving materials on walkways and driveways, whenever feasible.

Implementing Policy CO I-24: Sewer System Connections. Require all new development to be connected to the City's sewer system.

Implementing Policy CO-I-25: Sanitary Sewer Discharge. Ensure that discharges of treated wastewater from the Calera Creek Wastewater Recycling Plant continue to comply with the Sanitary Sewer System Permit.

The City will manage the release of treated wastewater as part of habitat restoration along Calera Creek, and pursue the use of recycled water for irrigation and other uses.

Implementing Policy CO-I-68: Resource Impact Mitigation. Ensure that new development analyzes and avoids potential impacts to historic, archaeological, and paleontological resources by:

- Requiring a records review for development proposed in areas that are considered historically, archaeologically or paleontologically sensitive;
- Requiring pre-construction surveys and monitoring during any ground disturbance for all development in areas of historical, archaeological, or paleontological sensitivity; and
- Implementing appropriate measures as a condition of project approval—such as avoidance, preservation in place, and excavation—to reduce or avoid impacts.

In the event that historical, archaeological, or paleontological resources are accidentally discovered during construction, grading activity in the immediate area shall cease and materials and their surroundings shall not be altered or collected. A qualified archaeologist or paleontologist must make an immediate evaluation and avoidance measures or appropriate mitigation should be completed, according to CEQA Guidelines. The State Office of Historic Preservation has issued recommendations for the preparation of Archaeological Resource Management Reports that may be used as guidelines.

Implementing Policy CO-I-70: Native American Sites. Work with local Native American tribes to protect recorded and unrecorded cultural and sacred sites, and educate developers and the community-at-large about the connections between Native American history and the environmental features that characterize the local landscape.

Development on archaeologically sensitive sites requires on-site monitoring by appropriate Native American consultant(s) and a qualified archaeologist of all grading, excavation, and site preparation activities that involve earth-moving operations.

County of San Mateo Multi-Jurisdictional Hazard Mitigation Plan

In 2021, City staff from the Police Department, Community Development Department, and Public Works Department evaluated the city's exposure to natural hazards and identified mitigation strategies as part of a San Mateo County-wide effort to update the San Mateo County Multi-Jurisdictional Local Hazard Mitigation Plan (MJ-LHMP). Pacifica's Local Hazard Mitigation Plan (LHMP) is an annex to the MJ-LHMP. It was adopted by City Council 2021.

The MJ-LHMP notes Pacifica's vulnerability to groundshaking, liquefaction, and subsidence caused by potential seismic activity along the San Andreas fault. It also describes Pacifica's susceptibility to landslides and slope failures, which can be caused by earthquakes, hillside erosion, or coastal erosion. Major landslides in Pacifica have been triggered by heavy rainfall. Coastal erosion is another serious hazard that exists in Pacifica, as bluffs are progressively undercut by wave action and eroded from above by rainfall, with the most severe erosion occurring during winter storms.

The MJ-LHMP concludes that landslide/mass movements, which includes traditional landslides as well as coastal erosion, and earthquakes, with the potential to cause ground shaking, liquefaction, and landslides, are Pacifica's two highest priorities for the mitigation of geologic and seismic hazards. All goals and policies in the adopted MJ-LHMP are applicable to the Proposed Project, including those that concern geologic hazards.

City of Pacifica Municipal Code

Title 8, Section 8-1.01 of the City of Pacifica Municipal Code adopts the 2022 California Building Code in its entirety excepting certain additions, deletions, and amendments. As discussed above, the CBC regulates seismic design, the excavation of foundations and retaining walls, analysis of slope instability, requirements for drainage and grading, and other aspects of building design and construction that relate to geology, soils, and seismicity. Section 1803.13 requires that any site within a geologic or seismic hazard zone mapped by the California Geologic Survey or adopted in the General Plan to include professional evaluation of potential off-site geotechnical hazards and incorporate any appropriate design to minimize hazards. Amendments to permitting also prohibit grading, excavating, or filling between October 1 and April 30 without authorization by the Building Official, and any approved grading must include proposed erosion control devices or methods. Erosion control devices must be in place before earthwork activities commence.

Chapter 5, Flood Damage Prevention, includes provisions for flood hazard reduction, including standards for construction, utilities, and subdivisions. regulations regarding flood hazard protection, and defines provisions aimed at reducing erosion damage and hazards. The purpose of this chapter is to minimize expenditure of public money for costly flood control projects, to minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in areas of special flood hazard, to insure that potential buyers are notified that property is in an area of special flood hazard; and to insure that those who occupy the areas of special flood hazard assume responsibility for their actions. This chapter includes standards of construction (Sec 7-5.501), standards for manufactured homes (7-5.504), and standards for coastal high hazard areas (7-5.507).

Title 6, Chapter 9 and Chapter 10, includes regulations regarding connection to city sewer system, maintenance of sanitary sewer laterals, and sewer overflows. This chapter defines private sanitary sewer collection system, sanitary sewer, and wastewater.

Title 6, Chapter 12 Storm Water Management and Discharge Control, Article 2, provides provisions to protect and enhance the water quality of waters of the State and waters of the United States, and to protect water bodies in a manner pursuant to and consistent with Federal, State, and regional regulations. Specifically, this ordinance stipulates regulations for new development aligned with NPDES General Permit (NPDES Permit No. CAS612008). The ordinance requires all construction site owners and contractors to implement storm water management practices (BMPs), which prevent pollutants generated during construction from leaving the construction site and entering the city's storm water system during wet or dry weather.

Impact Analysis

SIGNIFICANCE CRITERIA

For the purposes of this EIR, a significant impact would occur if the Proposed Project would:

- Criterion 1:** Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
- i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map or based on other substantial evidence of a known fault (refer to Division of Mines and Geology Special Publication 42),
 - ii. Strong seismic ground shaking,
 - iii. Seismically related ground failure, including liquefaction, or
 - iv. Landslides;
- Criterion 2:** Result in substantial soil erosion or the loss of topsoil;
- Criterion 3:** Locate structures on expansive soils or on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse, therefore creating substantial risks to life or property;
- Criterion 4:** Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water; or
- Criterion 5:** Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

METHODOLOGY AND ASSUMPTIONS

Geology, Soils, and Seismicity

This evaluation of geologic, soils, and seismic hazard conditions was completed using published geologic, soils, and seismic maps and studies from USGS and CGS. In order to reduce or mitigate potential hazards from earthquakes or other local geologic hazards, implementation of the Proposed Project would be governed by existing regulations at the federal, state, and local levels, including existing Monterey General Plan (General Plan) policies and provisions. These regulations require that a proposed project design reduce potential adverse soils, geological, and seismicity effects to the extent feasible. Compliance with these regulations is required, not optional. These provisions ensure that development will continue to be completed in compliance with local and State regulations.

Paleontological Resources

An evaluation of impacts on paleontological resources was completed using published geologic maps from CGS (Wagner, Bortugno, & McJunkin, 1991) and database query at the University of California Museum of Paleontology (University of California Museum of Paleontology, 2024), following procedures outlined in the Standard Guidelines provided by the Impact Mitigation Guidelines Revisions Committee of the Society of Vertebrate Paleontology (SVP) (Society of Vertebrate Paleontology, 2010).

The Standard Guidelines include procedures for the investigation, collection, preservation, and cataloguing of fossil-bearing sites, including the designation of paleontological sensitivity. The Standard Guidelines are widely accepted among paleontologists and are followed by most investigators. The Standard Guidelines identify the two key phases of paleontological resource protection as (1) assessment and (2) implementation. Assessment involves identifying the potential for a project site or area to contain significant nonrenewable paleontological resources that could be damaged or destroyed by project excavation or construction. Implementation involves formulating and applying measures to reduce such adverse effects.

For the assessment phase, the Standard Guidelines prescribe the following steps (Society of Vertebrate Paleontology, 2010):

- Identify the geologic units that would be affected by the project, based on the project's depth of excavation—either at ground surface or below ground surface, defined as at least 5 feet below ground surface.
- Evaluate the potential of the identified geologic units to contain significant fossils (paleontological sensitivity).
- Identify impacts on paleontologically sensitive geologic units as a result of near-term and longer-term construction and operation that involve ground disturbance.
- Evaluate impact significance.

The paleontological sensitivity of the geologic units identified in the study area is classified according to four categories: SVP defines the level of potential as one of four sensitivity categories

for sedimentary rocks: High, Undetermined, Low, and No Potential (Society of Vertebrate Paleontology, 2010).

- **High Potential.** Assigned to geologic units from which vertebrate or significant invertebrate, plant, or trace fossils have been recovered; and sedimentary rock units suitable for the preservation of fossils (“middle Holocene and older, fine-grained fluvial sandstones...fine-grained marine sandstones, etc.”). Paleontological potential consists of the potential for yielding abundant fossils, a few significant fossils, or “recovered evidence for new and significant taxonomic, phylogenetic, paleoecologic, taphonomic, biochronologic, or stratigraphic data.”
- **Undetermined Potential.** Assigned to geologic units “for which little information is available concerning their paleontological content, geologic age, and depositional environment.” In cases where no subsurface data already exist, paleontological potential can sometimes be assessed by subsurface site investigations.
- **Low Potential.** Field surveys or paleontological research may allow determination that a geologic unit has low potential for yielding significant fossils (e.g., basalt flows). Mitigation is generally not required to protect fossils.
- **No Potential.** Some geologic units have no potential to contain significant paleontological resources, such as high-grade metamorphic rocks (such as gneisses and schists) and plutonic igneous rocks (such as granites and diorites). Mitigation is not required.

Geologic units at the project site were identified through California Geological Survey regional maps. Determination of presence of paleontological resources in the units was based on the fossil record as documented by the University of California Museum of Paleontology. For the implementation phase, the Standard Guidelines states that evaluation must identify impacts on significant paleontological resources and formulate and implement measures to mitigate potential impacts relative to the paleontological sensitivity of the geologic units that would be disturbed.

For the purposes of this analysis, an impact on paleontological resources was considered significant and to require mitigation if it would result in any of the following:

- Damage to or destruction of vertebrate paleontological resources.
- Damage to or destruction of any paleontological resource that:
 - Provides important information about evolutionary trends, including the development of biological communities;
 - Demonstrates unusual circumstances in the history of life;
 - Represents a rare taxon or a rare or unique occurrence;
 - Is in short supply and in danger of being destroyed or depleted;
 - Has a special and particular quality, such as being the oldest of its type or the best available example of its type; or
 - Provides information used to correlate strata for which it may be difficult to obtain other types of age dates.

RELEVANT PROPOSED GOALS AND POLICIES

The Proposed Project contains the following goals and policies relevant to geology, soils, and seismicity.

IMPACTS

Impact 3.6-1 Implementation of the Proposed Project would not expose residents, visitors, and employees, as well as public and private structures, to substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault; strong seismic ground shaking; seismically related ground failure, including liquefaction; or landslides. (*Less than Significant*)

Fault Rupture

For the Proposed Project, a significant impact due to fault rupture could occur if new structures were constructed within a designated Alquist-Priolo Earthquake Fault Zone, or within an active or potentially active known fault. The San Andreas fault zone intersects the very northern portion of the City of Pacifica that roughly parallels Skyline Boulevard (see **Figure 3.6-1**, Seismic Hazards). Surface fault rupture could occur anywhere along or within the associated Alquist-Priolo Earthquake Fault Zone (Alquist-Priolo Zone) for the San Andreas fault and could affect existing or proposed improvements located within this zone. Although fault rupture is not necessarily confined to the boundaries of this approximately quarter mile wide Alquist-Priolo Zone, the likelihood of rupture occurring outside of these zones is considered very low based on historical evidence and the geologic record. The amount and location of surface displacement would depend on the magnitude and nature of the seismic event on the fault. In some cases, surface fault rupture can cause displacement of the ground surface, resulting in substantial damage to foundations, roadways, and utilities. Implementation of the Proposed Project could result in residential projects within an Alquist-Priolo zone, particularly sites G, 25, and 28.

For any proposed development within the Alquist-Priolo Zone, fault identification studies are required by the Alquist-Priolo Act. These studies involve onsite trenching and excavation for site-specific identification and location of fault rupture planes where any future rupture would be anticipated. Structures intended for human occupancy (defined as a structure that might be occupied a minimum of 2,000 hours per year) are then required to be set back a minimum distance of 50 feet. The California Building Code (CBC) requires that structures near a known fault complete site-specific geotechnical reports evaluating the known fault and the structural integrity of the proposed building, as well as consider mitigation measures in structural design. In addition, General Plan policies SA-G-1, SA-1-1 require site-specific evaluation of geotechnical hazards in currently undeveloped areas in order to determine appropriate levels of development, as well as compliance with the existing code (SA-I-4). Therefore, the impacts related to fault rupture hazards for proposed improvements associated with the Proposed Project are less than significant.

Ground Shaking

A significant impact due to ground shaking could occur if implementation of the Proposed Project would permit construction in an area that would experience ground shaking, such that substantial

damage or harm to buildings or people could result. According to modeling conducted by the US Geological Survey in conjunction with the California Geological Survey, the San Francisco Bay Area will likely experience at least one major earthquake (greater than moment magnitude 6.7) within the next 30 years. The intensity of such an event would depend on the causative fault and the distance to the epicenter, the magnitude, the duration of shaking, and the characteristics of the underlying geologic materials. The potential for damage or loss during an earthquake of this magnitude could be substantial, especially in older structures and infrastructure that were constructed under less stringent building codes.

As discussed above, the Seismic Hazards Mapping Act regulates structures intended for human habitation in order to minimize damage due to seismic ground shaking. Additionally, development occurring under the Proposed Project would be required to conform to the current seismic design provisions of the 2022 California Building Code, adopted and incorporated into the Pacifica Municipal Code. The California Building Code contains the latest seismic safety requirements to resist ground shaking through modern construction techniques, which are periodically updated to reflect the most recent seismic research. Compliance with existing regulations would reduce potential impacts from ground shaking to the maximum extent practicable. Other General Plan policies, including those described above, strengthen these requirements, including site-specific evaluation of geotechnical hazards (SA-I-2, SA-I-10). Thus, associated impacts would be less than significant.

Liquefaction

A significant impact due to liquefaction could occur if implementation of the Proposed Project would result in construction in areas of elevated liquefaction risk such that substantial damage or harm to buildings or people could result. As shown in **Figure 3.6-2**, locations within the Planning Area are considered prone to liquefaction hazards. In general, the areas of highest liquefaction susceptibility are located within and around the Sharp Park Golf Course and just inland from Linda Mar Beach. Damage from earthquake-induced ground failure associated with liquefaction could be high in buildings constructed on improperly engineered fills or saturated alluvial sediments that have not received adequate compaction or treatment in accordance with current building code requirements. Ground failure, including liquefaction, as a result of an earthquake could occur in the Planning Area depending on the underlying conditions including moisture content, relative size of soil particles, and density of subsurface materials within 50 feet of ground surface. In particular, sites D, E, F, 16 A and B, 18, 23, 24, 27A and B, and 29 are located in liquefaction zones as identified by the California Department of Conservation.

Potential impacts from ground failure resulting from liquefaction would be addressed through site-specific geotechnical studies prepared in accordance with California Building Code requirements as adopted in the Municipal Code and standard industry practices. Sites in seismic hazard zones are also required to submit geotechnical investigations and appropriate mitigation measures incorporated into the project design, per the Seismic Hazards Mapping Act. Chapter 18 of the CBC regulates the preparation of a preliminary soil report, engineering geologic report, geotechnical report, and supplemental ground-response report. As described in Chapter 18, Seismic Design Category C requires analysis of slope instability, liquefaction, and surface rupture attributable to faulting or lateral spreading. Categories D, E, and F require additional analyses as well as mitigation measures to be considered in structural design. While seismic hazards cannot be eliminated

completely, adherence to the State and local regulatory requirements would minimize potential exposure of people and new structures to seismic hazard by requiring incorporation of hazard mitigation measures into project design. General Plan policies described above require geotechnical analysis and soil studies, and for sites 27A and B in the Coastal Zone, other geotechnical requirements and studies apply (CD-I-15, Sa-I-8, SA-I-9, SA-I-14, SA-I-15, SA-I-70, SA-I-71, SA-I-80). Therefore, impacts due to liquefaction are less than significant.

Landslides

Implementation of the Proposed Project could have a significant impact due to landslides if new development were to be located in areas with high landslide risk such that substantial damage or harm to buildings or people could result. Landslides may occur on slopes of 15 percent or less; however, the probability is greater on steeper slopes that exhibit old landslide features such as steep slopes or banks, slanted vegetation, and transverse ridges. Landslide-susceptible areas are characterized by steep slopes and downslope creep of surface materials. Sites A, G, I, J, 2, 10, 11, 12, 25, and 38 are located in a landslide zone as identified by the California Department of Conservation.

The impacts from landslides on development of future land uses associated with the Proposed Project would be addressed through site-specific geotechnical studies prepared in accordance with CBC requirements and standard industry practices, which would specifically address landslide hazards located in landslide hazard areas. Development would conform to the current design provisions of the CBC to mitigate losses from landslides. Proposed developments would also adhere to the hillside development requirements contained in the proposed policies below as well as the existing regulations in the Hillside Preservation District to resist landslides through modern construction design and slope stabilization techniques. General Plan Policies CD-I-13, CD-I-14, and SA I-2, I-9 maintain restrictions on hazardous areas including those in the Hillside Preservation District, while Policy SA I-8 requires that proposed development in hillside areas undertake geotechnical studies which analyze erosion and landslide potential. Policy LU-I-14 requires the extension of the Hillside Preservation District to ensure that all steep and sensitive terrain is subject to these regulations. Policy SA-I-6 prohibits development that requires certain mitigation measures that may affect surrounding areas.

Development on these sites and in areas with slope stability hazards would be subject to the provisions of the California Building Code, adopted and incorporated into the City Code, which regulate analysis of slope instability and requirements for drainage and grading. In addition, any project with soil disturbance of at least 500 square feet or 50 cubic yards would be required to submit an Erosion and Sediment Control Plan (ESCP), which would be subject to review and approval by the City. The ESCP would need to meet City standards of including erosion control best management practices (BMPs) such as avoidance of land-disturbing activities during the wet weather season, protection of existing vegetation, use of slope and slope stabilization BMPs, and containment of construction waste onsite. Compliance with Construction General Permit, Pacifica Municipal Code (Chapter 31.5, Article 2) requirements, and submission of ESCP would ensure that BMPs would be implemented to control soil erosion and landslide risk. In addition to other General Plan policies related to site-specific geotechnical investigation described above, policies SA-I-7, SA-I-11, SA-I-12, CO-G-2, CO-I-10, CO-I-11, CO-I-13, CO-I-14, CO-I-15, and CO-I-44 relate to erosion prevention and drainage planning requirements that also help to reduce any potential landslide risks.

Given State and local regulations and policy requirements, the potential for adverse landslide impacts due to the implementation of the Proposed Project is considered less than significant.

Mitigation Measures

None required.

Impact 3.6-2 Implementation of the Proposed Project would not result in substantial soil erosion or the loss of topsoil. (Less than Significant)

Topsoil refers to the uppermost layer of soil, which have the highest concentration of organic matter, and where most biological soil activity occurs. Implementation of the Proposed Project could have a significant impact due to soil erosion or loss of topsoil if associated construction and development activities could expose soils to the effects of erosion, which could hinder proper drainage and stormwater management. Erosion control, particularly during grading, is necessary to avoid downstream sedimentation and flooding. Once disturbed, through the removal of vegetation, asphalt, or an entire structure, exposed and stockpiled soils could be affected by wind and water. Development associated with the Proposed Project would likely include earthwork activities that could expose soils to the effects of erosion or loss of topsoil. Once disturbed, either through removal of vegetation, asphalt, or an entire structure, stockpiled soils if not managed appropriately are left exposed to the effects of wind and water. Generally, earthwork and ground-disturbing activities, unless below minimum requirements, require a grading permit, compliance with which minimizes erosion, and the City's grading permit requirements ensure that construction practices include measures to protect exposed soils such as limiting work to dry seasons, covering stockpiled soils and use of straw bales and silt fences to minimize offsite sedimentation.

In addition, development that disturbs more than one acre would be subject to compliance with a National Pollutant Discharge Elimination System (NPDES) permit, including the implementation of best management practices (BMPs), some of which are specifically implemented to reduce soil erosion or loss of topsoil, and the implementation of a storm water pollution prevention plan (SWPPP) through the local jurisdiction. BMPs that are required under a SWPPP include erosion prevention measures that have proven effective in limiting soil erosion and loss of topsoil. Generally, once construction is complete and exposed areas are revegetated or covered by buildings, asphalt, or concrete, the erosion hazard is substantially eliminated or reduced.

Any project with soil disturbance of at least 500 square feet or 50 cubic yards would be required to submit an Erosion and Sediment Control Plan (ESCP), which would be subject to review and approval by the City. The ESCP would need to meet City standards of including erosion control best management practices (BMPs) such as avoidance of land-disturbing activities during the wet weather season, protection of existing vegetation, use of slope and slope stabilization BMPs, and containment of construction waste on-site. Individual projects disturbing more than one acre of ground would be required to obtain coverage under the State Construction General Permit, which requires preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP); the SWPPP also must include BMPs to control contamination of surface flows and potential discharge of pollutants from commencement of construction through project completion.

Policies in the General Plan described above require erosion prevention mechanisms and drainage plans to minimize erosion, including policies SA-I-7, SA-I-11, SA-I-12, CO-G-2, CO-I-10, CO-I-11, CO-I-12, CO-I-13, CO-I-14, CO-I-15, CO-I-44.

Therefore, compliance with the City's grading permit requirements, NPDES and ESCP permit requirements, and General Plan policies reduces the potential for adverse erosion impacts related to land use changes and development from implementation of the Proposed Project to less than significant.

Mitigation Measures

None required.

Impact 3.6-3 Implementation of the Proposed Project would not locate structures on expansive soils or on a geologic unit or soil that is unstable, or that would become unstable as a result of new development under the Proposed Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse, or create substantial risks to life or property. (Less than Significant)

Liquefaction and landslide hazards associated with implementation of the Proposed Project are examined under Impact 3.7-1, while potential impacts related to expansive soils are discussed below under Impact 3.7-3. Development associated with the implementation of the Proposed Project could be located on a geologic unit or soils that are susceptible to lateral spreading. As discussed above under *Lateral Spreading*, the factors determining the potential for lateral spreading are liquefiable soils and the proximity to an open face or slope. As shown in **Figure 3.6-2**, locations within the Planning Area that have high liquefaction susceptibility have the highest risk of lateral spreading, which represent a potential significant impact.

Development associated with the implementation of the Proposed Project could be located on soils that pose a risk of subsidence. The Pacifica Municipal Code also establishes administrative procedures, minimum standards of review, and implementation and enforcement procedures for ensuring stable soil conditions. Compliance with existing regulations would ensure that impacts would be less than significant.

Some improvements associated with implementation of the Proposed Project could be located on geologic units or soils that are unstable, or that could become unstable and result in geologic hazards if not addressed appropriately. Areas with underlying materials that include undocumented fills, soft compressible deposits, or loose debris could be inadequate to support development, especially multi-story buildings. Soils that exhibit expansive properties when exposed to varying moisture content over time could result in damage to foundations, walls, or other structures. Structures, including residential units and commercial buildings, could be damaged as a result of a settlement or differential settlement where structures are underlain by materials of varying engineering characteristics. The potential hazards of unstable/expansive soil or geologic units would be addressed largely through the integration of geotechnical information in the planning and design process for projects to determine the local soil suitability for specific projects

in accordance with standard industry practices and state-provided requirements, such as CBC requirements which are used to minimize the risk associated with these hazards. Geotechnical investigations would be required to thoroughly evaluate site-specific geotechnical characteristics of subsurface soils and bedrock to assess potential hazards and recommend site preparation and design measures to address any hazards which may be present. These measures are enforced through compliance with the CBC to avoid or reduce hazards relating to unstable soils and slope failure. In addition, Policy SA-I-8 and SA I-10 of the General Plan strengthens these precautions by requiring geotechnical studies subject to review by City staff, which identify any geologic hazards affecting proposed project sites particularly in Coastal and Hillside zones, any necessary mitigation measures, and a statement of the site's suitability for the proposed development and whether or not it will be safe from geologic hazard for its expected life.

In summary, State and local regulations and General Plan policies would help ensure that potential impacts related to unstable units are minimized and would reduce the potential impact to less than significant. The potential for landslide, lateral spreading, subsidence, liquefaction, or collapse impacts related to changes from implementation of the Proposed Project is less than significant.

Mitigation Measures

None required.

Impact 3.6-4 Implementation of the Proposed Project would not have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater. (No Impact)

A significant impact could occur if new development under the Proposed Project would locate structures in areas without connection to the city's sanitary sewer system and on soils incapable of adequately supporting the use of septic tanks. The City's Municipal Code, Chapter 10, prohibits the construction of septic tanks except as provided in the Plumbing Code. General Plan policy CO-I-24 requires use of the existing collection system. Therefore, the Proposed Project would have no impact related to soils capability to support wastewater disposal.

Mitigation Measures

None required.

Impact 3.6-5 Implementation of the Proposed Project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. (Less than Significant)

The geologic units exposed at and below ground surface in the Planning Area are composed primarily of Holocene-age alluvial materials, according to the NWIC. Holocene-age alluvial materials are generally considered too young to contain paleontological resources. Review of the University of California, Berkeley, Museum of Paleontology database does not include records in known paleontological resources in Pacifica. Based on Society of Vertebrate Paleontology (SVP) methods described under *Methodology and Assumptions* above, this geologic unit is considered to

have lower paleontological sensitivity. The Pacifica General Plan does not identify the presence of any paleontological or unique geological resources within the boundaries of the city. Additionally, a search performed using the University of California Museum of Paleontology's (UCMP) database indicated no previous finds of paleontological resources on or in the immediate vicinity of the project site. Nevertheless, there remains a potential for inadvertent discovery of unique paleontological or geological resources during ground disturbing activities. A significant impact would occur if implementation of the Proposed Project would directly or indirectly destroy a unique paleontological resource or site or unique geological feature.

Development on public lands, including lands owned by or under the jurisdiction of the City of Pacifica, San Mateo County (including the SOI), and public agencies, would be subject to the provisions of California Resources Code Sections 5097-5097.6, which prohibit the unauthorized disturbance or removal of paleontological resources. Any highway projects associated with implementation of the Proposed Project would be subject to paleontological studies conducted by Caltrans and local project sponsors, and Section 305 of the Federal Highway Act of 1956 gives Caltrans authority to use federal funds to salvage paleontological sites affected by highway projects. General Plan Policies CO-I-68 and CO-I-70 will ensure that new development analyzes and avoids potential impacts to historic, archaeological, and paleontological resources by requiring pre-construction surveys, a records review before construction, and if warranted, implementing appropriate measures to reduce or avoid impacts. Policy CO-I-70 also specifies that the City will work with local Native American tribes to protect cultural and sacred sites. Compliance with existing regulations and implementation of Proposed Project policies and implementing actions would ensure that any impact is reduced to a less than significant level.

Mitigation Measures

None required.

3.7 Hydrology and Water Quality

This section assesses potential environmental impacts from future development under the Proposed Project related to hydrology and water quality. Issues addressed include water quality standards, groundwater resources, drainage, and flood hazards related to rivers, sea level rise, dam failure, seiches, tsunamis, and mudflows. The section describes existing surface water and groundwater hydrology, water quality, and flood hazards in the Planning Area, as well as relevant federal, State, and local regulations and programs.

There were two responses to the Notice of Preparation (NOP) regarding topics covered in this section. Commenters expressed concern about potential coastal flooding, erosion, and stormwater runoff which are addressed in the Impact Analysis below.

Environmental Setting

SURFACE WATER

The City of Pacifica is located within all or part of nine watersheds, shown on **Figure 3.7-1**. The majority of the city drains west towards the Pacific Ocean. From north to south, the major watersheds that drain to the ocean are Milagra Creek, Sanchez Creek (also known as Sharp Park Creek), Calera Creek, and San Pedro Creek. A small portion of the Planning Area drains to the east, contributing to the upper basin of San Mateo Creek watershed, which flows east toward San Francisco Bay.

Milagra Creek

Milagra Creek watershed drains approximately 460 acres, including the northern portion of Pacifica, west to the ocean. The drainage area for Milagra Creek covers various land types, including an undeveloped portion of the Golden Gate National Recreation Area (GGNRA) in the southern portion of the watershed. Much of the remaining area is relatively dense residential and commercial development and Highway 1. Milagra Creek has intermittent flow in most years. The lower reaches of Milagra Creek have been altered and the channel hardened in the reach below Highway 1 to the ocean.

Limited information regarding water quality of Milagra Creek is available. The United States Geological Survey (USGS) performed a water quality assessment in the GGNRA that consisted of three water and sediment samples within Milagra Creek in February, April, and July of 2006 (Hladik, 2008). This study aimed to determine baseline levels of pesticides in the water and sediment of urban creeks within the GGNRA and the Presidio. The findings suggested that excess

pesticides were being washed into the creek during the early wet season. By the later wet season, most pesticides had already been flushed through the creek.

Sanchez Creek

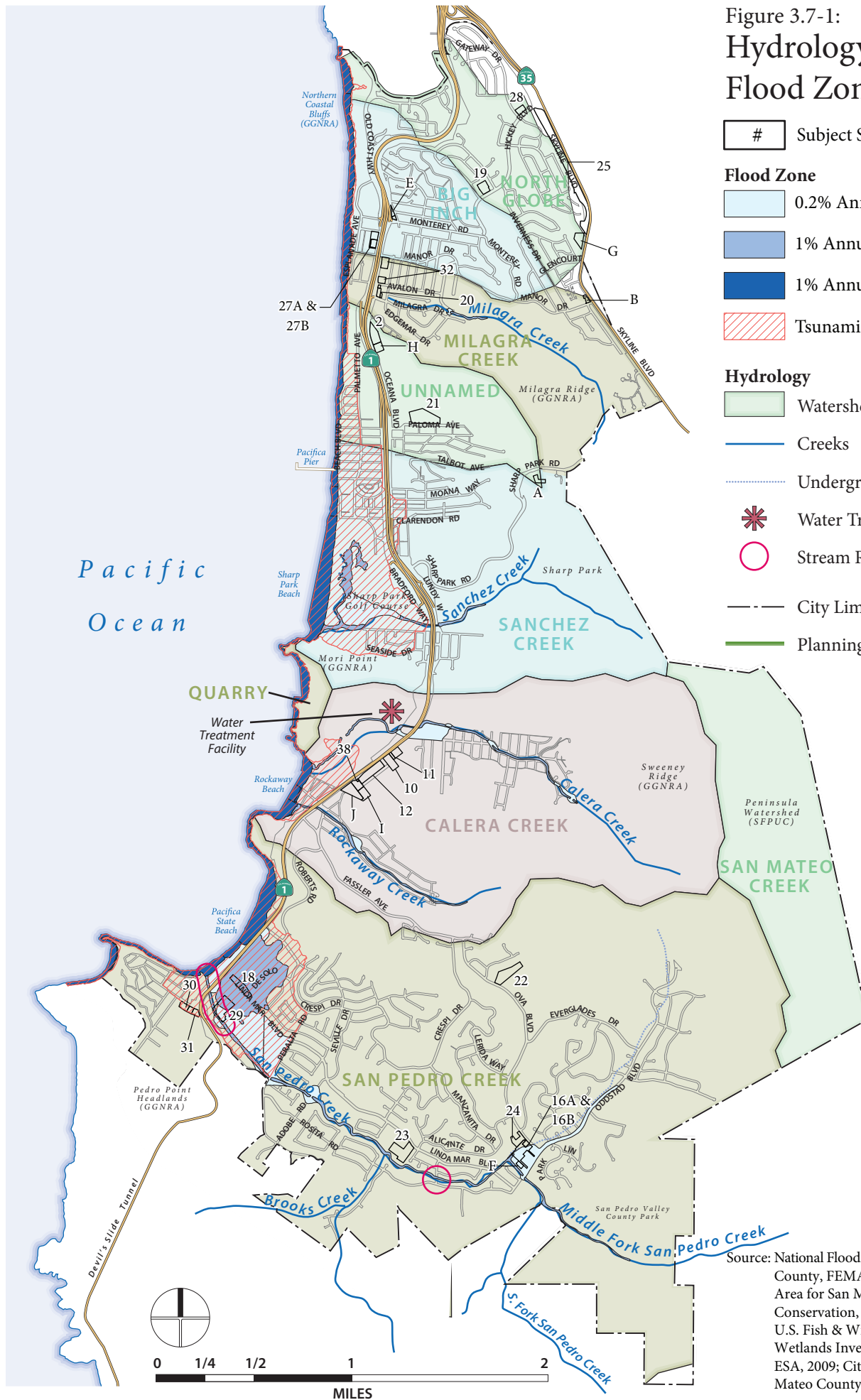
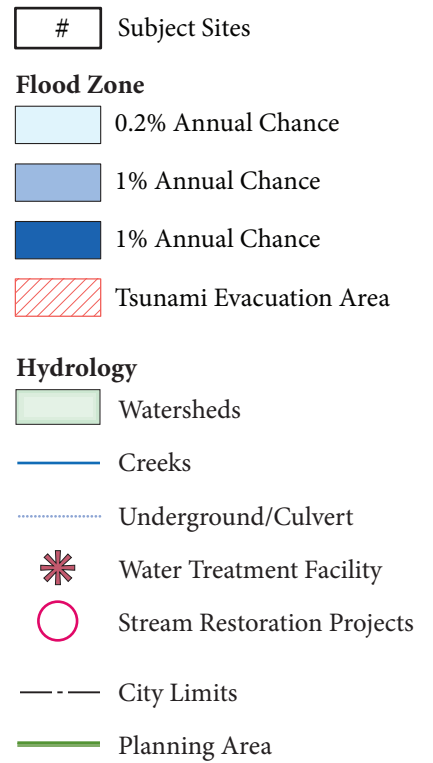
Sanchez Creek watershed drains approximately 1,071 acres west to the Pacific Ocean (Philip Williams & Associates, 1992). This watershed is almost entirely within the City of Pacifica. Much of the contributing area to Sanchez Creek is within the GGNRA. Portions of the valley bottoms and flatter portions of the hillsides within the watershed have residential development, a segment of Highway 1, and a golf course. Sanchez Creek has intermittent flow in most years, and frequently runs dry in the summertime in its upper reaches.

At its mouth, Sanchez Creek flows through Horse Stable Pond and exchanges water with Laguna Salada in the Sharp Park Golf Course. Creek flow is then conveyed through a levee to the ocean through a system of pipes. The discharge point of the pipes is often buried in beach sands and is occasionally excavated to allow for free drainage. During high flows, water from the golf course is pumped over the levee into the ocean.

There are several riverine wetlands associated with Sanchez Creek throughout the watershed. Notable wetlands include a headwater wetland on the north fork of the creek, and an old irrigation pond along the main stem of the creek. The irrigation pond has been used to provide water for the Sharp Park Golf Course. There are also several depressional and formerly estuarine wetlands near the mouth of Sanchez Creek at Horseshoe Pond and Laguna Salada.

The USGS pesticide baseline study described above collected data on Sanchez Creek (Hladik, 2008). Water samples showed limited concentrations of three pesticides and no concentrations measurable in the sediment samples.

Figure 3.7-1:
Hydrology and
Flood Zones



Source: National Flood Hazard Layer for San Mateo County, FEMA, 2019; Tsunami Hazard Area for San Mateo County, Department of Conservation, State of California, 2022; U.S. Fish & Wildlife Service, National Wetlands Inventory, 2023; FEMA, 2019; ESA, 2009; City of Pacifica, 2021; San Mateo County, 2021; Dyett & Bhatia, 2023.

Calera Creek

Calera Creek drains the central portion of the City of Pacifica west to the ocean, flowing onto the north end of Rockaway Beach. Calera Creek drains approximately 1,600 acres via two forks: a main channel to the north and a smaller southern fork (sometimes referred to as Rockaway Creek).

Land use throughout the Calera Creek basin is dominated by residential neighborhoods with some commercial businesses along main roads. The contributing area of Calera Creek is generally more altered along the valley bottom and near the mouth. The City of Pacifica's wastewater treatment plant (WWTP) is located near the mouth of Calera Creek, west of Highway 1.

The lower reach of Calera Creek was part of a substantial restoration project implemented in 1997 and 1998. This project excavated a new stream channel, restored approximately 16 acres of wetlands, and 12 acres of surrounding uplands. The restoration site receives additional tertiary-treated wastewater from the City's WWTP, which adds approximately 2.7 million gallons per day (mgd) to the lower reach. The amount of flow generated by the WWTP varies with rainfall events and usage.

Calera Creek is perennial in the lower reach due to the input from the WWTP. The creek was likely intermittent in at least some years prior to operation of the WWTP and is still intermittent with residual pools above the WWTP discharge point.

San Pedro Creek

San Pedro Creek watershed is the largest of the surface water channels within the City of Pacifica, draining approximately 5,300 acres west to the Pacific Ocean in the area to the north of Devil's Point. The watershed extends north to Sweeney Ridge, east to Spring Valley Ridge, and south into the slopes of Montara Mountain. San Pedro Creek has four main tributaries extending well past the city's eastern and southern boundaries. The tributaries are: South Fork, Middle Fork, North Fork, and Sanchez Fork.

San Pedro Creek is a key watershed along this portion of the coast because it has perennial flow that supports anadromous steelhead trout, which are listed under the federal Endangered Species Act. This creek also has one of the only functioning estuaries between the Devil's Slide area and the Golden Gate Bridge. Riverine wetlands along San Pedro Creek also provide habitat for the threatened California red-legged frog.

The upper watershed, which is beyond the Planning Area, extends into the GGNRA and is largely undeveloped. The lower portion within the city is highly developed with residential uses and commercial shopping centers near Highway 1.

Portions of San Pedro Creek have been significantly altered during past agricultural and urban land cover conversions. The North Fork of San Pedro Creek has been ditched and realigned to support farming in the valley bottom. The North Fork is currently contained within a pipe that was installed as the area developed with residential housing (Collins, 2001).

Direct alterations and changing hydrology from urban development have resulted in a deeply incised channel with steep banks in much of the main channel. Channel downcutting and erosion throughout the reach has threatened roads and residential lots and structures adjacent to the creek. Various types of formal and informal bank stabilization techniques have been installed over the years to protect banks (Collins, 2001).

The City of Pacifica and its partners have implemented several restoration projects along San Pedro Creek since the mid-1990s. The mouth of San Pedro Creek has been restored to its historic form as a tidally-influenced estuary. The restoration project acquired creekside property and removed fill west of Highway 1.

In 2000, earthwork and planting were completed on a combination stream restoration and flood protection project on former California Department of Transportation (Caltrans) property east of Highway 1. This project established more natural channel geometry and increased channel-floodplain connectivity to provide additional flood storage. This project was implemented with federal assistance from the U.S. Army Corps of Engineers. This project is one part of a multi-phase project intended to reduce flood risks, improve channel stability, and restore ecosystem functioning along San Pedro Creek. This project provides multiple benefits, including the restoration of habitat for several listed species, including steelhead trout and red-legged frogs.

Another phase of the San Pedro Creek restoration work occurred further upstream at the Capistrano bridge crossing in 2005. This project installed of rock weirs to stabilize the degrading channel bed, smoothed the longitudinal profile, and improved fish passage through the site (Smulyan, 2012).

From 2002 to 2004, San Mateo Countywide Stormwater Pollution Prevention Program (SMCWPPP) conducted bioassessment and collected water quality grab samples throughout the San Pedro Creek watershed (STOPPP, 2005). The results of the bioassessment generally confirmed that the portions of the creek that are higher in the watershed and do not receive as much runoff from developed lands support greater species richness and diversity. The elevation and substrate quality did not appear to influence species richness and diversity, indicating that poor water quality was the main driver that reduced the health of the benthic macroinvertebrate community in San Pedro Creek (STOPPP, 2005).

Water quality samples were taken for the SMCWPPP assessment from three locations on three different days. The levels of organo-phosphorous pesticides, pH, temperature, conductivity, and dissolved oxygen were measured in the samples. The results of the testing were all within general water quality standards, with the exception of relatively high temperature readings during one sampling event. Organo-phosphorous pesticides were not detected in these tests.

San Pedro Creek is listed on the San Francisco Bay Regional Water Quality Control Board's (RWQCB) 2006 303(d) list of impaired waters for high coliform bacteria. Impaired water bodies refer to those that do not meet one or more of the water quality standards established by the state (SWRCO, 2006). A Total Maximum Daily Load (TMDL) for coliform bacteria in San Pedro Creek was adopted in 2013 (California Water Boards, 2020). TMDL refers to the maximum amount of a pollutant that a water body can receive and still meet water quality standards (see Applicable Regulations section for more details).

San Mateo Creek

A small portion of the City's Planning Area drains east into the upper San Mateo Creek watershed. This area covers approximately 600 acres, approximately 7 percent of the Planning Area, along the eastern slopes of Sweeney Ridge. This area is within National Park Service lands and is currently undeveloped, with the exception of a ridge-top fire access road. San Mateo Creek is listed on the RWQCB's 2006 303(d) list of impaired waters for diazinon (insecticide). A TMDL for diazinon in San Mateo Creek was established in 2007 (SWRCB, 2006).

GROUNDWATER

The San Pedro Valley Groundwater Basin lies within the City of Pacifica and has a surface area of approximately 700 acres. Alluvial deposits, or clays, sands, and silts with interspersed gravel deposited by rivers, are found throughout the majority of the basin and are the primary water-bearing formation in the City of Pacifica (DWR, 2004). Existing data indicates that the alluvial deposits in San Pedro Valley are approximately 150 feet thick or more (City of Pacifica, 1992).

The alluvium contains semi-confined and unconfined groundwater that is transmitted and stored through intergranular porosity. Previous studies indicate that the aquifer is recharged by local precipitation and runoff (City of Pacifica, 1992). The outflow of water from the aquifer occurs by evapotranspiration and seepage to streams, springs, and the ocean. The water table fluctuates seasonally in response to outflow and recharge volumes. The fluctuations vary based on characteristics such as soil permeability, rainfall, and slopes. Water quality, groundwater level, and groundwater storage data for the San Pedro Valley Groundwater Basin is minimal.

As part of a Sewer System Evaluation Survey, groundwater wells in the City of Pacifica were monitored to determine the location of seasonally shallow groundwater. The groundwater was mapped for three depths below the ground surface: less than 1.5 feet, less than 3.0 feet, and less than 6.0 feet (City of Pacifica, 1992). Communities with seasonally shallow groundwater include Pedro Point, Park Pacifica, Vallemar, Fairway Park, Linda Mar, and Sharp Park.

RIVERINE FLOOD ZONES

Flood hazards exist along most of the creeks in Pacifica. Broad flood inundation is relatively common in several low-lying areas, including the Sharp Park area along Sanchez Creek and in the Linda Mar neighborhood along San Pedro Creek. In much of the city, however, the creeks are confined within deeply incised channels, limiting potential flooding in these areas.

Flood hazards have been mapped by the Federal Emergency Management Agency (FEMA) to support the development of Flood Insurance Rate Maps (FIRMs). These maps generally identify areas of greater flood risk (e.g., 1 and 0.2 percent annual chance flood areas, also referred to as 100 and 500 year events) in the lower reaches of the main stream channels, as well as the risk of coastal flooding along the shoreline. See **Figure 3.7-1**.

FEMA FIRM maps show riverine flood hazards on Milagra Creek, Sanchez Creek, Calera Creek, Rockaway Creek and, San Pedro Creek. The mapped flood hazards are generally within the active channels of these creeks in the lower elevation areas.

A portion of Milagra Creek above Miller Avenue is mapped within the 1 and 0.2 percent annual flood area. Along Sanchez Creek, mapped flood hazard zones include portions of the channel extending from Highway 1 west to the seawall within the Sharp Park Golf Course. These areas include a 1 percent annual chance area within or near the main channel, and a broad area within the 0.2 percent chance area over much of the golf course. Both 1 and 0.2 percent annual chance flood areas are mapped along Calera Creek extending from the coast upstream past the Highway 1 crossing. A portion of the former lower quarry area is within the 0.2 percent chance area extending upstream along the south fork of Calera Creek. A broad area within the 1 percent chance area is shown in the lower quarry area, but does not appear to reflect the new channel alignment that exists resulting from the Calera Creek restoration project.

The broadest mapped flood hazard areas are located along San Pedro Creek, covering much of the Linda Mar area north of the creek extending down to the coast. A broad 0.2 percent annual chance flood area is mapped at the confluence of the main stem with the North Fork of the San Pedro Creek.

According to the local hazard mitigation plan for the City of Pacifica, the city contains:

- 119 acres in the 500-year floodplain and 141 acres in the 100-year flood plain.
- 4 miles of roadway in the 500-year flood plain and 6 miles of roadway in the 100-year flood plain.
- No critical facilities located in the 500-year floodplain.
- Three critical facilities are located in the 100-year flood plain.

Recent Floods

San Pedro Creek has a history of substantial flooding in the Linda Mar area. The low area of Linda Mar has pump systems providing drainage to the ocean, but these systems can be overwhelmed during high flow/tide events. Substantial flooding in this area occurred in 1955, 1962, 1972, 1982, 1997, 1998, 2014 and 2021 (McDonald, 2004). The 1982 flood damaged more than 300 homes. One home was eventually lost, and two homes and a restaurant remained threatened by storm surges and erosion. Following the 1982 flood, the U.S. Army Corps of Engineers and the City's Flood Control Committee supported proposals to further harden and channelize the creek to reduce the risk of flooding.

COASTAL FLOODING

Pacifica can experience flooding from coastal sources. Coastal flooding in Pacifica typically occurs as some combination of high tides, large wind-driven waves, storm surge, swells, or tsunami waves. Areas with the potential for coastal flooding have been mapped and shown on the FEMA FIRMs

(**Figure 3.7-1**) based on a coastal flooding analysis updated in 2019 (FEMA, 2019). Areas mapped as prone to coastal flooding are focused on the low-lying areas along the coast including:

- The Sharp Park Golf Course/Laguna Salada area;
- Lower Calera Creek;
- Portions of Rockaway Beach;
- Residential and commercial area at Linda Mar near the mouth of San Pedro Creek.

Most of these areas lie to the west of Highway 1, with the exception of the San Pedro Creek Valley. This area extends well past Highway 1 into the residential and commercial area of Linda Mar.

The coastal flooding analysis determined the extent of the 1 percent annual chance flood event as a two-step process. First, stillwater elevations were defined using historical data for astronomical tide, storm surge, and wave setup. Second, wave runup on the beach was calculated using a wave tracking model. The wave runup calculations were performed on offshore bathymetry maps and beach transects collected by the USACOE in 1978 (FEMA, 2019).

The only section of coastline that is protected by levees is the Sharp Park Golf Course area. Waves overtopping the levee along the golf course resulted in significant flooding in 1983 and 1986 (PWA, 1992). Since that time, the levee has been reinforced, reducing overtopping risk in the area. However, drainage from Sanchez Creek and Laguna Salada to the ocean can be insufficient to prevent lowland flooding during high tide/high flow events.

A seawall/revetment structure protects the area north of the Sharp Park Golf Course along Beach Boulevard, including the Pacifica Pier. The structure has required maintenance on several occasions to repair areas where beach erosion has undermined the structure. The City of Pacifica is in the process of designing and permitting additional structural protections for portions of the revetment.

Potential Sea Level Rise

Sea level rise resulting from global climate change has the potential to alter the frequency and magnitude of coastal flood events in Pacifica. Current estimates of sea level rise are based on Global Climate Models (GCMs), based on work performed by the Intergovernmental Panel on Climate Change (IPCC), which released a summary report in 2014. The IPCC's Sixth Assessment cycle is currently underway, and an updated Synthesis Report is due for release in 2022 (IPCC, 2014). The Coastal and Ocean Working Group of the California Climate Action Team (CO-CAT) and other scientists have used IPCC results to investigate the implications of sea level rise along the California coast (CO-CAT, 2018). Estimates of sea level rise vary between model runs, so trends and potential increases are typically reported in ranges, usually grouped based on potential greenhouse gas emission scenarios. Scientific understanding of sea level rise is advancing, and current evidence has highlighted the potential for extreme sea level rise if current greenhouse gas emissions continue unabated and trigger rapid ice loss in the Greenland and Antarctic Ice Sheets (CalNRA, 2018). State guidance recommends analyzing a range of sea level rise projections in order to understand the consequences and risks associated with various decisions and to inform adaptation strategies despite uncertainty (CalNRA, 2018).

In 2018, the City of Pacifica prepared a Sea Level Rise Vulnerability Assessment using the best available science. Consistent with the San Mateo County Vulnerability Assessment, existing and future coastal flooding was evaluated using the Our Coast, Our Future (OCOF; produced by US Geological Survey) mapping products, while future coastal erosion was evaluated using the Pacific Institute (PI) erosion maps. The Vulnerability Assessment projected sea level rise scenarios ranging from 1-2 feet by 2050, and 3-6 feet by 2100 (City of Pacifica, 2018). The 6 feet projection is an extreme scenario in which sea levels rise at a rate about 30-40 times faster than the rate experienced in the 20th century (City of Pacifica, 2018).

Our Coast, Our Future (Ballard et al., 2016) is a collaborative project that provides online maps and tools to help users understand, visualize and anticipate vulnerabilities to sea level rise and storms. The project maps 40 different sea level rise and storm scenarios that were developed by the US Geological Survey. The modeling used for the Vulnerability Assessment does not incorporate the long-term erosion of shorelines and bluffs and thus the flood layers may underestimate flood exposure. The modeling does however use recent (2013) topography that includes existing features such as the elevation of the Beach Boulevard seawall and the Sharp Park Golf Course Levees.

In 2009, Ocean Protection Council funded a technical hazards analysis supporting the Pacific Institute report on the “Impacts of Sea Level Rise to the California Coast” (PWA 2009; Pacific Institute 2009). This work projects future coastal flooding hazards for the entire state based on a review of existing FEMA hazard maps and projected future coastal erosion hazard areas for the northern and central California coastline. The erosion hazard zones produced for this study do not consider the effects of coastal armoring structures, but rather depict the potential extent of erosion in the case that armoring fails or is not maintained. It is important to understand the potential risk that coastal erosion poses to assets without assuming any given adaptation strategy, and the Pacific Institute erosion maps are the best available resource to do so in Pacifica.

There is strong agreement among the various climate models that sea levels will continue to rise steadily through 2050 for the amount of sea level rise that is likely to occur (CO-CAT, 2018). After midcentury, projections of sea level rise become less certain and vary significantly, primarily due to uncertainties about future global greenhouse gas emissions and uncertainties associated with the modeling of land ice melting rates. Climate model runs intended to capture more severe carbon dioxide loadings to the atmosphere typically show acceleration in rising sea levels in the decades ahead.

Increased Coastal Flooding

The Vulnerability Assessment mapped seven coastal sub-areas at increased risk of coastal inundation using the OCOF and Pacific Institute Study maps. The subareas were used to facilitate more focused development of adaptation strategies and policies. The subareas identified as vulnerable to increased coastal flooding are: Fairmont West, West Edgemar, Pacific Manor, Northwest Sharp Park, Sharp Park/West Fairway Park/Mori Point (these areas were combined because the entire stretch of shoreline is publicly owned and fully government owned shoreline may have different policy or funding considerations), Rockaway Beach/Quarry/Headlands, Pacifica State Beach, West Linda Mar, and Pedro Point/Shelter Cove.

Tsunami

Coastal flooding, potentially severe damage, and threats to human health and safety can occur as a result of a tsunami. A tsunami is a wave generated by abrupt movement of the seabed, which can occur as an earthquake or after a significant landslide. Tsunami hazards occur for the low-lying portions of Pacifica, generally coincident with the coastal flooding zones discussed above (ABAG, 2019). While these areas are at risk, the occurrence of tsunamis is less frequent than riverine or coastal flooding.

Tsunamis can reach Pacifica from several sources, including: (1) 'far-field' sources throughout the Pacific Ocean, (2) a substantial earthquake along the Cascadia Subduction Zone in northern California north to Vancouver Island, (3) movement along local fault lines, and (4) local coastal landslides. Travel times, the degree of warning, and the magnitude of the wave will vary depending on the source and initial strength of the tsunami-generating event.

Earthquakes along the Cascadia Subduction Zone are likely the most hazardous to Pacifica because of the potential for very large wave generation and a relatively short travel time (on the order of 1-3 hours) (San Mateo County, 2006). However, smaller events along local faults could result in a wave that reaches Pacifica with essentially no warning time.

A 2007 study investigated the probability of tsunami occurrence and the potential severity of tsunamis reaching the City of Pacifica to support the City's planning process for constructing a new City Hall (Elwany, 2007). Historical tsunami run-up (wave height) values from San Francisco to Monterey from 1854 to 2007 from the National Geophysical Data Center (NGDC) were used to investigate recorded patterns at Pacifica. These records indicated that two tsunamis have reached Pacifica during the 153-year record. The most significant recorded tsunami wave that reached Pacifica was caused by the 1964 earthquake in Prince William Sound, Alaska. This event was a 9.2 magnitude earthquake that resulted in a 4.5-foot (1.37 m) run-up at Pacifica. The study resulted in an estimate of tsunami run-up heights and frequencies ranging from 0.16 feet (0.05 m) for the 5-year (20 percent annual chance) event to 4.2 feet (1.27 m) for the 500-year (0.2 percent annual chance) event (Elwany, 2007).

Overall, the report rates tsunami risks in Pacifica as lower than other areas in northern California. Recorded tsunami run-up magnitude is generally lower for Pacifica than other locations from San Francisco to Monterey, likely due to offshore bathymetry and shoreline alterations along the city (Elwany, 2007). The City of Pacifica reported no damage or injuries following the tsunami from the March 2011 Japan earthquake, which damaged other areas of California including Santa Cruz and Crescent City.

San Mateo County has an established emergency plan for tsunamis (San Mateo County OES, 2021). The City of Pacifica has identified tsunami hazards in their local annex to the San Mateo County Multi-Jurisdictional Local Hazard Mitigation Plan for the Bay Area (City of Pacifica, 2021). As part of this program, the City of Pacifica installed a tsunami warning system, consisting of three solar powered alarm towers. Two are located in the Sharp Park neighborhood and one is located at Rockaway Beach. This system links into a San Mateo County alert system that can reach email and cell phones.

REGULATORY SETTING

Federal

Clean Water Act (CWA)

The Clean Water Act (CWA) provides jurisdiction over waters of the United States and authorizes the United States Environmental Protection Agency (EPA) to implement water quality regulations. The intent of the CWA is to maintain and restore the chemical, physical, and biological integrity of the waters of the United States. The CWA includes regulatory and non-regulatory guidance to reduce direct and indirect pollution discharges into waterways.

National Pollutant Discharge Elimination System (NPDES)

Section 402(p) of the CWA establishes the National Pollutant Discharge Elimination System (NPDES) permit program. The NPDES permit program regulates discharges of pollutants (including contaminated stormwater, sewage, and construction sediment) into the waters of the United States. The EPA has given authority for NPDES permitting to the California State Water Resources Control Board (SWRCB) and the nine regional water quality boards. The San Francisco Bay Regional Water Quality Control Board (RWQCB) regulates water quality for the City of Pacifica.

Total Maximum Daily Load (TMDL)

Section 303(d) of the CWA requires that each state identify segments of water bodies or entire water bodies that are impaired. After the segment of water bodies or the entire water body is listed, the state is required to establish a TMDL for the pollutant identified as causing the impairment. Generally, TMDL is the sum of the loads of a single pollutant from point and nonpoint sources. In Pacifica, San Pedro Creek is listed as impaired by coliform bacteria and San Mateo Creek is listed as impaired by diazinon (Table 3.7-1).

Table 3.7-1: Section 303(d) List of Impaired Water Bodies

<i>Water Body</i>	<i>Pollutant</i>	<i>Potential Source</i>	<i>Status of TMDL Preparation and Approval¹</i>
San Pedro Creek	Coliform bacteria	Urban runoff/storm sewers	Approved (2013)
San Mateo Creek	Diazinon	Urban runoff/storm sewers	Approved (2007)

1. The date of

planned TMDL completion is provided in the 303(d) lists from the SWRCB.

Source: SWRCB, 2007; California Water Boards San Francisco Bay R2, 2020.

Executive Order 11988

FEMA is responsible for managing the 100-year floodplain, areas with a 1 percent or greater chance of flooding in any given year. A Flood Insurance Rate Map, an official FEMA-prepared map, is used to delineate both the Special Flood Hazard Areas (the 100-year floodplain) and the flood-risk premium zones in a community. Under Executive Order 11988, FEMA requires local governments that are covered by the National Flood Insurance Program to pass and enforce a floodplain management ordinance that specifies minimum requirements for any construction within the 100-year floodplain (FEMA, 2021). FEMA administers the National Flood Insurance Program, which includes floodplain management and flood hazard mapping and provides subsidized flood insurance to communities that comply with FEMA regulations to limit development in floodplains.

Safe Drinking Water Act

The Safe Drinking Water Act (SDWA) was established in 1974 to set federal minimum drinking standards and to protect public water supplies. This is the primary federal legislation protecting drinking water supplied by public water systems. As a result of the act, regulations for the protection of public health, as well as regulations relating to the taste, odor, and appearance of drinking water were established (U.S. EPA, 2004).

State Regulations

California Coastal Act

The California Coastal Act of 1976 establishes policies that guide development and conservation along the California coast. Section 30235 pertains to construction altering natural shoreline; construction that alters natural shoreline processes shall be permitted when required to serve coastal dependent uses or to protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures that cause water stagnation, pollution, and fish kills should be phased out or upgraded where feasible.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act) was established and implemented by the SWRCB. The SWRCB is the primary State agency with responsibility for protecting the quality of the State's surface and groundwater supplies, or waters of the State. Waters of the State are defined more broadly than waters of the United States (i.e., any surface water or groundwater, including saline waters, within the boundaries of the State). This includes waters in both natural and artificial channels. It also includes all surface waters that are not waters of the United States or non-jurisdictional wetlands, which are essentially distinguished by whether they are navigable. If waters are not navigable, they are considered to be isolated and, therefore, under the jurisdiction of only the Porter-Cologne Act and not the CWA (SWRCB, 2024). The Porter-Cologne Act authorizes the SWRCB to draft policies regarding water quality. The act requires projects that discharge or propose a discharge of wastes that could affect the quality of waters of the State to file a Report of Waste Discharge with the appropriate RWQCB. The Porter-Cologne Act also requires the SWRCB or a RWQCB to adopt basin plans for the protection of water quality. The RWQCB has prepared the San Francisco Bay Basin Plan (Basin Plan), which establishes water

quality objectives and implementation programs to meet these objectives (see Regional section below). Additionally, the act authorizes the NPDES program and permit requirements for the City of Pacifica.

Regional Regulations

San Francisco Bay Water Quality Control Plan (Basin Plan)

The Basin Plan, amended in 2019, contains descriptions of the technical, legal, and programmatic bases of water quality regulations for the San Francisco Bay Region, which includes the City of Pacifica. The Basin Plan defines beneficial uses for water bodies in the region. The beneficial uses listed for water bodies in the City of Pacifica are shown in **Table 3.7-2**.

Table 3.7-2: Designated Beneficial Uses

<i>Designated Beneficial Uses</i>	<i>Water Body</i>	
	<i>San Pedro Creek</i>	<i>San Mateo Creek</i>
Municipal and Domestic Supply (MUN)	Yes	No
Body Contact Recreation (REC-1)	Yes	Yes
Noncontact Recreation (REC-2)	Yes	Yes
Warm Freshwater Habitat (WARM)	Yes	Yes
Cold Freshwater Habitat (COLD)	Yes	Yes
Fish Migration (MIGR)	Yes	Yes
Fish Spawning (SPWN)	Yes	Yes
Wildlife Habitat (WILD)	Yes	Yes
Freshwater Replenishment (FRSH)	No	Yes
Preservation of Rare and Endangered Species (RARE)	Yes	Yes

Source: RWQCB, 2019.

General Construction Permit

The California Construction Stormwater Permit (Construction General Permit)¹, adopted by the State Water Resources Control Board (SWRCB), regulates construction activities that include clearing, grading, and excavation resulting in soil disturbance of at least one acre of total land area. The Construction General Permit authorizes the discharge of storm water to surface waters from construction activities. It prohibits the discharge of materials other than storm water and authorized non-storm water discharges and all discharges that contain a hazardous substance in

¹ *General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities*, Order No. 2009-0009-DWQ, as amended by Order No. 2010-0014-DWQ, National Pollutant Discharge Elimination System No. CAS000002.

excess of reportable quantities established at 40 Code of Federal Regulations 117.3 or 40 Code of Federal Regulations 302.4, unless a separate NPDES Permit has been issued to regulate those discharges.

The Construction General Permit requires that all developers of land where construction activities will occur over more than one acre do the following:

- Complete a Risk Assessment to determine pollution prevention requirements pursuant to the three Risk Levels established in the General Permit;
- Eliminate or reduce non-storm water discharges to storm sewer systems and other waters of the Nation;
- Develop and implement a Stormwater Pollution Prevention Plan (SWPPP), which specifies Best Management Practices (BMPs) that will reduce pollution in storm water discharges to the Best Available Technology Economically Achievable/Best Conventional Pollutant Control Technology standards; and
- Perform inspections and maintenance of all BMPs.

In order to obtain coverage under the NPDES Construction General Permit, the Legally Responsible Person must electronically file all Permit Registration Documents with the SWRCB prior to the start of construction. Permit Registration Documents must include:

- Notice of Intent;
- Risk Assessment;
- Site Map;
- SWPPP;
- Annual Fee; and
- Signed Certification Statement.

Typical BMPs contained in Stormwater Pollution Prevention Plans are designed to minimize erosion during construction, stabilize construction areas, control sediment, control pollutants from construction materials, and address post construction runoff quantity (volume) and quality (treatment). The Stormwater Pollution Prevention Plan must also include a discussion of the program to inspect and maintain all BMPs.

Construction Dewatering Permit

The RWQCB construction dewatering permit is required for construction activities such as excavating and trenching in areas with shallow groundwater. Dewatering is regulated under state requirements for stormwater pollution prevention and control. Discharge of non-stormwater from an excavation or trench that contains sediments or other pollutants to water bodies is prohibited. Discharge of uncontaminated groundwater from an excavation or trench is a conditionally exempted discharge by the RWQCB. Since the removed water could be contaminated by chemical released from construction equipment, disposal of this water would require permits either from the RWQCB for discharge to surface creeks or local agencies for discharge to sewers. Dewatering

operations would require a NPDES permit, or an exemption, from the RWQCB, which would establish discharge limitations for specific chemicals, as applicable.

Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act (SGMA) provides a framework for sustainable management of groundwater supplies by local authorities, with a limited role for State intervention only if necessary to protect the resource. The plan is intended to ensure a reliable groundwater water supply for California for years to come (CDWR, SGMA).

The SGMA requires the formation of local Groundwater Sustainability Agencies, which are required to adopt Groundwater Sustainability Plans (GSPs) to manage the sustainability of groundwater basins. Adoption of a GSP is required for all high- and medium-priority basins, as identified by the Department of Water Resources; otherwise, the agencies must submit an alternative to a GSP. The SGMA also requires governments and water agencies with high- and medium-priority basins to halt overdraft practices and bring groundwater basins into a balanced level of pumping and recharge. Within SGMA, the San Pedro Valley Groundwater Basin that lies within the City of Pacifica has been designated as a very-low priority groundwater basin. As such, the basin is not subject to a Groundwater Sustainability Plan (GSP) or other SGMA requirements.

Local Regulations

San Mateo Countywide Stormwater Pollution Prevention Program (SMCWPPP)

SMCWPPP was established in 1990 and includes San Mateo County and 20 cities and towns in the county, including City of Pacifica. The primary goal of SMCWPPP is to reduce pollution carried by stormwater throughout San Mateo County into local creeks, San Francisco Bay, and the Pacific Ocean. SMCWPPP maintains compliance with the NPDES Stormwater Discharge Permit and promotes stormwater pollution prevention.

Participating agencies, including the City of Pacifica, must comply with the NPDES Storm water Discharge Permit by ensuring that development and redevelopment mitigate water quality impacts to stormwater runoff during construction and operation phases of projects. These projects are subject to NPDES Provision C.3 and are grouped into categories based on project size. Group 1 includes new development and redevelopment projects that would replace or create more than one acre of impervious surface and Group 2 includes new development and redevelopment that would replace or create more than 10,000 square feet of impervious surfaces. As part of the NPDES permit requirement, the City of Pacifica completed a Green Infrastructure Plan in 2019, which describes how low impact development (LID) drainage design will be incorporated into public and private streets, parking lots, building roofs and other facilities to achieve water quality, flow reduction and other environmental and community benefits.

Local Hazard Mitigation Plan

In 2005, a task force representing the City of Pacifica studied the city's exposure to natural hazards and identified mitigation strategies. Their work is incorporated into the regional Multi-Jurisdictional Local Hazard Mitigation Plan (MJ-LHMP) directed by the San Mateo County.

Pacifica's Local Hazard Mitigation Plan (LHMP) is an annex to the MJ-LHMP. It was adopted in 2005, updated in 2016, and updated again most recently in 2021.

The MJ-LHMP examines Pacifica's vulnerability to flooding during and after intense storms as well as the potential effects of other hazards. It notes that approximately 384 flood insurance policies are in effect in the City of Pacifica covering approximately \$85 million in property value. The MJ-LHMP concludes that Pacifica's two highest priorities for mitigation are landslide/mass movements, including coastal erosion, which can result in sudden losses of property and property damage; and, earthquakes, which may cause ground shaking, liquefaction, and landslides.

All goals and policies in the adopted MJ-LHMP are applicable to the Proposed Project, including those that concern flooding, stormwater, and other hydrological processes.

City of Pacifica 2040 General Plan (General Plan)

The City of Pacifica 2040 General Plan (General Plan) includes the following goals and policies associated with hydrology and water quality:

Open Space and Community Facilities

Implementing Policy OC-I-11: Parks Landscaping. Promote landscapes with native vegetation, which requires little maintenance, little water, makes good wildlife habitat, and is fire resistant, in landscaping of City parks.

Conservation

Implementing Policy CO-G-1 Water Quality. Support the improvement of Pacifica's water quality, including both surface water and groundwater, through Best Management Practices (BMPs) for stormwater management, stream restoration, and riparian habitat restoration.

Guiding Policy CO-G-2 Watershed Management. Recognize the interrelated nature of Pacifica's hydrology system, its watersheds, and development in the Planning Area, and protect water resources through comprehensive management of entire watersheds.

Guiding Policy CO-G-3 Maintain Creeks as a Resource. Ensure both access to and ecological functionality of the creek system in Pacifica.

Guiding Policy CO-G-4 Retain Natural Processes. Enable natural processes to occur on developed sites, and utilize these processes to enhance the built environment and users' experiences of it.

Guiding Policy CO-G-5 Water Conservation. Work with the NCCWD to meet water conservation objectives as required by State law. Pacifica's water conservation efforts will include water efficient landscaping requirements, incentives for water conservation, and expansion of the system to use recycled wastewater for landscaping irrigation.

Guiding Policy CO-G-6 Wastewater Treatment. Ensure that the City maintains adequate capacity to handle wastewater, and continue to expand wastewater recycling.

Implementing Policy CO-I-1 Creek Protection and Restoration. Maintain, protect, and restore Pacifica's creeks, including San Pedro, Calera, Sanchez, and Milagra creeks, as environmental and aesthetic resources. Actions will include, but are not limited to:

- Continuing restoration efforts along San Pedro Creek to improve conditions for steelhead by removing obstacles to fish passage, placing rock weirs to facilitate fish passage, and by monitoring the effectiveness of these projects;
- Partnering with local organizations, such as the San Pedro Creek Watershed Coalition, Go Native, the Pacifica Land Trust, and others, on restoration efforts;
- Exploring opportunities to collaborate with other agencies and organizations on stream restoration and riparian habitat restoration along Sanchez and Calera creeks;
- Enforcing restrictions on the planting of invasive species near creek areas;
- Identifying and working with property owners to take advantage of unique opportunities where human active use (e.g., through trail development) would enhance creek appreciation without disrupting ecological function;
- Requiring a minimum of 100-foot setbacks from the top of creek banks, or from the outer edge of riparian vegetation, where it exists, for development proposed adjacent to creeks, in keeping with City regulations and Best Management Practices. Exceptions to such buffer requirements should be supported by a biological report demonstrating that the adjusted buffer, in combination with incorporated siting, design or other mitigation measures, shall prevent impacts that significantly degrade the creek. Buffer adjustments should also be limited to where the entire subject legal lot is within the buffer or where it is demonstrated that development outside the buffer would have a greater impact on the creek.

Implementing Policy CO-I-2 Improvement of Impaired Waterways. Strive to improve water quality in San Pedro Creek, which is listed on the Clean Water Act 303(d) list of impaired water bodies, and any other waterway that may be listed as impaired in the future.

Implementing Policy CO-I-3 Funding for Creek Maintenance. Establish funding mechanism to require property owners with land adjacent to creeks to pay proportionate share of creek improvement maintenance.

Implementing Policy CO-I-4 Wetlands Preservation. Prohibit new development in existing wetlands except as allowed under the federal Clean Water Act and the California Coastal Act. Continue to require formal delineations wetlands subject to State or federal regulations prior to any proposed development project in an area where potential wetlands have been identified. If impacts on wetlands are unavoidable, compensation measure should be in line with the State's no-net-loss goal regarding wetlands.

Implementing Policy CO-I-5 Limitations on Diking, Filling or Dredging. Only permit the diking, filling, or dredging of open coastal waters, wetlands, and lakes for the following purposed where there is no feasible, less environmentally damaging alternative, and where

feasible mitigation measures have been provided to minimize adverse environmental effects:

- New port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.
- New boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.
- Incidental public service purposes, including, but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.
- Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.
- Restoration activities;
- Nature study, aquaculture, or similar resource-dependent activities.

Implementing Policy CO-I-6 Minimize Disruption of Dredging. Require any proposed dredging and spoils disposal to be planned and carried out in a way that will avoid significant disruption to marine and wildlife habitats.

Implementing Policy CO-I-7 Maintain Functional Capacity of Wetlands. Ensure that any diking, filling, or dredging in existing wetlands maintains or enhances their functional capacity.

Implementing Policy CO-I-8 Continued Movement of Sediment and Nutrients. Allow sediment removed from erosion and flood control facilities to be placed at appropriate points on the shoreline, where environmental effects will be minimal.

Implementing Policy CO-I-9 Countywide Water Pollution Prevention Program. Continue to participate in the San Mateo Countywide Water Pollution Prevention Program. The Program represents a collaborative effort amongst the County and its municipalities, consisting of five major areas of water pollution prevention and control:

- Municipal maintenance activities
- Industrial and illicit discharge
- Public information and participation
- New development and construction
- Controls
- Watershed monitoring

Implementing Policy CO-I-10 Stormwater Discharge. Ensure compliance with the Municipal Regional Permit, the Construction General Permit, and the Construction Dewatering Permit, which regulate stormwater discharge from new and existing development. These permits are established by the National Pollutant Discharge Elimination System (NPDES) and administered by the Regional Water Quality Control Board. They require that new development incorporate Best Management Practices

(BMPs) and Green Infrastructure Plan requirements in site design, construction, and management to minimize storm water runoff rates and volumes, control water pollution, and maximize infiltration.

Implementing Policy CO-I-11 Protect Water Quality through Best Management Practices. Continue to require the use of best management practices to reduce water quality impacts from construction and development. Measures include:

- Site Design and Source Control. Ensure that all new development incorporates site design and source control BMPs into the project design in order to preserve the infiltration, purification, and retention functions of each site's natural drainage systems, and to prevent or minimize the runoff of pollutants, sediments, waste, and pathogens from the site.
- Construction Pollution Control. Require all construction projects to adopt measures to avoid when possible, or minimize erosion and runoff of pollutants and sediments from construction-related activities, and to limit activities that result in the disturbance of land or natural vegetation.
- Construction projects will be required to use appropriate erosion prevention techniques, sediment control measures, and best management practices in accordance with City specifications and the San Mateo Countywide Water Pollution Prevention Program.
- Treatment Control. Require that new development implement treatment control BMPs (or structural treatment BMPs) where the combination of site design and source control BMPs is not sufficient to protect water quality and comply with applicable water quality permits.

Implementing Policy CO-I-12 Infrastructure and Water Quality. Ensure that the design and construction of new infrastructure elements does not contribute to stream bank or hillside erosion or creek or wetland siltation, and incorporates site design and source control BMPs, construction phase BMPs, and treatment control BMPs to minimize impacts to water quality, in compliance with the NPDES Permit.

Implementing Policy CO-I-13 Erosion Control. Manage erosion in the Planning Area, particularly in watershed areas, through on-site erosion control. Construction projects will be required to use appropriate erosion prevention techniques, sediment control measures, and best management practices in accordance with City Specifications and General Conditions of Approval and the San Mateo Countywide Water Pollution Prevention Program.

Implementing Policy CO-I-14 Minimize Site Disturbance. Require use of best practices during development design and construction to preserve natural resources, such as soil, trees, native plants, and permeable surfaces.

Implementing Policy CO-I-15 Reduce Impervious Surfaces. Enable natural drainage by reducing the amount of impervious surfaces on a development site, whenever feasible.

Implementing Policy CO-I-16 On-site Stormwater Management. Continue to require all small projects and detached single-family home projects, as defined under the NPDES Permit, to incorporate site design measures that facilitate groundwater recharge and natural hydrological processes, allowing stormwater to infiltrate the ground on-site and/or be collected for reuse in landscaping and designated to on-site stormwater detention facilities.

Implementing Policy CO-I-16.1 Runoff Capacity Management. Require new development for all project types to include storm drainage design that results in runoff below or equal to predevelopment conditions.

Implementing Policy CO-I-17 Prevent Contaminated Runoff. Ensure that new parking lots and commercial development incorporate BMPs designed to prevent or minimize runoff of oil, grease, solvents battery acid, coolant, gasoline, sediments, trash, and other pollutants from the site. Runoff from areas serving vehicle traffic, structures, landscaping, loading areas, repair and maintenance bays, fueling areas, vehicle/equipment wash areas, outdoor material storage areas, and waste storage areas should be prevented or minimized.

Implementing Policy CO-I-18 Oil and Hazardous Substance Spills. Provide protection against the spillage of crude oil, gas, petroleum products, or hazardous substances in relation to any development of transportation of such materials.

Implementing Policy CO-I-19 Water Supply. Support the Bay Area Water Supply & Conservation Agency in advocating for reliable and fairly priced water from the San Francisco regional water system.

Implementing Policy CO-I-20 Incentives for Water Conservation. Encourage the NCCWD to continue and expand its water conservation incentive programs, including free water efficient fixtures and rebates for water-efficient appliances.

Implementing Policy CO-I-21 Water Recycling. Continue to support implementation and expansion of NCCWD's water recycling project, involving new pipes and pumping stations, to allow treated wastewater from the Calera Creek Water Recycling Plant to be used for irrigation of landscaped areas.

Implementing Policy CO-I-22 Water Storage. Support the NCCWD in its efforts to provide adequate emergency water storage in Pacifica.

Implementing Policy CO-I-23 Wastewater Treatment Capacity. Continue to monitor wastewater generation rates so decision-makers are aware of the impacts on the treatment plant on new development, and plan for additional capacity in advance of projected need.

Implementing Policy CO-I-24 Sewer System Connections. Require all new development to be connected to the City's sewer system.

Implementing Policy CO-I-25 Sanitary Sewer Discharge. Ensure that discharges of treated wastewater from the Calera Creek Wastewater Recycling Plant continue to comply with the Sanitary Sewer System Permit.

Guiding Policy CO-G-9 Creeks and Riparian Areas. Protect year-round creeks and their riparian habitats.

Implementing Policy CO-I-29 Fencing. Any fencing or barriers located within riparian ESHAs or wildlife corridors shall permit the free passage of wildlife.

Implementing Policy CO-I-44 Regional Sediment Management. Participate in regional approaches to protecting, enhancing and restoring coastal beaches and watersheds through the California Coastal Sediment Management Workgroup, with a goal of minimizing coastal erosion.

Implementing Policy SA-I-10 Soil Study. Require any geotechnical studies to include study of expansive and creeping soils, as well as analysis of erosion, seismic, tsunami, and other geotechnical hazards and make recommendations, as warranted.

Implementing Policy SA-I-12 Bluff Drainage and Erosion. The City will pursue feasible funding mechanisms to investigate areas that may be significantly contributing to groundwater flows to the bluffs and determine whether improving drainage and/or reducing irrigation could reduce bluff erosion. Measures to improve drainage and reduce over-watering shall be communicated to the public and property owners as part of existing water conservation outreach programs, and included as conditions on new development where applicable.

Implementing Policy SA-I-13 Water Tank Rupture. Work with the NCCWD to determine areas potentially affected by flooding from ruptured water tanks in the event of a seismic event and inform property owners.

Safety

Guiding Policy SA-G-2 Development in Hazardous Areas. Protect new development in 100-year floodplains and tsunami hazard zones with flood damage prevention programs.

Guiding Policy SA-G-3 Sea Level Rise Adaptation. Establish policies to minimize the risk to persons and property posed by potential sea level rise.

Implementing Policy SA-I-17 Floodplain Management. Continue to manage floodplains through zoning, development requirements, and ordinances, and take other actions necessary, in order to remain within the National Flood Insurance Program.

Implementing Policy SA-I-18 Flood Map Review. Periodically review maps prepared by FEMA and the State Department of Water Resources to identify changes in mapping of areas subject to flooding and amend the General Plan, Municipal Code or Local Coastal Program as warranted.

Implementing Policy SA-I-19 NDPES Enforcement. Enforce NPDES permits, as well as the San Mateo Countywide Water Pollution Prevention Program, to mitigate potential flooding risks by slowing the release of stormwater from development sites into drainage channels.

Implementing Policy SA-I-20 Flood Hazard Reduction. Continue to comply with the Flood Damage Prevention Ordinance in the Municipal Code

Implementing Policy SA-I-21 Flood Insurance. Inform households and businesses located in flood-prone areas about opportunities to purchase federal flood insurance.

Implementing Policy SA-I-22 Flood Control Maintenance. Regularly maintain flood control structures, including, but not limited to drainage channels, pipes, culverts, and stream beds.

Implementing Policy SA-I-23 Flood Control Structures. Require flood control devices that alter streams to incorporate best mitigation measures feasible, and only permit them where no other method for protecting existing structures in the flood plain is feasible and where such protection is necessary for public safety or to protect existing development.

Implementing Policy SA-I-24 Storm Drainage Impact Assessment. Require developers to provide an assessment of a project's potential impacts on the local storm drainage system as part of the development review process.

Implementing Policy SA-I-25 No Adverse Impact Approach. Update the Flood Hazard Reduction regulations to establish a "No Adverse Impact" standard to floodplain and coastal development.

Implementing Policy SA-I-26 Tsunami Evacuation Zone. For new development in the tsunami evacuation zone, require use of low impact engineering techniques, such as elevating structures above projected water levels, to mitigate impacts to people and structures.

Local Coastal Land Use Program (1980)

The Local Coastal Land Use Plan (LCLUP) specifies the kinds, locations, and intensities of land uses; the applicable resource protection and development policies; and where necessary, a listing of implementing actions. The following is a list of LCLUP policies specific to this chapter on hydrology and water quality in Pacifica:

12. The biological productivity and the quality of coastal, waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharge and entrainment, controlling runoff, preventing depletion of groundwater supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural, streams. (CN, CF, LU)

14. (a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this policy, where there is no feasible less environmentally damaging alternative and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:
- (1) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.
 - (2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.
 - (3) In wetland areas only, entrance channels for new or expanded boating facilities; and in a degraded wet land, identified by the Department of Fish and Game for boating facilities if, in conjunction with such boating facilities, a substantial portion of degraded wetland is restored and maintained as a biologically productive wetland; provided, however, that in no event shall the size of the wetland area used for such boating facility, including berthing space, turning basins, necessary navigation channels, and any necessary support service facilities, be greater than 25 percent of the . total wetland area to be restored.
 - (4) In open coastal waters, other than wetlands; including streams, estuaries, and lakes, new or expanded boating facilities.
 - (5) Incidental public services purposes, including, but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.
 - (6) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.
 - (7) Restoration purposes.
 - (8) Nature study, aquaculture, or similar resource-dependent activities.
- (b) Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for such purposes to appropriate beaches, or into suitable longshore current systems.
- (c) In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary. Any alteration of coastal wetlands identified by the Department of Fish and Game shall be limited to very minor incidental public facilities, restorative measures and nature study. (CN, CF, OS, LU)
16. Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion and when designed to eliminate or mitigate adverse impacts on local

- shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fish kills should be phased out or upgraded where feasible. (SS, OF, LU)
17. Channelization, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and be limited to:
- (a) Necessary water supply projects;
 - (b) Flood control projects where no other method for protecting existing structures in the flood plain is feasible and where such protection is necessary for public safety or to protect existing development; or
 - (c) Developments where the primary function is the improvement of fish and-wildlife habitat. (SS, CN, N, CF, LU)
19. The maximum amount of prime agricultural land shall be maintained in agricultural production to assure the protection of the areas' agricultural economy, and conflicts shall be minimized between agricultural and urban land uses through following:
- (a) By establishing stable boundaries separating urban and rural areas, including, where necessary, clearly defined buffer. areas to minimize conflicts between agricultural and urban land uses.
 - (b) By limiting conversions of agricultural lands around the periphery of urban areas to the lands where the viability of existing agricultural use is already severely limited by conflicts with urban uses and where the conversion of the lands would complete a logical and viable neighborhood and contribute to the establishment of a stable limit to urban development.
 - (c) By developing available lands not suited for agriculture prior to the conversion of agricultural lands.
 - (d) By assuring that public service and facility expansions and nonagricultural development do not impair availability either through increased assessment costs or degraded air and water quality.
 - (e) By assuring that all divisions of prime agricultural lands and all development adjacent to prime agricultural lands shall not diminish the productivity of such prime agricultural lands. (CN, CF, LU)
31. Oil and gas development shall be permitted in accordance with Section 30250, 1f the following conditions are met:
- (a) The development is performed safely and consistent with one geologic condition of the well site.

(b) New or expanded facilities related to such development are consolidated to the maximum extent feasible and legally permissible, unless consolidation will have adverse environmental consequences and will not significantly reduce the number of producing wells, support facilities, or sites required to produce the reservoir economically and with minimal environmental impacts.

(c) Environmentally safe and feasible sub-sea completions are used when drilling platforms or islands would substantially degrade coastal visual qualities unless use of such structures will result in substantially less environmental risks.

(d) Platforms or islands will not be sited where a substantial hazard to vessel traffic might result from the facility or related operations, determined in consultation with the United States Coast Guard and the Army Corps of Engineers.

(e) Such development will not cause or contribute to subsidence hazards unless it is determined that adequate measures will be undertaken to prevent damage from such subsidence.

(f) With respect to new facilities, all oil field brines are reinjected into oil-producing zones unless the Division of Oil and Gas of the Department of Conservation determines to do so would adversely affect production of the reservoirs and unless injection into other subsurface zones will reduce environmental risks. Exceptions to reinjections will be granted consistent with the Ocean Waters Discharge Plan of the State Water Resources Control Board and where adequate provisions are made for the elimination of petroleum odors and water quality problems. Where appropriate, monitoring programs to record land surface and near-shore ocean floor movements shall be initiated in locations of new large scale fluid extraction on land or near shore before operations begin and shall continue until surface conditions have stabilized, costs of monitoring and mitigation programs shall be borne by liquid and gas extraction operators.

In addition, the 2024 Draft of the City of Pacifica Local Coastal Land Use Plan was recently adopted by City Council on October 28, 2024. However, since the 2024 Draft LCLUP has yet to be certified by the Coastal Commission, this EIR references the 1980 LCLUP in its analysis. Even so, Pacifica's adopted 2040 General Plan is inclusive of all policies in the 2024 draft LCLUP. Consistent with the 1980 LCLUP, it includes guiding and implementing policies for the protection of water quality and comprehensive watershed management, protection, and restoration in Pacifica.

City of Pacifica Municipal Code (Municipal Code)

Chapter 4 of Title 9 (Zoning) regulates grading and drainage of all new development by requiring development applicants to prepare grading and drainage plans if the project site is in the coastal zone district (Sec. 9-4.4405). One of the development standards states applicants must provide adequate drainage facilities, including grease and silt traps where necessary to minimize pollutants entering runoff water.

Chapter 12 of Title 6 (Storm Water Management and Discharge Control) describes provisions to protect water resources and to improve water quality by setting requirements and prohibitions for

stormwater discharge. This includes discharge regulations and requirements and various inspection and enforcement authorities the City holds.

Chapter 13 of Title 6 (Wastewater Control) describes regulations related to wastewater discharge, such as specifics on permissible and prohibited discharges. In additions, standards on pretreatment of discharge, requirements for discharge permits, and authorizations for inspection are included.

Chapter 5 of Title 7 (Flood Damage Prevention) provides regulations to minimize flood losses, including human life, property damage, and public utilities. Special flood hazards areas are identified according to the Federal Emergency Management Agency's (FEMA) "Flood Insurance Study for the City of Pacifica," (FIS) with accompanying Flood Insurance Rate Maps (FIRMs) and Flood Boundary and Floodway Maps (FBFMs) from 1987. A floodplain development permit is required for development in any special flood hazard area. Standards of construction in areas of special flood hazards, for utilities, subdivisions, and recreational vehicles for flood hazard reduction are also provided. In addition, coastal high hazard areas have additional construction standards.

Section 10-1.506 also lists preliminary requirements for City approval and requirements for improvement plans for subdivisions, which includes hydrology and hydraulic calculations of all storm drains.

Impact Analysis

SIGNIFICANCE CRITERIA

For the purposes of this EIR, a significant impact would occur if the Proposed Project would:

- Criterion 1:** Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality;
- Criterion 2:** Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;
- Criterion 3:** Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
- i. Result in substantial erosion or siltation on- or off-site;
 - ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
 - iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or
 - iv. Impede or redirect flood flows.
- Criterion 4:** In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation; or

Criterion 5: Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

METHODOLOGY AND ASSUMPTIONS

The Proposed Project was analyzed by comparing existing conditions, as described in the Environmental Setting section, to conditions during implementation of the Proposed Project. The analysis focuses on issues related to surface hydrology, flood hazards, groundwater supply, and surface and groundwater quality. Because detailed design of future construction associated with the Proposed Project has not yet been completed, potential hydrology and water quality impacts associated with future development as a result of the Proposed Project implementation are analyzed qualitatively at a program level.

Surface Water Hydrology

The surface water hydrology impact analysis considers potential changes in the physical characteristics of water bodies, impervious surfaces, and drainage patterns throughout the city as a result of the Proposed Project's implementation.

Groundwater Hydrology

Impacts on groundwater supply and recharge are assessed by comparing existing groundwater use and recharge capabilities with conditions within the Planning Area after implementation of the Proposed Project. Recharge is determined by the ability of water to infiltrate into the soil.

Surface and Groundwater Quality

Impacts of the Proposed Project on surface water and groundwater quality were analyzed by using information on potential existing water quality conditions. Potential Proposed Project-related sources of water contaminants generated by residential activities, such as vehicle use, building maintenance, pesticide use, and trash generation, are considered. The potential for water quality objectives to be exceeded and beneficial uses to be compromised is also considered.

Flooding

The flood risk analysis uses FEMA data and historical flood information to determine the existing flood zone and whether the Planning Area overlaps designated 100-year floodplains, whether it would affect the drainage system, and whether it was a flood risk. CEQA does not require an analysis of how existing environmental conditions will affect a project's residents or users unless the project would exacerbate an existing environmental hazard. Accordingly, hazards resulting from a project that places development in an existing or future flood hazard area are not considered impacts under CEQA unless the project would exacerbate the flood hazard. Thus, the analysis evaluates whether the Proposed Project would exacerbate existing or future flood hazards in the town, resulting in a substantial risk of loss injury or death. If evidence indicates it would not, then the analysis will conclude by stating such. If it could exacerbate the issue, then evidence is provided to determine if the exacerbation would or would not be significant.

IMPACTS

Impact 3.7-1 Implementation of the Proposed Project would not violate any federal, state, or local water quality standards or waste discharge requirements. (Less than Significant)

The Proposed Project would have a significant environmental impact if it would violate water quality standards and waste discharge requirements such as those set out in the NPDES General Permit for Construction Activities (Construction General Permit). Violation could occur if the Proposed Project would substantially increase pollutant loading levels in the sanitary sewer system, either directly, through the introduction of pollutants generated by industrial or other land uses, or indirectly, through stormwater pollution. The RWQCB, SMCWPPP, and Municipal Code and General Plan water quality protection requirements and conditions applicable to implementation of the Proposed Project are intended to reduce any potential construction period and post-construction water quality impacts to a less-than-significant level, consistent with federal and State water quality regulations and plans. These RWQCB, SMCWPPP, and City requirements and conditions apply to future development facilitated by the Proposed Project.

Adherence to the Construction General Permit under the NPDES program would require that a SWPPP with best management practices (BMPs) be prepared for construction sites; it would include measures to protect water quality of stormwater that is discharged offsite and practices to limit erosion or unintentional releases of hazardous materials used during construction. Additionally, any development that would occur under the Proposed Project would be subject to the erosion and runoff control provisions described in the regional Basin Plan. Chapter 4 of Title 9 of the City's Municipal Code also regulates grading and drainage of all new development by requiring development applicants to prepare grading and drainage plans if the project site is in the coastal zone district (Sec. 9-4.4405). Further, the General Plan Implementing Policies CO-I-11 and CO-I-13 require construction projects to use appropriate erosion prevention techniques, sediment control measures, and best management practices in accordance with City specifications and SMCWPPP.

New development under the Proposed Project could result in construction of structures with subsurface foundations or open trenches, such as building foundations or pipelines, which could intercept shallow groundwater. Common practices employed to facilitate construction include either dewatering the excavation site or shoring the sides of the excavation to reduce groundwater inflow. If dewatering methods are used, groundwater would be pumped out of the excavation to the surface and then discharged, typically to either a storm drain or sanitary sewer. Water extracted during dewatering could contain chemical contaminants (either from pre-existing sources or from equipment) or could become sediment-laden from construction activities. Depending on the construction site and the quality of the groundwater, the discharge could potentially contaminate the receiving waters and the Pacific Ocean.

Dewatering operations either on a short- or long-term basis will comply with certain provisions in the NPDES permit, such as the treatment of flows prior to discharge. Discharge of the groundwater from dewatering to the sanitary sewer or storm drain system shall occur pursuant to authorization and required permits from the RWQCB or the City of Pacifica Public Works Agency and in compliance with applicable permit conditions associated with the treatment of groundwater prior

to discharge. Adherence to established regulations will ensure that the potential impact is less than significant.

Development and redevelopment associated with the Proposed Project could result in incremental increases in the amount of impervious surfaces within the Planning Area. In turn, an increase in the amount of impervious surface has the potential to generate additional storm-water pollution in runoff during storm events. The introduction of new paved areas, building rooftops, parking lots etc., could therefore present the potential for accumulation and release of petroleum hydrocarbons, lubricants, sediments, and metals (generated by the wear of auto-mobile parts), which, if not managed appropriately, could violate water quality standards.

The management of landscaped areas would also present the potential for runoff and/or infiltration of herbicides and pesticides. These types of common urban pollutants could be transported in runoff, potentially adversely affecting the quality of receiving surface waters or groundwater. Nonpoint source pollutants would be washed by rainwater from rooftops and landscaped areas into onsite and local drainage networks. Potential nonpoint source pollutants include products used in landscaping (e.g., pesticides, herbicides and fertilizers); oil, grease, and heavy metals from automobiles; and petroleum hydrocarbons from fuels.

However, in general, existing local stormwater management plans and policies, and State Water Board regulations, which implement federal Clean Water Act requirements, would prevent these potential impacts from rising to a level of significance under CEQA through requirements that minimize the creation of pollution generating surfaces. Clean Water Act Section 402 NPDES MS4 Permit, which covers many Bay Area jurisdictions including the City of Pacifica, requires stormwater management plans, which in turn require source and treatment control measures. In many cases, as part of the NPDES program to reduce the severity of impacts, stormwater drainage control/Low Impact Design (LID) measures may be required as standard conditions of approval and building permit application submittals, along with compliance with RWQCB Municipal Regional Stormwater Permit Order No. 2011-0083 Provision C.3.

As required by Provision C.3, for new development that would introduce 10,000 square feet of new impervious surfaces, a project applicant would incorporate LID strategies, such as stormwater reuse, onsite infiltration, and evapotranspiration as initial stormwater management strategies. Secondary methods that could be incorporated include the use of natural, landscape-based stormwater treatment measures, as identified by Provision C.3. Stormwater treatment measures may also be required in the final design plans in accordance with local stormwater management plans. The treatment measures may vary from “local” improvements at individual building sites to “area wide” concepts, such as stormwater treatment wetlands with large open space areas. Treatment control measures may include use of vegetated swales and buffers, grass median strips, detention basins, wet ponds, or constructed wetlands, infiltration basins, and other measures. Filtration systems may be either mechanical (e.g., oil/water separators) or natural (e.g., bioswales and settlement ponds). The City of Pacifica completed a Green Infrastructure Plan in 2019, which describes how LID drainage design will be incorporated into public and private streets, parking lots, building roofs and other facilities to achieve water quality, flow reduction and other environmental and community benefits.

Projects that redevelop existing sites may even result in improved water quality compared to existing conditions, particularly in cases where existing development was constructed under older, less stringent stormwater requirements. Selection and implementation of such LID measures would occur on a project-by-project basis, depending on project size and stormwater treatment needs as required to meet NPDES or any other local permitting requirements.

Further, Pacifica General Plan policies would protect and improve water quality by ensuring participation in the SMCWPPP (Implementing Policy CO-I-9) and compliance with the Municipal Regional Permit, the Construction General Permit, and the Construction Dewatering Permit, which regulate stormwater discharge from new and existing development (Implementing Policy CO-I-10). Implementing Policy CO-I-11 also requires that new development implement treatment control BMPs (or structural treatment BMPs) where the combination of site design and source control BMPs is not sufficient to protect water quality and comply with applicable water quality permits. Implementing Policy CO-I-16.1 requires that new development for all project types include storm drainage design that results in runoff below or equal to predevelopment conditions. In addition, Chapter 12 of Title 6 of the City's Municipal Code describes provisions to protect water resources and to improve water quality by setting requirements and prohibitions for stormwater discharge. This includes discharge regulations and requirements and various inspection and enforcement authorities the City holds.

Ultimately, development associated with the Proposed Project would be designed and maintained in accordance with City, San Francisco Bay RWQCB, SMCWPPP, and NPDES regulations. Stormwater runoff would be treated using BMPs, as required. Therefore, at the program level, development associated with the Proposed Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade water quality. Therefore, this impact would be less than significant.

Mitigation Measures

None required.

Impact 3.7-2 Implementation of the Proposed Project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. (Less than Significant)

New development proposed under the Proposed Project could result in an increase in impervious surfaces such that a reduction in the amount of stormwater that infiltrates into underlying groundwater would occur. Infiltration rates can vary widely and largely depend on the characteristics of the exposed overlying soils and vegetation. In general, sandy soils have higher infiltration rates and can contribute to significant amounts of ground water recharge; clay soils tend to have lower percolation potentials; and impervious surfaces such as pavement substantially reduce infiltration capacity. The City of Pacifica receives its water supplies from the North Coast Water District, which purchases imported water supplies from San Francisco Public Utilities Commission and does not rely on groundwater resources. Regardless, as new development and redevelopment occurs, on-site drainage plans would be designed to retain, capture and convey increased runoff in accordance with the local City design standards, state requirements such as

Provision C.3 site control features, the regional Basin Plan, and General Plan Implementing Policies CO-I-10, CO-I-11, CO-I-15, CO-I-16, and CO-I-16.1. These requirements generally require or encourage the use of LID features such as vegetated swales, permeable paving, use of landscaping for infiltration, and other measures that would retain runoff as much as possible and allow for onsite infiltration. As a result, stormwater flows generated from new development associated with the Proposed Project would remain unchanged or decrease following implementation of required source control measures, which would therefore not substantially affect underlying groundwater levels.

Therefore, considering the existing level of development, the fact that groundwater is not used for water supply purposes, the fact that San Pedro Valley Groundwater Basin is not subject to a Groundwater Sustainability Plan (GSP), and the regulatory framework that currently exists for new development, the impact on groundwater recharge from implementation of the Proposed Project is less than significant.

Mitigation Measures

None required.

Impact 3.7-3 Implementation of the Proposed Project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces in a manner which would result in substantial erosion, siltation, or flooding on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or impede or redirect flood flows. (Less than Significant)

Erosion, Siltation, and Flooding

Development associated with the Proposed Project would be expected to increase the amount of impervious surface area within the Planning Area. Therefore, buildout of the Proposed Project could increase runoff and alter existing drainage patterns resulting in erosion, siltation, and flooding. Additionally, construction activities could involve excavation and disturbance of existing ground surface, exposing base soil and temporarily altering surface drainage patterns.

As discussed under Impact 3.7-1, developments pursuant to the Proposed Project must adhere to the NPDES MS4 Permit, which require source and treatment control measures. In many cases, as part of the NPDES program to reduce the severity of impacts, stormwater drainage control/Low Impact Design (LID) measures may be required as standard conditions of approval and building permit application submittals, along with compliance with RWQCB Municipal Regional Stormwater Permit Order No. 2011-0083 Provision C.3. As required by Provision C.3, for new development that would introduce 10,000 square feet of new impervious surfaces, a project applicant would incorporate LID strategies, such as stormwater reuse, onsite infiltration, and evapotranspiration as initial stormwater management strategies. Secondary methods that could be

incorporated include the use of natural, landscape-based stormwater treatment measures, as identified by Provision C.3. Stormwater treatment measures may also be required in the final design plans in accordance with local stormwater management plans. The treatment measures may vary from “local” improvements at individual building sites to “area wide” concepts, such as stormwater treatment wetlands with large open space areas. Treatment control measures may include use of vegetated swales and buffers, grass median strips, detention basins, wet ponds, or constructed wetlands, infiltration basins, and other measures. Filtration systems may be either mechanical (e.g., oil/water separators) or natural (e.g., bioswales and settlement ponds). These measures would be identified for each individual project and implemented during construction to reduce contamination and sedimentation in waterways.

Development pursuant to the Proposed Project would also adhere to the Construction General Permit under the NPDES program that requires that a SWPPP with best management practices (BMPs) be prepared for construction sites. The SWPPP would include a range of stormwater control BMPs (e.g., installing silt fences, staked straw wattles, or geofabric to prevent silt runoff to storm drains or waterways); requirements for the stockpiling, protection, and replacement of topsoil and backfill at the conclusion of construction activities; and requirements for revegetation of turf, plants, and other vegetation upon completion of construction. Projects disturbing less than an acre of ground surface during construction would not be required to prepare a SWPPP but would be required to implement the construction site control BMPs required by the City’s MS4 NPDES permit. Development associated with the Proposed Project would be required to comply with Provision E.10, which requires adoption and implementation of LID techniques, including the use of vegetated swales and retention basins and minimal use of impermeable surfaces to manage stormwater and maintain a site’s predevelopment runoff rates and volumes.

Development would also be subject to requirements of the SMCWPPP and the City’s erosion and sediment control requirements. Compliance with applicable regulations and implementation of erosion and sediment control BMPs discussed above would ensure that impacts associated with substantial alteration of the existing drainage pattern of the Planning Area would be reduced. Therefore, at the program level, development under the Proposed Project would not result in substantial erosion, siltation, or flooding on- or off-site and impacts would be less than significant.

Surface Runoff

Pacifica’s storm drainage system consists of a collection system and two pump stations. This drainage system acts to convey drainage to area creeks or the ocean. Two areas in the city, Linda Mar and lower Sharp Park, are too low to allow drainage to a creek or the ocean, and are served by pump stations to prevent street flooding. Overall, the city’s system serves 178 miles of roads and 986 inlets (San Mateo County, 2008). The stormwater infrastructure in Pacifica is adequate to provide for the General Plan, and thus the Proposed Project, buildout population.

In 2004, the City completed the Pacifica State Beach Improvement Project. This project has successfully redirected polluted water from first-flush release into the ocean to two constructed wetland treatment swales, and, together with other elements of the project, improved water quality. Thus, the incorporation of stormwater management in site planning would not result in exceedance of the stormwater system’s capacity.

In addition, this impact would be minimized by existing local stormwater management plans and policies, and State Water Board regulations, which implement federal Clean Water Act requirements, such as source control measures as part of the requirements of Provision C.3. Source control measures may include prohibition of illegal dumping to storm drain inlets and waterways, designating vehicle washing areas, and preparing and implementing a landscape plan to control any fertilizer or pesticide use and discharge into receiving waters. Compliance with these requirements, as well as General Plan policies that manage activities to reduce waste, would prevent this potential impact from rising to a level of significance under CEQA through requirements that minimize the creation of pollution generating surfaces.

Impede or Redirect Flood Flows

Figure 3.7-1 illustrates flood hazard areas that are located within the Planning Area. While most of the development associated with the Proposed Project would be placed outside these hazard areas, there are areas of new development that may be located within 100-year flood or 500-year zone areas. Siting structures in flood zones can impede flood flows, which could cause a backwater effect by potentially raising flood levels, thus causing more severe flooding impacts to existing vulnerable areas or by exposing new areas that would not have previously flooded to new flooding impacts.

Should any developments be proposed in an area within the 100-year flood zone, they would be required to meet local, state and federal flood control design requirements. In general, flood control policies require new construction in flood prone areas to be built to flood safe standards, such as ensuring that ground levels of living spaces are elevated above anticipated flood elevations. In addition to design requirements with new development, there would be requirements for adequate storm drainage capacities and retention such that new development does not exacerbate any existing problem areas. Development in compliance with local floodplain requirements (Title 7 Public Works, Chapter 5 Flood Damage Prevention, Article 5 Provisions for Flood Hazard Reduction) and federal regulations (National Flood Insurance Program), would minimize the risk associated with housing in these areas. In addition, many ongoing improvements to flood protection infrastructure by the U.S. Army Corps of Engineers and the City's Flood Control Committee, for example, to areas of San Pedro Creek and the Sharp Golf Course, should help to minimize areas subject to flooding.² Pacifica's General Plan also includes a number of policies in the Conservation Element and Safety Element that are designed to protect wetlands from environmental impact and development, which increases flood resilience in the Planning Area by preserving the natural watershed.

Flood flows may change over the horizon of the Proposed Project due to sea level rise; Pacifica's General Plan includes policies from the Local Coastal Land Use Plan which commit to using the best available science to plan for sea level rise, as well as continuing to monitor and map changes in flood flows and high-water marks.

² Note that Draft Policy CO-I-49 discusses a natural management strategy to flood protection which would prioritize alternatives to further armoring or heightening of the levee at Sharp Park. See discussion of levees below.

Based on implementation of existing local regulations and compliance with General Plan policies, the impacts of the Proposed Project related to the alteration of drainage patterns and flood flow, would be less than significant.

Mitigation Measures

None required.

Impact 3.7-4 In flood hazard, tsunami, or seiche zones, implementation of the Proposed Project would not risk release of pollutants due to project inundation. (Less than Significant)

A seiche is a standing wave in an enclosed or partly enclosed body of water. Seiches are normally caused by an earthquake or high wind activity and can affect harbors, bays, lakes, rivers and canals. The only enclosed or semi-enclosed body of water located within the City of Pacifica is the Laguna Salada, which is within the Sharp Golf Course with no proposed improvements that could potentially be affected by seiche waves.

Tsunamis are a series of large waves created by an underwater disturbance such as an earthquake, landslide, volcanic eruption, or meteorite. In general, a tsunami can move hundreds of miles per hour in the open ocean and reach land with waves as high as 100 feet or more. More than eighty tsunamis have been observed or recorded in California since 1700. Of these, only the tsunamis generated by the 1960 Chile earthquake and the 1964 Alaska earthquake caused damage in the San Francisco Bay. The 1964 tsunami event caused the most damage of the two most notable events and had a recorded amplitude of approximately 3.7 feet (1.1 meters) at the Presidio in San Francisco. The most significant recorded tsunami wave that has reached Pacifica was related to the 2011 earthquake in Japan and resulted in a 3.2-foot (1 m) amplitude at Pacifica.

Tsunami risks in Pacifica have been identified as lower than other areas in northern California. Recorded tsunami run-up magnitude is generally lower at Pacifica than other locations likely because of offshore bathymetry and shoreline alterations along the city. In addition, many potential sources of tsunami are distantly located, which can allow for time to prepare and evacuate hazard areas. San Mateo County has an established emergency plan for tsunamis and the City of Pacifica has identified tsunami hazards in its local annex to the San Mateo County Multi-Jurisdictional Local Hazard Mitigation Plan.

Portions of the Proposed Project's rezoning sites are located in tsunami and flood hazard areas as shown in **Figure 3.7-1**. Increased intensity of development within tsunami and flood hazard areas could result in risk of release of pollutants if a tsunami or flood were to collect contaminated urban runoff, such as combustion by-products, toxins, trash, bacteria, heavy metals, and pesticides, into the water system.

There are sections of the city that are susceptible to flooding during heavy storm events. The Proposed Project allows for development in areas that may be located within 100-year and 500-year flood zone areas. Siting structures in flood zones can result in direct impacts including the release of pollutants upon project inundation. Over the past century, the sea level has risen nearly eight inches along the California coast, and modeling suggests that future increases in sea level due to climate change may occur over the coming century. As a result, the frequency of flooding events

may increase, and there may be an increase in the amount of area that is considered prone to a 100-year flood event. New development is expected to involve greater human activity, vehicle traffic, and pesticide or fertilizer use associated with lawns or parks, which could be released to the city's drainage system during a flood event.

The Proposed Project would be required to comply with Clean Water Act Section 402 NPDES MS4 Permit, which requires source and treatment control measures, as well as source control measures and building permit application submittals as part of the requirements under Provision C.3. In addition, new development would be under the authority of the RWQCB, which can require groundwater investigations when the quality of groundwater or surface waters of the state are threatened and to remediate the site, if necessary. San Mateo County has substantial regulations concerning hazardous materials under its Toxic Programs, and future development under the Proposed Project would be subject to regulatory programs overseen by the Regional Water Quality Control Board and the Department of Toxic Substances. Locally, the City of Pacifica Municipal Code covers flood hazard reduction measures in Title 7 Public Works, Chapter 5 Flood Damage Prevention, Article 5.

Numerous policies in the Safety Element of Pacifica's General Plan protect and restrict new development in tsunami and flood hazard zones with flood damage prevention programs; facilitation of the cleanup of hazardous waste and toxic pollutants; and enforcement of existing State codes and regulations which minimize risk to life and property in areas of flood hazard. Based on compliance with local, state, and federal regulations and implementation of General Plan policies, the potential impact from release of pollution due to project inundation by seiche, flooding, or tsunamis is less than significant.

Mitigation Measures

None required.

Impact 3.7-5 Implementation of the Proposed Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. (Less than Significant)

The Proposed Project and other future projects in the region would be required to comply with drainage and grading requirements intended to control runoff and regulate water quality at each development site. Additionally, new projects would be required to demonstrate that stormwater volumes could be managed by stormwater conveyance facilities designed to control onsite stormwater flows. New development projects would also be required to comply with MS4 NPDES permitting requirements, including the Municipal Regional Permit, the Construction General Permit, and the Construction Dewatering Permit, which regulate stormwater discharge from new and existing development. They require that new developments incorporate Best Management Practices (BMPs) and Green Infrastructure Plan requirements in site design, construction, and management to minimize storm water runoff rates and volumes, control water pollution, and maximize infiltration. The Proposed Project and other future projects in the vicinity would be required to comply with flood control requirements intended to provide flood protection. Additionally, new projects would be required to demonstrate that stormwater volumes could be managed by stormwater conveyance facilities designed to control onsite stormwater flows. New

development projects would be required to comply with local flood control requirements, and these may be strengthened as needed to address sea level rise, as directed by Plan policies.

Applicable regional plans that cover the City of Pacifica include the San Francisco Bay Water Quality Control Plan (Basin Plan), the SMCSWPPP, the San Mateo County Multi-Jurisdictional Local Hazard Mitigation Plan, the City of Pacifica Green Infrastructure Plan, and the Local Coastal Land Use Plan. New development under the Proposed Project would be required to comply with water quality control provisions and sustainable groundwater measures detailed in these documents. The City's General Plan was developed to continue the goals and visions of these plans and to continue enhancing water quality in the planning area. Thus, the Proposed Project would not conflict with implementation of a water quality plan or sustainable groundwater management plan, and therefore this impact is less than significant.

Mitigation Measures

None required.

3.8 Land Use, Population, and Housing

This section assesses potential environmental impacts from future development under the Proposed Project, as related to land use, population, and housing, including evaluation of Proposed Project consistency with other applicable land use plans and regulations, population growth, community division, and housing displacement. This section describes existing land uses, demographics, and housing in the Planning Area, as well as relevant federal, State, and local regulations and programs.

There was one response to the Notice of Preparation (NOP) received regarding affordable housing. These comments are addressed in this section and incorporated into the following analysis.

Environmental Setting

PHYSICAL SETTING

Existing Land Use

Home to 37,062 residents, the City of Pacifica is the one of San Mateo County's largest jurisdictions, encompassing 12.3 square miles (Department of Finance, 2024). The city is bordered to the west by the Pacific Coast, to the north by Daly City, to the east by San Mateo County, and to the south by unincorporated portions of San Mateo County and the ridges of the Coast Range. Much of the land to the southeast and south is preserved as units of the Golden Gate National Recreational Area, the State and County park systems, and protected watersheds. Rural and agricultural land is also prevalent south of the city.

Pacifica is composed primarily of parks and open space and single-family homes with some areas of multi-family homes, in addition to various commercial activity centers, on either side of Highway 1, including West Sharp Park, West Linda Mar, Pacific Manor, and Rockaway Beach. Notable land uses across these activity centers include the Pacifica Coastside Museum at the Little Brown Church, Sanchez Adobe Park, Pacifica Museum, and Pacifica Sharp Park Library. The city is made up of several neighborhoods, many of which share proximity to the coast, and which are unified by Highway 1. The eastern and southeastern parts of Pacifica are filled with open space, including Milagra Ridge, Sharp Park, Sweeny Ridge, and San Pedro County Park. The relative acreage and distribution of existing land uses throughout the Planning Area are shown in **Figure 3.8-1** and **Table 3.8-1**.

Public/Institutional

Public, community, and institutional uses occupy 393 acres of Pacifica's land. Of this, about 60 percent is school land and buildings, including the campuses of Oceana and Terra Nova high schools which are part of the Jefferson Union High School District. Other significant public land holdings include two library sites, the Calera Creek Water Recycling Plant, police and fire stations, and water tanks throughout the city. Public/Institutional land uses are interspersed throughout the city.

Residential and Mixed-Use

Single-family housing makes up 1,789 acres, about 91 percent of residential land use area, while multi-family housing makes up about 186 acres or 9 percent of residential land use area, and mobile homes make up less than one percent of residential land use area. Single-family houses are typical in all neighborhoods, while multi-family housing is distributed in clusters throughout the city.

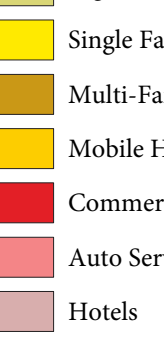
Pacifica has a small amount of mixed-use development, primarily along Palmetto Avenue in West Sharp Park and in Rockaway Beach. Several buildings along Palmetto Avenue have restaurants or retail on the ground floor and housing units or office space on the second floor. Overall, West Sharp Park has the greatest mix of uses throughout the neighborhood, both vertically and horizontally.

Commercial, Industrial, and Office

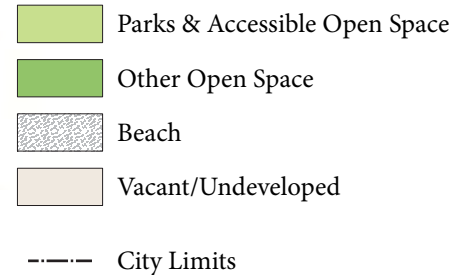
Commercial and office uses occupy approximately 97 acres in Pacifica, making up only one percent of the city's land. Pacifica has no central downtown area. Most retail, restaurants and services are located in neighborhood shopping centers and commercial areas distributed around the city. Most of the 17 acres of industrial land in Pacifica is located between Palmetto Avenue and the ocean, in the northern end of the West Sharp Park neighborhood.

Open Space, Parks and Agriculture

Large parcels of undeveloped land are present along the northern bluffs, the north slope of Milagra Ridge, Gypsy Hill, the Rockaway Quarry site, the face of Cattle Hill, Fassler Ridge, and the slope of Montara Mountain. Smaller vacant "infill" lots are found primarily in the West Sharp Park, East Sharp Park, Westview-Pacific Highlands, Rockaway Beach, and Pedro Point neighborhoods. Given environmental factors such as slope and sensitive species, there are some constraints on the development potential of these sites. There are about 360 acres of land used for agriculture in the City of Pacifica. About 260 acres of this are within city limits, at Millwood Ranch and Park Pacifica Stables, on properties directly north of Sharp Park, and along Linda Mar Boulevard west of the Pacifica Center for the Arts. About 104 acres are outside city limits, at Shamrock Ranch between San Pedro Creek and Highway 1.



#	Subject Sites
	Agriculture
	Single Family Residential
	Multi-Family
	Mobile Homes
	Commercial
	Auto Services
	Hotels
	Office
	Mixed Use
	Utilities
	Industrial
	Schools
	Church
	Other Public or Community



Source: City of Pacifica, 2024; San Mateo County, 2022; Dyett & Bhatia, 2024.

Table 3.8-1: Existing Land Use Summary

Land Use	Acres	Percent
Single Family Residential	1,789	23
Multi-Family Residential	186	2
Mobile Homes	9	0.1
Parks and Accessible Open Space	2,865	37
Other Open Space	737	10
Beach	48	1
Public, Community, and Institutional Uses	393	5
Commercial and Hotels	90	1.1
Office	4	0.1
Mixed Use	12	0.2
Industrial	78	0.2
Agriculture	363	5
Vacant and Undeveloped	1,142	15
Total	7,665	100%

Source: City of Pacifica, 2023

Housing

A household refers to occupied housing units, and housing units describe the structure, vacant or occupied. In 2024, there were 14,787 housing units in the Planning Area (with approximately 14,311 households, representing a vacancy rate of approximately 3.2 percent) (Department of Finance, 2024). ABAG 2040 projections estimated that Pacifica would have 14,520 households by 2040. However, these projections did not account for the final 6th Cycle RHNA allocations adopted by ABAG in December 2021 and updated in November 2022, which requires Pacifica to plan for, at minimum, an additional 1,892 housing units from 2023 to 2031. As indicated in Chapter 2, Project Description, the Proposed Project creates capacity for an additional 2,175 units of housing (approximately 2,092 households, using the DOF's 3.2 percent vacancy rate), resulting in household growth of approximately 15.1 percent from 2024 to 2031.

By law, the RHNA Plan is required to be consistent with the development pattern from Plan Bay Area 2050. These two planning processes seek to address the Bay Area's housing needs over different time horizons: Plan Bay Area 2050 has a planning horizon of 2050, while the 6th cycle of RHNA addresses the need to address short-term housing needs, from 2023 to 2031. To achieve the required consistency, both the overall housing growth for the region, as well as housing growth on a more localized level, must be greater in the long-range plan than over the eight year RHNA cycle.

According to Plan Bay Area 2050, the Association of Bay Area Governments (ABAG) predicts that between 2015 and 2050, the number of households in North San Mateo County (which includes Brisbane, Colma, Daly City, Pacifica, South San Francisco, Millbrae, San Bruno, and part of Burlingame) will grow by 70 percent to reach 166,000 units (MTC, 2021). **Table 3.8-2** presents the

anticipated households and job growth projections for North San Mateo County between 2015 and 2050 based on ABAG's 2050 projections. Over 35 years, the net increase of 69,000 households represents a growth rate of approximately 1,970 units a year. Thus, it can reasonably be assumed that North San Mateo County can expect to add 31,540 households from 2024 to 2040.

Table 3.8-2: Plan Bay Area 2050 North San Mateo County Job Growth and Housing Projections, 2015–2050

	2015	2050	Net Increase	Percent Change
Households	98,000	166,000	69,000	70%
Jobs	130,000	188,000	58,000	44%

Source: Dyett & Bhatia, 2023; ABAG Plan Bay Area 2050, 2021.

According to the DOF, Pacifica's households in 2020 and 2024 represented 14 percent of all households in North San Mateo County, as shown in **Table 3.8-3**. If Pacifica continues to represent this share into the future, it can reasonably be assumed that Pacifica may add approximately 4,415 homes from 2024 to 2040.

Table 3.8-3: Household Percentage Distribution for Jurisdictions in North San Mateo County, 2020 and 2024

	2020	Percentage	2024	Percentage
Brisbane	1,955	2%	1,979	2%
Colma	509	1%	509	0%
Daly City	31,777	32%	32,387	32%
Pacifica	14,180	14%	14,311	14%
South SF	21,803	22%	22,388	22%
Millbrae	8,272	8%	8,627	8%
San Bruno	15,938	16%	16,077	16%
Burlingame*	6,241	6%	6,418	6%

Note: Burlingame represents a partial jurisdiction; numbers represent 50 percent of total

Source: DOF, 2024; Dyett & Bhatia, 2024

Population

In 2024, the population of the Planning Area was approximately 37,062 residents. The population of Pacifica makes up 4.9 percent of San Mateo County. Since 2000, Pacifica's population has decreased by 3.4 percent; in contrast to the County's 4.8 percent growth. As described in the adopted Housing Element, Population growth in Pacifica has been limited in part due to slower job growth compared to other Bay Area jurisdictions but also due to the lack of available housing. Multiple barriers to housing production including high land and construction costs, limited funding, coastal zone regulations, dominance of single-family zoning limiting opportunities for denser development, and a significant amount of publicly owned land (Golden Gate National Recreation Area, Sharp Park, San Pedro Valley County Park, and other public open spaces make up approximately 40 percent of the city's land area).

Employment

Plan Bay Area 2050 growth estimates do not break down household and job growth by specific jurisdiction. ABAG projects Northern San Mateo County will have 188,000 jobs in 2050 – a 44 percent increase between 2015 and 2050. Over 35 years, the net increase of 58,000 jobs represents a growth rate of approximately 1,660 jobs a year. ABAG 2040 projections indicate that Pacifica’s share of jobs was six percent of Northern San Mateo County estimated for 2020, and projected to be seven percent in 2040, as shown in **Table 3.8-4**. Assuming that Pacifica maintains its share of jobs in the North San Mateo County from 2020 to 2040, this would represent an additional 2,320 jobs. Added to Pacifica’s existing jobs total for 2020, this represents a projection of 8,160 jobs by 2040. As shown in Table 2-2 in the Project Description, Pacifica is expected to have 7,560 jobs in 2040. As such, cumulative buildout (including from the Proposed Project and existing 2040 General Plan) is in line with Plan Bay Area 2050 projections and does not represent unplanned growth.

Table 3.8-4: Jobs Percentage Distribution for Jurisdictions in North San Mateo County, 2020 and 2040

	2020	Percentage	2040	Percentage
Brisbane	6,590	7%	16,870	16%
Colma	4,070	4%	4,315	4%
Daly City	18,370	18%	4,315	4%
Pacifica	6,160	6%	7,115	7%
South SF	46,365	46%	54,230	53%
Millbrae	6,570	7%	11,595	11%
San Bruno	14,625	15%	14,780	14%
Burlingame*	16,168	16%	21,313	21%

Note: Burlingame represents a partial jurisdiction; numbers represent 50 percent of total

Source: ABAG, 2018; Dyett & Bhatia, 2024

Jobs-housing balance, or more precisely, jobs to employed residents balance, can influence travel demand and commute patterns. A ratio of 1.0 means that the number of jobs equals number of employed residents, whereas a ratio greater than 1.0 indicates a net in-commute and less than 1.0 indicates a net out-commute. Actual in-commuting and out-commuting is influenced by many other factors, including job skills match, desired housing type match, and household locational preferences.

Pacifica is considered a bedroom community and will continue to include more households than employed residents. Pacifica’s 2040 General Plan anticipated an additional 1,470 jobs for a total of 7,310 jobs by 2040, based on older ABAG 2040 projections. As indicated in the Project Description, implementation of the Proposed Project is expected to add capacity for an additional 250 jobs beyond those anticipated in the 2040 General Plan. Based on the latest available data from DOF and the Census, the existing jobs-employed residents ratio was 0.28. On top of growth anticipated in the 2040 General Plan, implementation of the Proposed Project slightly increases the jobs-employed residents ratio to 0.29.

Table 3.8-5: Planning Area Population, Housing, and Growth Projections, 2024-2040

	Existing (2024) ¹	Total at Buildout (2040) ²
Housing Units	14,787	17,685
Population	37,062	46,450
Employed Residents	20,636	25,858
Jobs	5,840	7,560
Jobs-Employed Residents Ratio	0.28	0.29

¹ C/CAG2040 Travel Demand Model estimates are used for 2020 estimates of jobs by sector. These values are not available for 2024, though nonresidential growth in Pacifica has been minimal and is not expected to be significantly different from this total. Housing units are from the 2024 DOF Population and Housing Estimates, Table E-5.

² Assumes similar proportion of employed residents per population to 2040, based on latest 5-year ACS estimates. Housing Units, population, and jobs taken from Table 2-2 in the Project Description.

Source: City of Pacifica, 2022; DOF, 2024; C/CAG2040; ACS, 2018-2022; Dyett & Bhatia, 2024.

REGULATORY SETTING

Federal

There are no federal regulations applicable to land use, population, and housing in the Planning Area. State, regional, and local regulations are discussed below.

State

California Government Code

California Relocation Law, Public Resources Code Section 7260 et seq.

The California Relocation Law requires the fair and equitable treatment of persons displaced as a direct result of programs or projects undertaken by a public entity. The law requires agencies to prepare a relocation plan, provide relocation payments, and identify substitute housing opportunities for any resident that is to be displaced by a public project.

Department of Housing and Community Development

The State Department of Housing and Community Development (HCD) is responsible for determining regional housing needs for all jurisdictions in California and ensuring the availability of affordable housing for all income groups.

Sustainable Communities and Climate Protection Act of 2008 (Chapter 728, Statutes of 2008)

The Sustainable Communities and Climate Protection Act of 2008, otherwise known as Senate Bill (SB) 375, requires the integration of land use, housing, and transportation planning to achieve regional greenhouse gas (GHG) emission reductions, as adopted by the California Air Resources Board. SB 375 requires Metropolitan Planning Organizations (MPOs) to develop a Sustainable Communities Strategy (SCS)—a new element of the Regional Transportation Plan (RTP)—to plan for achieving GHG reduction targets. The SCS must demonstrate attainment of the regional GHG emissions reduction targets while accommodating the full projected population of the region.

Regional

ABAG/MTC Plan Bay Area 2050

The Metropolitan Transportation Commission (MTC), and Association of Bay Area Governments (ABAG) adopted Plan Bay Area 2050 in October 2021. Plan Bay Area is the integrated land use/transportation plan and demographic/economic forecast for the nine-county San Francisco Bay Area region. The plan coordinates housing plans, open space conservation efforts, economic development strategies, and transportation investments. Plan Bay Area 2050 focuses on four key issues—the economy, the environment, housing and transportation—outlining 35 strategies for growth and investment through 2050 to make the Bay Area more equitable for all residents and more resilient in the face of unexpected challenges.

Together, Plan Bay Area 2050's eight housing strategies work toward a more equitable, affordable future for residents with low incomes, and for all residents, by preserving and protecting the affordable housing currently available; stimulating new housing production; and prioritizing inclusive, mixed communities. Through advocacy, legislation, regional initiatives, planning and research over the next 30 years, MTC and ABAG will work with partners to secure a \$468 billion investment into the region's future housing needs, ensuring that everyone in the Bay Area has a safe, affordable home — especially those historically and systemically marginalized, underserved and excluded. Those strategies include:

- **Goals H1-H2:** Protect and preserve affordable housing by further strengthening renter protections beyond state law and preserving existing affordable housing
- **Goals H3-H6:** Spur housing production for residents of all income levels by allowing a greater mix of housing densities and types of Growth Geographies, building adequate affordable housing to ensure homes for all, integrating affordable housing into all major housing projects, and transforming aging malls and office parks into neighborhoods.
- **Goals H7-H8:** Create inclusive communities by providing targeted mortgage, rental and small business assistance to Equity Priority Communities and accelerating reuse of public and community-owned land for mixed-income housing and essential services.

ABAG Regional Housing Needs Allocation

The Regional Housing Needs Allocation (RHNA) process addresses the need for housing in communities throughout the State. To ensure that adequate housing is available for all income groups, the California Department of Housing and Community Development determines the regional need in coordination with ABAG, which is required to distribute the region's share of statewide need to cities and counties within its jurisdiction. The purpose of the RHNA is to allocate a "fair share" of the Bay Area's projected housing need to cities and counties by household income group, categorized as "very low," "low," "moderate," and "above moderate." According to the 2023–2031 RHNA, ABAG has preliminarily determined that Pacifica's fair share of regional housing need for the 2023 to 2031 period would be 1,982 units. Approximately 848 of these units would be allocated as housing affordable to very low- and low-income households (ABAG, 2021). The ABAG Executive Board adopted the Final RHNA Plan in December 2021.

San Mateo County Housing Element 2023-2031

State housing and planning laws require all California cities and counties include in their General Plan a housing element that establishes objectives, policies, and programs in response to community housing conditions and needs. The Housing Element is required to be updated periodically according to the statutory deadline set forth in the Government Code (Section 65580). This Housing Element update for the County of San Mateo represents the 6th update cycle, covering an eight-year planning period from January 31, 2023 through January 31, 2031.

- **Goal H1:** Production of new housing at all income levels, with a focus on affordable housing
- **Goal H2:** Preservation of existing housing that is affordable to lower- and middle-income residents
- **Goal H3:** Protection of current residents to prevent displacement
- **Goal H4:** Promotion of community engagement and public outreach
- **Goal H5:** Affirmatively Furthering Fair Housing

San Mateo County Local Agency Formation Commission

Under State law, each county must have a local agency formation commission (LAFCO), which is the agency that has the responsibility to create orderly local government boundaries, with the goals of encouraging the orderly formation of local governmental agencies and the preservation of open space lands, and discouraging urban sprawl. While the commission in San Mateo County has no direct land use power, its actions determine which local government will be responsible for planning new areas. Additionally, the commission addresses a wide range of boundary actions, including the creation of a county-wide sphere of influence, adjustments to boundaries of special districts, annexations, and incorporations of cities.

Local

Pacifica 6th Cycle Housing Element

The Housing Element is one of the State-mandated elements that must be included in the City's General Plan. State law stipulates that the Housing Element include certain items, such as a Housing Needs Assessment; goals, policies and objectives regarding housing in Pacifica; and implementation programs to work toward achieving those goals.

In January 2024, the City adopted the 6th Cycle Housing Element Update to cover the eight-year planning period from December 2023 through December 2031. It sets forth actions the City will undertake to support production of an adequate supply of safe, affordable housing for existing and future residents, preserve and rehabilitate existing affordable housing stock, protect tenants from displacement pressures, and affirmatively further fair housing throughout the entire city, so that everyone has access to opportunity. The Housing Element includes 14 programs that create the framework for how the City of Pacifica will address housing needs and constraints. Key program actions that specifically address creation of new housing, preservation of existing housing, and anti-displacement include the following:

HE-I-1 General Plan and Zoning Amendments to Achieve RHNA

Create the regulatory framework to accommodate the Regional Housing Needs Allocation (RHNA) sites inventory, promote development of multi-family housing, including rental housing and missing middle housing. Address land use constraints to make the production of housing more likely. This program reflects the priority given in the General Plan and this Housing Element to focus redevelopment in existing commercial shopping centers.

HE-I-2 Citywide Zoning Modernization and Streamlining to Facilitate Housing Development and Maintain Consistency with the General Plan

Modernize zoning code to make it easier to use, foster greater development in select areas, and streamline the application submittal and review processes. Address land use and processing and permitting procedure constraints to make the production of housing more likely. This program is a citywide comprehensive code update to remove barriers to housing development, improve the function and interpretation of the zoning code, and to ensure consistency with the updated 2040 General Plan. It is intended to apply city-wide and not be limited to sites identified on the RHNA sites inventory.

HE-I-3 Public and Semi-Public Land Master Planning and Implementation

Accommodate the Regional Housing Needs Allocation Sites Inventory by evaluating public and semi-public lands to support future housing development. Address constraints associated with land cost and land use controls.

HE-I-4 Support Development of Accessory Dwelling Units

Increase the rate of ADU production to expand the number of units affordable to lower-income households in higher resource areas across the city. Address constraints associated with land cost, construction cost, financing, and land use controls as they relate to the production of ADUs.

HE-I-5 Fund a Housing Action Fund

Fund a Housing Action Fund to support housing projects or other supportive activities to remove constraints on housing production and promote development of multi-family rental and for-sale housing.

HE-I-6 Strengthen Inclusionary Housing Program

Commission a study to evaluate revisions to current Below Market Rate (inclusionary zoning) program to increase the minimum required proportion of affordable units and incentivize production of units with deeper affordability than the current program.

HE-I-7 Preserve Existing Affordable Housing Units

Preserve the City's deed restricted affordable units that will expire in the next decade and develop a plan for preservation of all existing affordable units to keep them affordable long term. Protect residents of less expensive market-provided units.

HE-I-8 Rehabilitation of Homes in Lower Resource Areas

Support maintenance and rehabilitation activities that improve the condition of the city's existing housing stock in order to preserve existing housing options, especially for extremely low-income households and households with special needs. Address any building code constraints to facilitate preservation of existing housing stock.

HE-I-9 Residents with Extremely Low-Incomes and Special or Disproportionate Housing Needs

Reduce development constraints on the construction of extremely low-income units as well as a variety of housing types to meet the needs of populations with special and disproportionate housing needs. Extremely low-income units will help serve residents with disproportionate housing needs. Through the implementation actions listed below, the City will prioritize a mix of unit sizes at inclusive housing properties that would address the needs of those who require live-in aides, want to live with roommates or partners, or have children. The City will also encourage development near public transit to accommodate the transit-dependency of most adults with developmental disabilities.

HE-I-11 Support Fair Housing Enforcement and Outreach Capacity

Maintain and distribute accurate information about fair housing law and policies and regulate existing loopholes related to substantial remodels.

City of Pacifica 2040 General Plan (General Plan)

The City of Pacifica 2040 General Plan was adopted in September 2022 and provides guidelines for land use decision-making in the city. The General Plan includes six elements: Land Use; Circulation; Parks, Recreation and Open Space; Conservation; Safety; and Noise. The Housing Element Update is updated more frequently. The Land Use, Conservation, Housing, and Safety Elements are intended to ensure that adequate land, infrastructure services, and safety measures are provided to accommodate existing and future development. Several key themes guide the General Plan:

- **Open Space Preservation and Trail System Expansion.** The Plan identifies priorities for open space preservation and strategies to protect open space while allowing limited development, to be clustered and designed to fit into its natural setting
- **Sustainable Development and Practices.** The Plan aims to set a good land use balance and to promote sustainable site planning and design, water conservation, waste reduction, and use of alternative transportation modes.
- **Creating a Destination for Tourism.** The Plan includes strategies to enhance tourism by leveraging Pacifica's natural assets, creating more attractive places in visitor-oriented districts, marketing, and pursuing destination hotels and inns at key sites.
- **Shopping Area Revitalization and Walkable, Mixed Use Areas.** Pacifica residents desire more attractive and successful commercial areas, and also envision the development of walkable, mixed-use areas with good transit access. The Plan seeks to support commercial revitalization and redevelopment at key locations, advancing the City's fiscal health, its quality of life, and its sustainability all at once.
- **A Unique Vital Center for Pacifica.** The General Plan establishes the goals for the Sharp Park neighborhood and supports the Sharp Park Specific Plan, which provides detailed land use strategies, urban design guidance, and connectivity improvements. and other policies to enhance the area.

Specific policies that relate to CEQA topics include:

Economic Sustainability

Guiding Policy ES-G-5 Attract New Businesses and Jobs. Seek out new businesses that will employ and serve Pacifica residents, improving the City's jobs/housing ratio.

Implementing Policy ES-I-13 Proportional Mix of Uses. Strive to achieve a balanced mix of retail and service uses in commercial centers and districts to support visitor- and sales tax-generating uses.

Implementing Policy CD-I-1 Primary Activity Centers. Create primary activity centers at West Sharp Park, Rockaway Beach, and Linda Mar, and neighborhood centers in Pacific Manor and Park Pacifica (at and around the Park Mall site).

- The Sharp Park Specific Plan Area will be the City's mixed use core. The Sharp Park Specific Plan will serve as the guide to enhance Palmetto Avenue between Paloma Avenue and Clarendon Road as a vibrant, mixed-use main street, with strong connections to the Ocean. Sharp Park's character will be signaled by higher-intensity buildings along the Highway 1 corridor, including at the Eureka Square site.
- Rockaway Beach will be the visitor-oriented center. Its charming coastal character will be strengthened by new development and the district will be extended with a connective street pattern onto the flat portion of the Quarry site. It may gain a new, defining feature such as a destination hotel or conference center. Linda Mar will be a center for recreation and community. Crespi Drive, in particular, will become a more diverse center of activity, including visitors to the beaches and trail system; seniors, youth, and families at an expanded community center park; and mixed-use, transit-oriented development. Linda Mar and Pedro Point Shopping Centers are also part of this center.

Implementing Policy CD-I-2 Neighborhood Activity Centers. Support smaller-scale neighborhood centers at Pacific Manor and at and around the Park Mall site, enabling them to become walkable, mixed use districts catering primarily to Pacifica residents.

Implementing Policy CD-I-4 Support Infill and Redevelopment. Support compatible residential infill on designated vacant lots as shown in Figure 4-3, and redevelopment of under-utilized commercial properties, and continue to use the City's Design Guidelines in evaluation of proposals that don't meet all development standards in residential districts.

Community Design

Guiding Policy CD-G-4 Enhanced Mixed Use Areas. Create distinctive mixed-use areas by ensuring good building form and building-sidewalk interface, and providing pedestrian-oriented streets and public spaces.

Implementing Policy CD-I-9 Parking Districts. Within mixed-use and commercial areas, establish parking districts that facilitate parking once to reach all destinations.

Implementing Policy CD-I-20 Underground Utilities. Continue to require underground utilities in all new development. New developments should include undergrounding existing overhead utilities along each project frontage. Within scenic corridors, place lines underground or located there so they do not break the viewline of a roadway vista. This policy applies Citywide.

Land Use

Guiding Policy LU-G-2 Concentrated Development. Focus new development in or directly adjacent to already-developed areas, where it can be served by existing public services and where it will not have significant impacts on coastal or other resources.

Guiding Policy LU-G-3 Future Residential Development. Limit development to sites that are not critical for open space connections or habitat preservation, and which will be in harmony with the surrounding natural setting.

Guiding Policy LU-G-4 Higher-Density Housing. Locate higher-density housing outside of Coastal Vulnerability Zones and in accessible places close to community shopping areas and transportation.

Guiding Policy LU-G-6 Compact Mixed Use Development. Facilitate compact mixed-use development on sites with good access to transit consistent with the Land Use Diagram. Mixed-use development may include housing or office space with retail, restaurants, or personal service businesses.

Guiding Policy LU-G-7 Open Space Conservation and Habitat Protection. Protect beaches, oceanfront bluffs, ridgelines, hillside areas adjacent to existing open space, and areas that support critical wildlife habitat and special status species.

Implementing Policy LU-I-2 Land Divisions in the Coastal Zone. Continue to require coastal development permits for all land divisions within the Coastal Zone. Land divisions in the Coastal Zone shall be:

- Designed to minimize impacts to public access, recreation, and coastal resources.
- Designed to minimize site disturbance, landform alteration, and the removal of native vegetation for development or fire safety.
- Prohibited on properties that include any areas that are within or adjacent to an Environmentally Sensitive Habitat Area (ESHA) unless the resulting parcels can be developed without building or requiring vegetation clearance in the ESHA or ESHA buffer, or unless the resulting parcels are set aside for conservation.
- Permitted only in areas with adequate public services to serve development on the resulting parcels.
- Any land division that would result in a parcel that could not be developed in accordance with the policies of this LCLUP is not allowed.

Implementing Policy LU-I-16 Density Bonus. Continue to facilitate housing affordable to moderate-, low- and extremely-low-income households by providing a density bonus of up to 50 percent over the maximum allowed by zoning, consistent with State Government Code Sections 65915-65918.

Implementing Policy LU-I-16.1 Inclusionary Zoning Update. Consider an update to the City's below-market rate (BMR) inclusionary zoning ordinance as an action program in a future Housing Element update to study an increase in the inclusionary requirement to 20 percent consistent with the requirements of state law, to evaluate longer terms of affordability, and other opportunities to expand the applicability of inclusionary zoning requirements to more projects.

Implementing Policy LU-I-17 Accessory Dwelling Units. Maintain the Zoning Ordinance to ensure that regulations governing accessory dwelling units conform with current State

requirements. Accessory dwelling units are an important component of the City's strategy to provide housing for moderate- and low-income households.

Local Coastal Land Use Plan (1980)

The California Coastal Act requires every city and county lying partly or wholly within the Coastal Zone to prepare a Local Coastal Program (LCP). The LCP consists of a local coastal land use plan or plans; zoning ordinances; zoning district maps; and other actions which taken together implement the Coastal Act provisions. These provisions aim to ensure that public access to and along the shoreline is maintained; that water quality, marine life, and environmentally sensitive habitat areas are protected; and that coastal visual resources and special communities are preserved. The Coastal Act calls for certain land uses within the Coastal Zone to have priority over other uses: recreation and visitor-serving uses, fishing, boating, and other coastal-dependent uses, and public works and industrial facilities needed to support priority uses. In Pacifica, land west of SR 1, as well as the Sheldance Nursery, are within the Coastal Zone.

Pacifica's current Local Coastal Land Use Plan (LCLUP) was adopted in 1980. The heart of the LCLUP is a detailed description of each coastal neighborhood, and a statement of land use and coastal access policies for each neighborhood. The LCLUP follows with a detailed description of each existing or proposed beach access point (the Access Component) and concludes with a set of policies to achieve the Coastal Act goals.

In addition, the 2024 Draft of the City of Pacifica Local Coastal Land Use Plan was recently adopted by City Council on October 28, 2024. However, since the 2024 Draft LCLUP has yet to be certified by the Coastal Commission, this EIR references the 1980 LCLUP in its analysis. Even so, Pacifica's adopted 2040 General Plan is inclusive of all policies in the 2024 draft LCLUP. Consistent with the 1980 LCLUP, it includes policies, programs, and standards to ensure that public access to the coast is provided according to the policies of the Coastal Act. Further, the LCLUP update provides a comprehensive assessment of current conditions and serves as a long-range development policy document of the portion of the City of Pacifica within the Coastal Zone.

Design Guidelines

Pacifica adopted design guidelines in 1990, following the Community Design Element's recommendation for the establishment of rules to preserve and enhance the character of the city. The Guidelines are meant to encourage high-quality and context-sensitive buildings and encourage creativity in design.

Pacifica Municipal Code

The Pacifica Zoning Regulations can be found under Chapter 4 of Title 9 of the Municipal Code. The Zoning Ordinance has been amended over time to address changes to Pacifica's growth and planning legislation. The Zoning Ordinance provides development standards, identifies allowable land uses, and specifies other regulations related to development within the city. Zoning designations in the city fall into four main categories:

Residential. There are four main residential zoning designations, R-1 (Single-Family Residential), R-2 (Two-Family Residential), and R-3 (Multiple-Family Residential), and R-5 (High Rise Apartment District). R-1 primary land uses include single family dwellings, accessory buildings, and small childcare and special care facilities. R-2 primary land uses includes single family dwellings on lots smaller than 5,800 square feet, two family dwellings, accessory buildings, and small childcare and special care facilities. R-3 primary land uses include duplexes and multi-family dwellings, accessory buildings, and small childcare and special care facilities. R-5 land uses include high-rise apartments.

Commercial and Industrial. There are seven commercial zoning designations, C-1 (Neighborhood Commercial), C-2 (Community Commercial), C-3 (Service Commercial), C-1-A (Commercial Apartment District), O (Professional Office), and C-R (Commercial Recreation), and CO (Cannabis Operation Overlay District). There are also two industrial zoning designations, M-1 (Controlled Manufacturing) and M-2 (Industrial). There is also Parking District (P). Primary land uses include a variety of local and visitor-serving retail uses, offices, galleries, restaurants and bars, storage, and industrial supply. C-1 covers most of Pacifica's commercial areas and shopping centers. The Zoning ordinance also specifies the height limit, building site area, setbacks, and parking requirements for each designation.

Agricultural and Open Space. There are three agricultural and open space zoning designations, A (Agricultural), O-S (Open Space), and R-M (Resource Management). The A district covers most of Pacifica's undeveloped land and allows residential and certain other uses at very low densities specified by overlay districts. In addition, there is a P-F (Public Facilities) district that covers schools, government facilities, utilities, recreation facilities, and churches.

There are also two special districts, P-D (Planned Development) and HPD (Hillside Preservation District), which covers development standards and plans for these areas.

Impact Analysis

For the purposes of this EIR, a significant impact would occur if implementation of the Proposed Project would:

- Criterion 1:** Physically divide an established community;
- Criterion 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;
- Criterion 3:** 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); or

Criterion 4: Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

METHODOLOGY AND ASSUMPTIONS

The Proposed Project is considered consistent with the provisions of the identified regional and local plans if it meets the general intent of the applicable land use plans. The focus of this analysis is on plans, and policies within those plans, adopted for the purpose of avoiding or mitigating an environmental effect. A given project is not expected to conform precisely with each and every policy, as state law does not require precise conformity of a proposed project with every policy or land use designation for a site. Inconsistency is considered insignificant if it causes physical environmental impacts (State CEQA Guidelines Section 15382).

Potential impacts resulting from implementation of the Proposed Project were evaluated based on relevant information from the planning and policy documents listed in the Regulatory Setting section of this chapter and in consideration of the proposed land use designations, diagrams, and policies.

RELEVANT PROPOSED PROJECT PROGRAMS

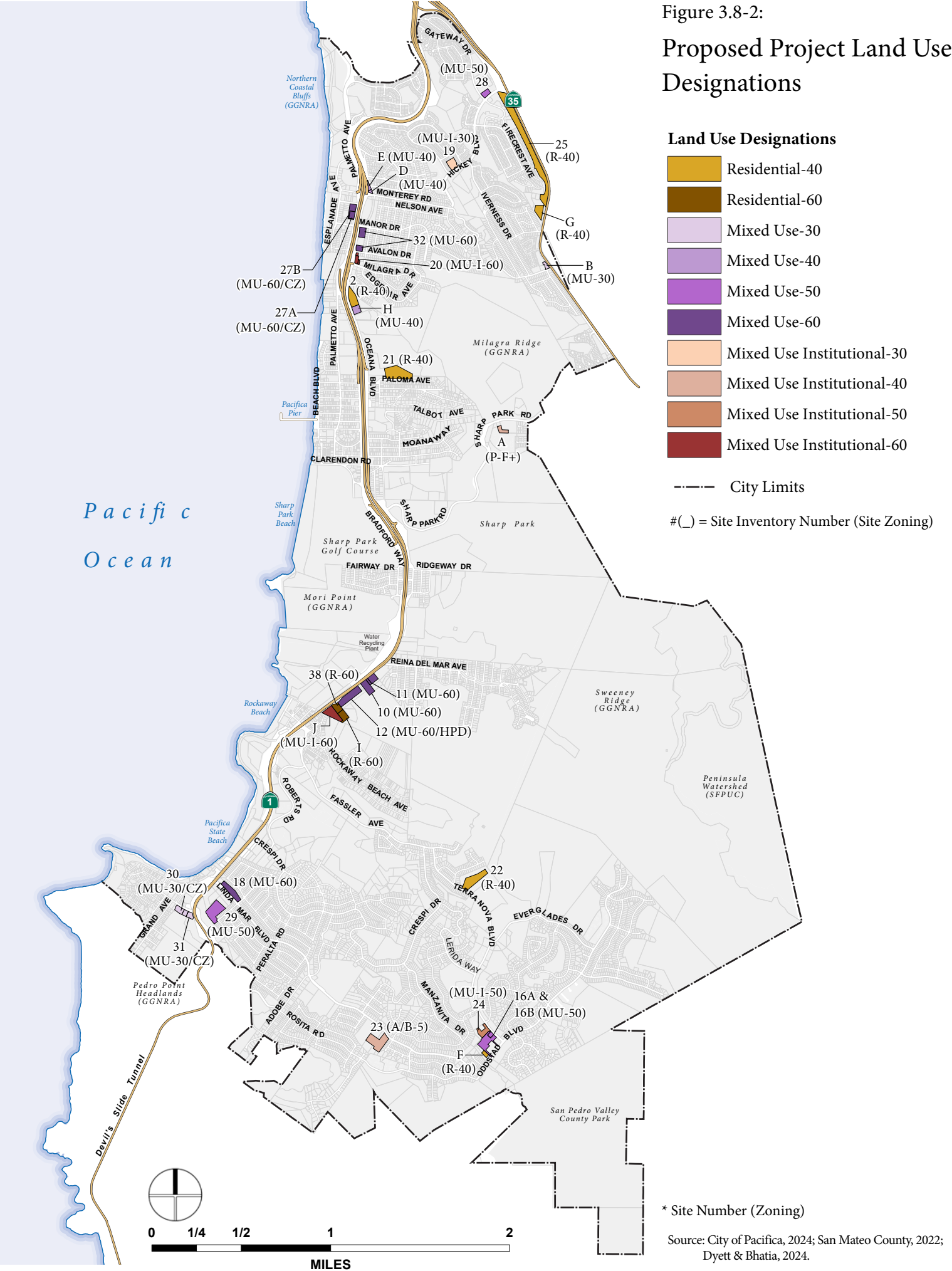
General Plan Designations and Zones

As outlined in the Project Description, The Proposed Project includes three new general plan land use designations and corresponding zones, with each type containing associated densities that match densities in the Housing Site Inventory (30, 40, 50, or 60 dwelling units/acre):

- Multifamily Residential (R-#). This use is intended for multi-family apartments.
- Mixed Use (MU-#). This use is intended for high-density mixed-use development. Allowable uses would include ground-floor retail, restaurant or personal service uses and housing or offices. Ground floor commercial uses must be constructed along the street frontage but are not required on the interior of a site.
- Mixed use Institutional (MU-I-#). This use is intended for high-density mixed-use development that includes institutional uses, such as government facilities/infrastructure, schools, religious institutions, etc.

These land use designation and zoning changes are shown in **Figure 3.8-2**.

Figure 3.8-2:
Proposed Project Land Use
Designations



* Site Number (Zoning)

Source: City of Pacifica, 2024; San Mateo County, 2022;
Dyett & Bhatia, 2024.

Objective Development Standards

State law requires adoption of objective development standards for multifamily sites that enable ministerial project review and approval. The Objective Development Standards component of Program HE-I-1 will create or revise objective development standards (“ODS”) applicable to the sites identified to achieve Housing Element densities and meet the City’s RHNA. The Proposed Project creates six ODS addressing the following: height; setbacks from property lines; lot coverage; floor area ratio (“FAR”); open space per dwelling unit; and, off-street parking. In many cases, the objective design standards increase allowable height and lot coverage, decrease minimum usable open space, and decrease parking requirements from the existing zone. The ODS for each proposed zoning designation are described in Table 2-2 of Chapter 2: Project Description of this EIR.

IMPACTS

Impact 3.8-1 Development under the Proposed Project would not physically divide an established community. (No Impact)

The physical division of an established community typically refers to the construction of a linear feature, such as an interstate highway or railroad tracks, or removal of a means of access, such as a local bridge, that would affect mobility within an existing community or between a community and outlying area. However, physical division could also occur if large buildings were designed in such a way so as to create “walls” or oriented in such a way that would obstruct movement or circulation on commonly used routes.

The Proposed Project does not involve the construction of a linear feature or other barrier as described above and would not remove any means of access or impact mobility. Implementation of the Proposed Project would facilitate residential development required to meet the City’s RHNA allocation, consisting primarily of infill housing on previously developed lots within the city limit. While many of the objective design standards increase allowable building heights, they include standards for setbacks, height requirements for sites near single-family zones, and other design requirements that ensure compatibility with the scale of surrounding neighborhoods.

In addition, future development under the Proposed Project would need to comply with the City of Pacifica General Plan, which contains policy requirements pertaining to community development patterns that must be implemented in each of Pacifica’s neighborhoods. Existing policies ES-I-7, CD-I-1, CD-I-2, CD-I-4, CD-G-4, CD-I-9, CD-I-20, LU-G-2, LU-G-3, LU-G-4, LU-G-6 direct development to be oriented toward transit and pedestrian- or bicycle-oriented connectivity within neighborhoods. Policy LU-G-7 intends to protect Pacifica’s bluffs, ridgelines, and other natural features to avoid dividing important natural resource areas. Rather, by allowing for compact and concentrated development in already-urbanized neighborhoods, increasing opportunities for housing and economic development, and improving linkages, the Housing Element update provides improved connections to and continuity with surrounding neighborhoods. Conformance with the General Plan would discourage development that would result in a division within an established community and would reduce potential impacts to a less than significant level.

Therefore overall, because the Proposed Project would not introduce any physical barriers to the Planning Area, it would result in no impact with respect to physically dividing an existing community.

Mitigation Measures

None required.

Impact 3.8-2 Development under the Proposed Project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. (No Impact)

Regional Plans

Plan Bay Area 2050

Plan Bay Area is the regional blueprint for development and conservation in the nine county San Francisco Bay Area. As discussed in the Regulatory Setting, both Plan Bay Area 2040 and its update, Plan Bay Area 2050, promote compact, mixed-use, infill development within walkable/bikeable neighborhoods close to public transit, jobs, schools, shopping, parks, recreation, and other amenities in order to reduce GHG emissions, increase housing opportunities, promote equity and diversity, focus development within the existing urban footprint, increase access to affordable housing, increase employment opportunities, and increase non-automotive mode share and the effectiveness of the transportation system. Plan Bay Area 2050 was adopted in October 2021, and continues to support the goals of Plan Bay Area 2040 while identifying a path to make the Bay Area more equitable for all residents and more resilient in the face of unexpected challenges. RHNA and Plan Bay Area 2050 discuss planning for housing on two separate time horizons: RHNA focuses on the shorter-term with its eight-year cycle, while Plan Bay Area 2050 presents a longer-term vision for the next 30 years. The two efforts, however, are coordinated, with RHNA's near-term focus setting the stage for early implementation of Plan Bay Area 2050's envisioned growth pattern.

The Proposed Project's goals and associated policies and programs (HE-I-1 through HE-I-14) set the stage for early implementation of Plan Bay Area 2050's envisioned growth pattern by redesignating and rezoning sites within Pacifica to provide for the City's RHNA and reducing barriers to building more affordable housing.

Table 3.8-3 presents the Plan Bay Area 2050 strategies that are applicable to the analysis of land use, population, and housing in this chapter and how the programs associated with the Proposed Project's goals (described above) complies with each of the strategies. Consistency with Plan Bay Area 2050 strategies not listed in **Table 3.8-3** are further evaluated in other chapters of this EIR. **Table 3.8-3** shows that the Proposed Project generally would not disrupt or hinder implementation of any Plan Bay Area 2050 strategies. The Housing Element Update includes proposed actions the City would be undertaking to achieve its housing RHNA targets and also would implement ABAG's land use goals and policies by encouraging new development in areas with access to transit and services, thus minimizing vehicle trips and GHG emissions.

As shown in **Table 3.8-6**, the Proposed Project would support key objectives of Plan Bay Area throughout the Planning Area, such as creating greater opportunity for low-income groups in High Resource Areas and adding more affordable housing typologies throughout the Planning Area. Therefore, the Proposed Project would not conflict with Plan Bay Area 2050, and there would be no impact.

Table 3.8-6: Plan Bay Area 2050 Strategies Applicable to the Proposed Project

<i>Plan Bay Area 2050</i>	<i>Proposed Project Integration</i>
Housing Strategies	
H3. Allow a greater mix of housing densities and types in Growth Geographies. Allow a variety of housing types at a range of densities to be built in Priority Development Areas, select Transit-Rich Areas and select High Resource Areas. H4. Build adequate affordable housing to ensure homes for all. Construct enough deed restricted affordable homes to fill the existing gap in housing for the unhoused community and to meet the needs of low-income households	Program HE-I-I: <i>General Plan and Zoning Amendments to Achieve RHNA</i>. Focuses redevelopment in existing shopping centers and promote development of multi-family housing, including rental housing and missing middle housing. Address land use constraints to make the production of housing more likely. Other Housing Element programs not included in this EIR, including HE-I-I through HE-I-9, and HE-I-I I, support construction and preservation of deed restricted affordable housing.

Source: *Plan Bay Area 2050, 2021*; Dyett & Bhatia, 2023.

Local Plans and Regulations

Local land use plans and regulations that cover the Planning Area include the City of Pacifica General Plan and the Zoning Code, and the LCLUP. As the Proposed Project is an update to existing local policies and development standards, there are cases in which it differs from existing standards and regulations.

General Plan and Zoning Code

The General Plan envisions Pacifica as a destination for tourists and businesses, where there is a balance of urban and undeveloped land, habitat conservation, housing opportunities, economic development, and neighborhood character.

The Proposed Project retains the overall land use framework of the General Plan to achieve its vision, with some targeted changes to land use designations and the Zoning Code to promote housing development (Policies HE-I-I). The City will adopt Objective Design Standards for multi-family residential projects and mixed-use projects with a residential component and modernize the Zoning Code to increase the potential for development with a focus on areas identified in the general plan for increased density. The locations of Housing Element sites, largely infill sites in

underutilized shopping centers, institutional uses, and on City-owned parcels, are compatible with policies and guiding themes of preserving open space, sustainable site planning, and shopping area revitalization/walkable mixed use areas.

Local Coastal Program

The Proposed Project includes four sites, 27A, 27B, 30, and 31, located in the Coastal Zone. As described in Environmental Settings, Pacifica's adopted 1980 Local Coastal Program outlines policies that address the following: ensuring public access to recreational and coastal areas while balancing safety, environmental protection, and property rights; enhance public access, particularly to coastlines, and avoid obstructing existing facilities; give priority to affordable recreational facilities and coastal-dependent uses, with a focus on maintaining and protecting sensitive habitats and agricultural lands; and strategically distribute and manage sites to prevent overcrowding and environmental degradation. Housing development on these four sites does not conflict with these goals, and none of the sites are within hazard areas in the Coastal Vulnerability Zones (LU-G-8).

Summary

Pacifica's adopted 2040 General Plan is inclusive of all policies in the 2024 draft LCLUP as well. Because the Proposed Project changes were not included in the original General Plan or 2024 LCLUP update, a subsequent LCP amendment would be necessary to make the LCP consistent with the General Plan. The Zoning Ordinance implements the General Plan and will be modified to conform with Proposed Project changes. As such, the Proposed Project will not conflict with the General Plan, Zoning Ordinance, or the LCLUP, and no impact would result.

Mitigation Measures

None required.

Impact 3.8-3 Development under the Proposed Project would not 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). (Less than Significant)

Implementation of the Proposed Project could induce substantial population growth directly if its proposed land uses and development standards would provide for significant population or employment growth above projected levels, or indirectly if infrastructure extensions would encourage significant numbers of people to move to the area.

The implementation of the Proposed Project would facilitate construction of new housing to meet the City of Pacifica RHNA obligations. Development associated with the implementation of the Proposed Project is projected to result in up to approximately 2,175 additional homes and 250 additional jobs by 2040, in addition to other growth anticipated in the 2040 General Plan.

Pacifica's 2040 General Plan projections were consistent with regional demographic projections taken from ABAG 2040. Since time of 2040 General Plan preparation, Plan Bay Area 2050 was

adopted. Plan Bay Area 2050 does not provide jurisdiction-level projections, instead projecting additional household growth for “superdistricts” to year 2050. As indicated in the above analysis, **Table 3.8-2** presents the anticipated households and job growth projections for North San Mateo County between 2015 and 2050 based on ABAG’s 2050 projections. Over 35 years, the net increase of 69,000 households represents a growth rate of approximately 1,970 units a year. Thus, it can reasonably be assumed that North San Mateo County can expect to add 31,540 households from 2024 to 2040. According to the DOF, Pacifica’s households in 2020 and 2024 represented 14 percent of all households in North San Mateo County, as shown in **Table 3.8-3**. If Pacifica continues to represent this share into the future, it can reasonably be assumed that Pacifica may add approximately 4,415 homes from 2024 to 2040. As shown in **Table 3.8-4**, growth associated with implementation of the Proposed Project and the 2040 General Plan will result in nearly 3,000 additional units, which is less than the total reasonably expected amount.

Similarly, jobs growth associated with the Proposed Project and 2040 General Plan does not represent unplanned growth. ABAG projects Northern San Mateo County will have 188,000 jobs in 2050 – a 44 percent increase between 2015 and 2050. Over 35 years, the net increase of 58,000 jobs represents a growth rate of approximately 1,660 jobs a year. ABAG 2040 projections indicate that Pacifica’s share of jobs was six percent of Northern San Mateo County estimated for 2020, and projected to be seven percent in 2040, as shown in **Table 3.8-4**. Assuming that Pacifica maintains its share of jobs in the North San Mateo County from 2020 to 2040, this would represent an additional 2,320 jobs. Added to Pacifica’s existing jobs total, this represents a projection of 8,160 jobs by 2040. As shown in Table 2-2 in the Project Description, Pacifica is expected to have 7,560 jobs in 2040. Cumulative buildout for jobs (including from the Proposed Project and existing 2040 General Plan) is in line with Plan Bay Area 2050 projections and does not represent unplanned growth.

As such, the resulting increase in population, housing units, and jobs would not be considered substantial unplanned growth as it would be consistent with regional planning projections, and it would occur incrementally over the time horizon for the Proposed Project. Further, the Proposed Project generally involves infill development within the city limit and does not propose the extension of roads or infrastructure into undeveloped areas. Therefore, the Proposed Project would result in a less than significant impact associated with population growth, either directly or indirectly.

Given that the Proposed Project’s direct and indirect projected population growth is commensurate with regional growth projections, the Proposed Project would not induce substantial unplanned population growth in the Planning Area and the impact would be less than significant.

Mitigation Measures

None required.

Impact 3.8-4 Development under the Proposed Project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. (Less than Significant)

A significant impact could result if the Proposed Project displaced substantial numbers of people or housing, either directly through eviction and demolition, or indirectly, through means such as gentrification and economic displacement. The Proposed Project would facilitate the provision of housing to meet the projected need at all income levels in Pacifica. The location of proposed new housing units is shown in **Figure 2-3** of Chapter 2, Project Description of this EIR. In total, the Proposed Project would result in 2,175 housing units, including ADUs. None of the Housing Element sites have existing housing, and buildout would result in a substantially higher amount of new housing of different types and price points than exists now, which would be accessible to people of all ages and backgrounds. As such, direct displacement impacts would be less than significant.

Indirect displacement resulting from development within the Planning Area could potentially occur through the process of neighborhood economic and demographic change in an existing area, which often results from real estate investment and increased demand from higher-income residents. Pacifica's Housing Element contains provisions to protect against the indirect displacement of housing units and people in Pacifica. Program HE-I-5 will help prevent displacement of existing lower income households by providing financial support for the preservation of existing affordable housing and helping to prevent conversion of affordable housing units to market rate housing. Program HE-I-7 will help prevent low-income residents from displacement or housing-cost burden due to expiration of affordable covenants, helping vulnerable populations remain in their homes. This program will address the lack of investment in existing affordable housing by developing a long-term funding plan for the preservation of affordable units. The program will help protect existing residents from displacement by implementing strategies that protect residents in areas of lower or moderate opportunity and concentrated poverty and preserves housing choices and affordability.

Several Housing Element programs, including HE-1-1 in this Proposed Project, seek to increase the availability of housing stock at a range of incomes, with particular focus on increasing the number of lower income units in the city. These include HE-1-1, which increases the capacity for future lower and moderate-income housing; HE-1-2, which streamlines the application submittal and review processes and makes it easier to build new housing; HE-1-3, which evaluates public lands to support future housing development and include lower income units; HE-1-4, which supports ADU development, and important source of housing for those that are lower income and have disproportionate housing needs; HE-I-8, which supports maintenance and rehabilitation activities to preserve existing housing options; HE-I-9, which reduces constraints on the construction of extremely low-income units; and HE-I-11, which aims to maintain and distribute information about fair housing law and policies, including substantial renovation eviction notices.

Adherence to existing State regulations and implementation of programs in the Housing Element Proposed Project would prevent the indirect displacement of substantial numbers of residents or housing units to the maximum extent practicable. Overall, the Proposed Project would not directly or indirectly displace substantial numbers of people or housing units, and any potential indirect

impacts would be addressed by existing City policies and provisions for affordable housing; this impact would be less than significant.

Mitigation Measures

None required.

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3.9 Noise

This section evaluates the potential effect of the Proposed Project on noise levels within the Planning Area. It describes how noise is measured and regulated, and identifies sources of noise in Pacifica.

There were four responses to the NOP related to topics addressed in this section of the EIR, including construction and operational noise, and proximity to Highway 1. The City/County Association of Governments of San Mateo County (C/CAG) also submitted a letter regarding concerns about ensuring Airport/Land Use Compatibility for sites within Airport Influence Area. These comments are addressed in this section and incorporated into the following analysis.

Environmental Setting

PHYSICAL SETTING

Noise Descriptors

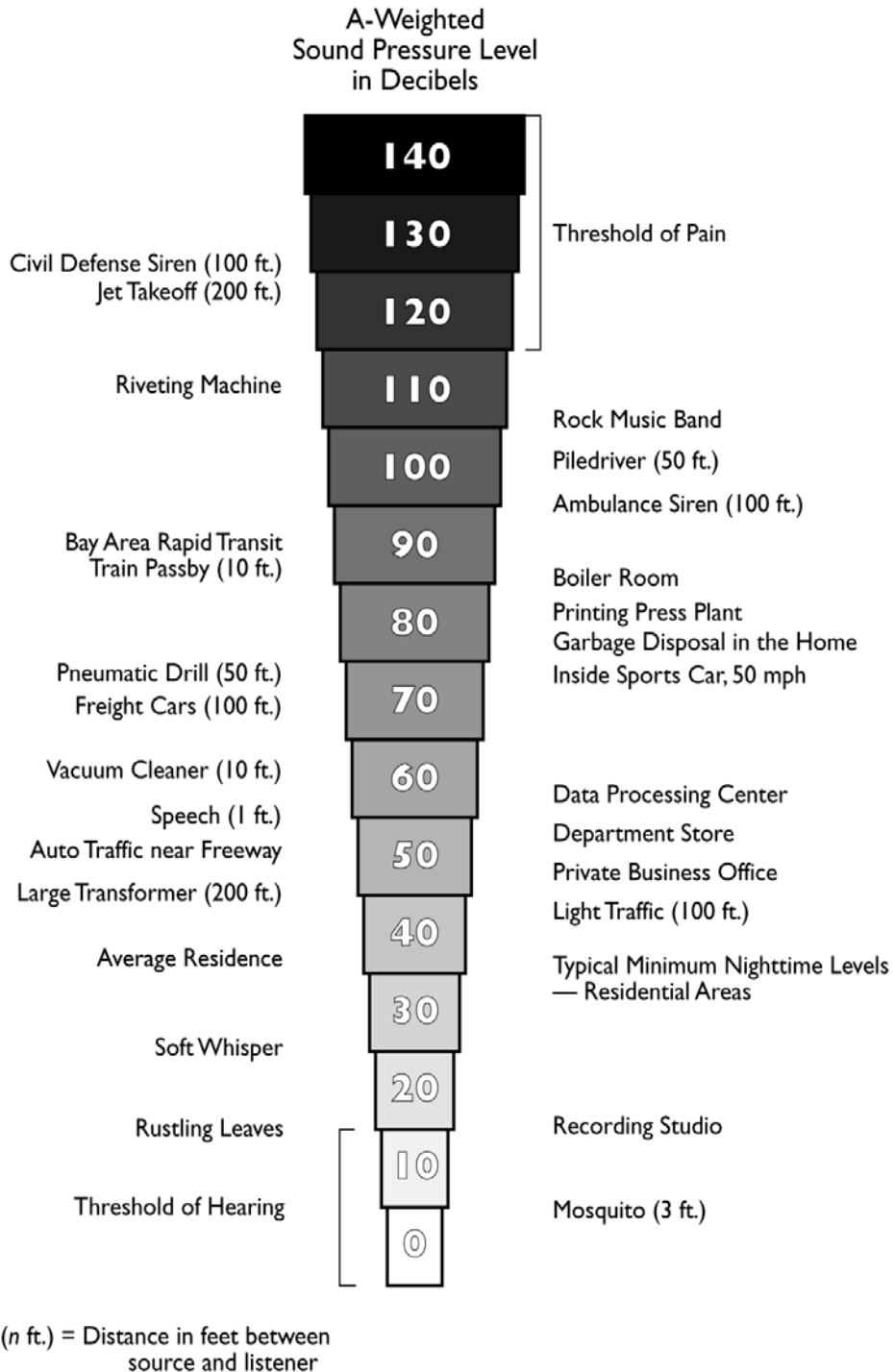
Sound waves, traveling outward from a source, exert a sound pressure level (commonly called “sound level”), measured in decibels (dB). In general, people can perceive a two- to three-dB difference in noise level; a difference of 10 dB is perceived as a doubling of loudness. “Noise” is often defined as unwanted sound. Environmental noise is usually measured in A-weighted decibels, a metric corrected for the variation in frequency response of the human ear. The A-weighted scale is used to describe all noise levels discussed in this section.

Environmental noise levels typically fluctuate over time; different types of noise descriptors are used to account for this variability. Some descriptors characterize cumulative noise over a given period, while others describe single noise events. Cumulative noise descriptors include the energy-equivalent noise level (Leq), Day-Night Average Noise Level (DNL), and Community Noise Equivalent Level (CNEL). The Leq is the actual time-averaged, equivalent steady-state sound level, which, in a stated period, contains the same acoustic energy as the time-varying sound level during the same period. Some representative noise sources and their corresponding A-weighted noise levels are shown in **Figure 3.9-1**.

DNL and CNEL values result from the averaging of Leq values (based on A-weighted decibels) over a 24-hour period, with weighting factors applied to different periods of the day to account for their greater relative annoyance. For DNL, noise that occurs during the nighttime period (10:00 p.m. to 7:00 a.m.) is penalized by 10 dBA. The CNEL descriptor is similar to DNL, except that it also includes a penalty of approximately 5 dBA for noise that occurs during the evening period (7:00

p.m. to 10:00 p.m.). The cumulative noise descriptors, DNL and CNEL, are well correlated with the likelihood of public annoyance from transportation noise sources.

Figure 3.9-1: Typical Sound Levels



Sound Propagation and Attenuation

Sound level naturally decreases as one moves farther away from the source. This basic attenuation rate is referred to as the geometric spreading loss. The basic rate of geometric spreading loss depends on whether a given noise source can be characterized as a point source or a line source. For a point source, such as an idling truck or jackhammer, the noise level decreases by about 6 dBA for each doubling of distance away from the source.

In many cases, noise attenuation from a point source increases by 1.5 dBA from 6.0 dBA to 7.5 dBA for each doubling of distance due to ground absorption and reflective wave canceling. These factors are collectively referred to as excess ground attenuation. The basic geometric spreading loss rate (6.0 dBA per doubling of distance) is used where the ground surface between a noise source and a receiver is reflective, such as parking lots or a smooth body of water. The excess ground attenuation rate (7.5 dBA per doubling of distance) is used where the ground surface is absorptive, such as soft dirt, grass, or scattered bushes and trees.

For a line source, such as a heavily traveled roadway, the noise level decreases by a nominal value of 3.0 dBA for each doubling of distance between the source and the receiver. If the ground surface between source and receiver is absorptive rather than reflective, the nominal rate increases by 1.5 dBA to 4.5 dBA for each doubling of distance. Atmospheric effects, such as wind and temperature gradients, can also influence noise attenuation rates from both line and point sources of noise. However, unlike ground attenuation, atmospheric effects are constantly changing and difficult to predict.

Trees and vegetation, buildings, and barriers reduce the noise level that would otherwise occur at a given receptor distance. However, for a vegetative strip to have a noticeable effect on noise levels, it must be dense and wide. For example, a stand of trees must be at least 100 feet wide and dense enough to completely obstruct a visual path to the roadway to attenuate traffic noise by 5 dBA (CalTrans, 1998). A row of structures can shield more distant receivers depending upon the size and spacing of the intervening structures and site geometry. Generally, for an at-grade highway in an average residential area where the first row of houses cover at least 40 percent of the total area, the reduction provided by the first row of houses is approximately 3 dBA, there is 1.5 dBA of additional reduction for each additional row of homes (CalTrans, 1998). Similar to vegetative strips discussed above, noise barriers, which include natural topography and sound walls, reduce noise by blocking the line of sight between the source and receiver. Generally, a noise barrier that breaks the line of sight between source and receiver will provide at least a 5 dBA reduction in noise.

Effects of Noise

The effects of noise on humans may include annoyance, interference with various activities, hearing loss, and stress-related health problems. These effects of noise are discussed below.

- **Annoyance** is the most difficult of all noise responses to describe. Annoyance is a very individual characteristic and can vary widely from person to person. What one person considers tolerable can be quite unbearable to another of equal hearing capability (for instance, some people like the sound of trains, while others do not).

- **Speech interference** is one of the primary concerns associated with environmental noise. Normal conversational speech is in the range of 60 to 65 dBA and any noise in this range or louder may interfere with speech. Depending upon the distance between the talker and the listener, background noise levels may require a raised voice in order to communicate. Transportation sources can easily interfere with conversation within a few hundred feet of the source.
- **Sleep interference** is a major noise concern related to traffic-generated noise. Sleep disturbance studies have identified interior noise levels attributed to traffic noise as a key factor of sleep disturbance. However, it should be noted that sleep disturbance does not necessarily mean awakening from sleep, but can refer to altering the pattern and stages of sleep. Train noise (especially horn soundings) is a major source of complaints.
- **Potential hearing loss** is commonly associated with occupational exposures in heavy industry or very noisy work environments. Noise levels in neighborhoods, even near very noisy airports, are not sufficiently loud to cause hearing loss.
- **Physiological responses** are those measurable noise effects on the human metabolism. They are ascertained as changes in pulse rate, blood pressure, etc. While such effects can be induced and observed, the extent to which these physiological responses cause harm or are a sign of harm is not known.

Vibration

Vibration is energy radiated through the ground. The rumbling sound caused by the vibration of room surfaces is called groundborne noise. Sources of groundborne vibration include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) or human-made causes (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous, such as factory machinery, or transient, such as the passing of a train.

The effects of groundborne vibration include perceptible floor movement, rattling of windows, shaking of items on shelves or hanging on walls, and rumbling sounds. In contrast to noise, vibration is not a common environmental problem. In extreme cases, vibration can cause damage to buildings. Building damage is usually not a factor for normal transportation projects, with the exception of blasting and pile driving during construction. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Annoyance from vibration often occurs when the vibration exceeds the threshold of human perception by only a small margin. A vibration level that causes annoyance will be well below the damage threshold for normal buildings.

Sensitive Receptors

Some land uses are considered more sensitive to ambient noise than others. Places where people sleep, where people require quiet for focused concentration, and where people receive medical and nursing care are all likely to be sensitive receptor locations. These uses include, but are not limited to, residences, motels, hotels, schools, libraries, churches, auditoriums, hospitals, nursing homes, natural areas, parks, and outdoor recreation areas. Consequently, the noise standards for these land uses are more stringent than those for less sensitive uses such as commercial, office, or industrial land. Sensitive receptors of all types are located within Pacifica.

To protect various human activities in sensitive areas (e.g., sleeping, studying, recuperating), lower noise levels are generally required. For example, a maximum outdoor noise level of 55 to 60 DNL is necessary for intelligible speech communication inside a typical home. Social surveys and case studies have shown that complaints and community annoyance in residential areas begin to occur when outdoor noise reaches 55 DNL. Sporadic complaints associated with the 55 to 60 DNL range give rise to widespread complaints within the 60 to 70 DNL range. At 70 DNL and above, residential community reaction typically involves threats of legal action and strong appeals to local officials to stop the noise.

Operational Noise Sources

Noise levels in Pacifica vary considerably, as indicated in **Figure 3.9-2** that depicts existing noise in the city. Principal noise sources in Pacifica include freeway and arterial roadways, and to a lesser extent, the city's proximity to San Francisco International Airport. Residential neighborhoods are dominated by local traffic sounds and other human activities such as lawn mowing, leaf blowing, and music. Along major streets and freeways, the sound of traffic grows more intense because traffic levels and speeds are higher, and trucks make up a greater share of the traffic. Other noise sources include those associated with service commercial uses such as automotive repair facilities, car washes, and recycling yards. Noise as a result of construction is another substantial source, though often short-term.

Freeways and Major Arterial Roadways

Most noise within Pacifica is from automobile and truck traffic. Vehicle traffic background noise levels vary throughout the day based on the average density of noise sources in a given area. Traffic noise at a particular location depends upon the traffic volume on nearby roadways, the average vehicle speed, distance between the receptor and the roadway, intervening barriers between source and receiver, and the ratio of trucks (particularly heavy trucks) and buses to automobiles.

The major noise sources in Pacifica from freeways and arterial roadways are a result of vehicle traffic along State Routes 1 and 35 and Sharp Park Road. Noise exposure contours for Pacifica's major roadways were modeled by applying the Federal Highway Administration's noise modeling procedure. Traffic data representing annual average traffic volumes and truck mix, for existing conditions, were obtained from the engineers working on the General Plan Update and Caltrans. Existing noise measurements were made in April 2021 at 14 locations. Using these data and the FHWA methodology, traffic noise levels were calculated for existing and projected traffic volumes associated with the Proposed Project and added to 2040 projections. Compared to existing conditions, all segments had a projected increase in sound levels of less than 3 dB as shown in **Table 3.9-1**. Sounds less than 3 dB are nearly imperceptible to the human ear.

Table 3.9-1: Traffic Noise Analysis Summary- Projected Increase

#	Roadway	Segment	Existing Noise Level at 50' (DNL in dB)	Future Noise Level at 50' (DNL in dB)	Projected Increase (dB)
1	Hickey Blvd	SR 35 to Gateway	70	70	<1
2	SR 35	North of Hickey Blvd	74	75	1
3	SR 35	South of Hickey Blvd	72	74	2
4	Reina del Mar	SR 1 to Lauren Ave	66	67	1
5	Fassler Ave	SR 1 to Ebken St	69	69	<1
6	Crespi Dr	SR 1 to Roberts Rd	66	67	1
7	Linda Mar Blvd	SR 1 to Solo Dr	69	69	<1
8	SR 1	South of Linda Mar Blvd	73	74	1
9	SR 1	Linda Mar Blvd to Crespi Dr	76	77	1
10	SR 1	Crespi Dr to Sea Bowl Ln	77	79	2
11	SR 1	Sea Bowl Ln to Fassler Ave	77	79	2
12	SR 1	Fassler to Reina del Mar Ave	79	80	1
13	SR 1	Reina del Mar Ave to Mori Point Rd	79	80	1
14	SR 1	North of Mori Point Rd	79	80	1

-
1. Analysis utilizes calculations of roadway traffic noise levels based on traffic volume data and other parameters in accordance with Federal Highway Administration (FHWA) Traffic Noise Model (TNM) methodology.
 2. "Existing" traffic noise level estimates are based on "Existing 2019" local roadway traffic volumes provided by the project traffic engineer (data received March 2021). "Future" traffic noise level estimates are based on "2040 Preferred Alternative" traffic volumes provided by the traffic engineer (data received August 2024).
 3. DNL is estimated to be equal to the peak hour Leq for roadways in this study area, this is based on traffic noise trends found in noise measurements in the study area and our experience with similar measurements for past projects.
 4. Percentage of heavy truck traffic volume in our analysis are between 1.3 percent and 2.4 percent. These data are per Caltrans 2020 Census data (Source: <https://dot.ca.gov/programs/traffic-operations/census>) for highways or assumed to be 2 percent baseline assumption based on input from traffic engineers on past projects. Based on our experience with many similar projects, this is a reasonable starting point. It is refined slightly, if needed, per Comment #6 below.
 5. Speeds are estimated per street type/posting and adjusted per site observation/measurement
 6. In addition to utilizing traffic data and assumptions listed above, traffic noise calculations have been adjusted, or "calibrated," using results of noise measurements at several locations throughout the study area to further refine the results above. Measured noise levels were compared to the baseline calculated levels, and the analysis refined, as appropriate to better represent actual conditions in the study area.

Source: Charles Salter and Associates, 2024; Dyett & Bhatia, 2024

Based on this analysis, shown in **Table 3.9-3**, about 1,407 acres or 16.5 percent of the existing Planning Area were in areas with traffic noise levels greater than 60 dB (CNEL). These areas include approximately 299 acres designated for medium or low density residential development with community noise levels between 60 and 70 dB, considered "conditionally acceptable" for single-family or townhouse development, and 20 acres of medium or low density land with community noise levels over 70 dB, considered "normally unacceptable." Another 33 acres of high density residential and mixed use land is affected by noise levels of between 65 and 70 dB, considered "conditionally acceptable" for multi-family development, and six acres of land in these categories is currently exposed to unacceptable noise levels over 70 dB. In general, the further development is from Sharp Park Road, SR 35, and especially SR 1, the less noise is likely to be experienced.

Airport Noise

The greatest potential for noise intrusion from airports occurs when aircraft land, take off, or run their engines while on the ground. San Francisco International Airport (SFO) is located approximately four miles east of the Planning Area. Based on SFO's 2019 noise contours, no part of the Planning Area is currently within the 65 dB CNEL noise contour (SFO, 2021). SFO's Aircraft Noise Abatement Office maintains a noise abatement program that integrates parts of the approved Noise Compatibility Plan; City and County of San Francisco resolutions; stated goals of the San Francisco International Airport/Community Roundtable; and air traffic control requirements. The program includes a mix of regulatory and voluntary actions that together minimize the impacts of noise on communities while ensuring safety.

Construction Noise Sources

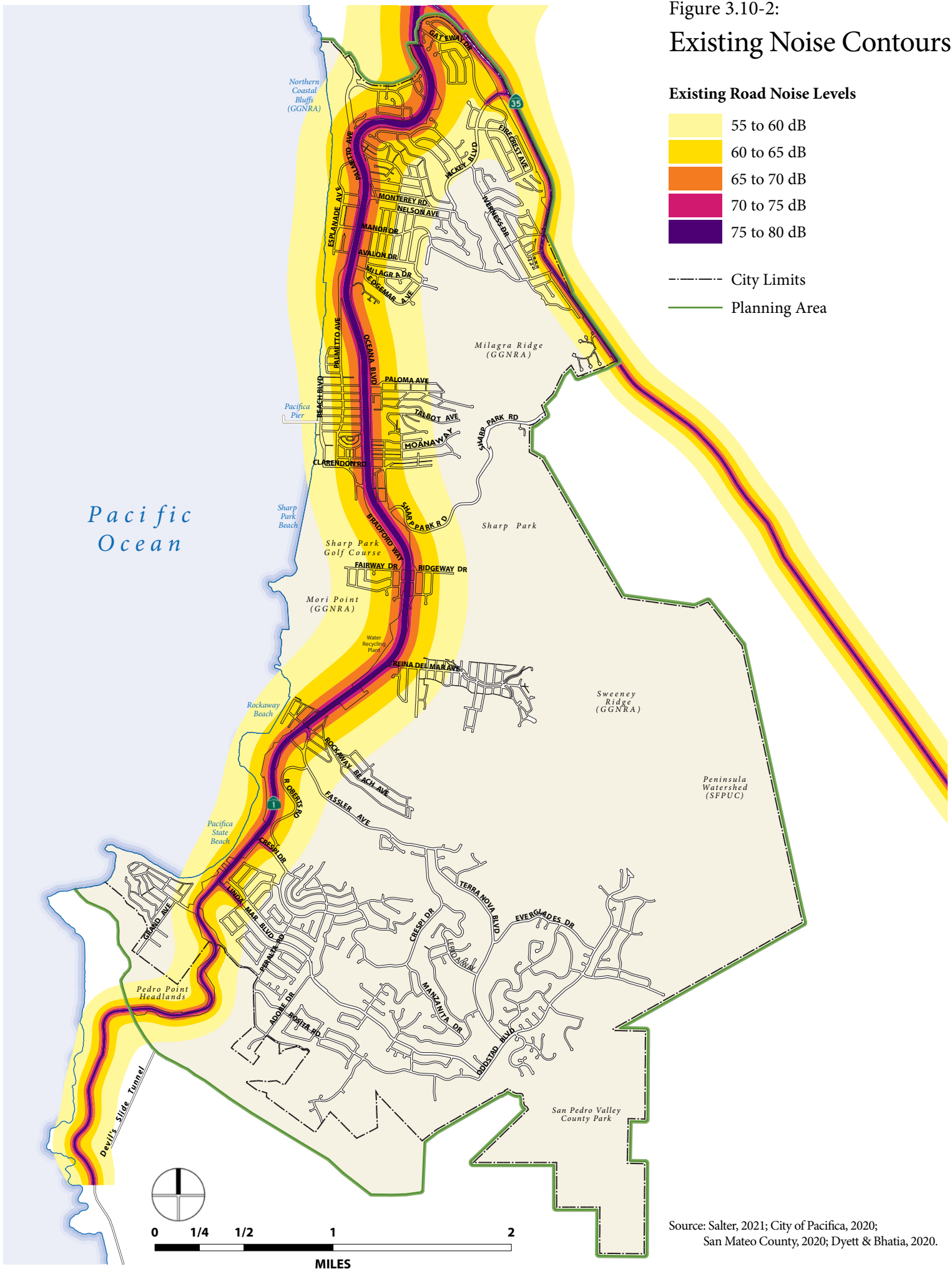
Construction is another significant, although typically short-term, source of noise. Construction noise is most significant when it takes place near sensitive land uses, and occurs at night or in early morning hours. Local governments typically regulate noise associated with construction equipment and activities through enforcement of noise ordinance standards, implementation of general plan policies, and imposition of conditions of approval for building or grading permits. **Table 3.9-2** shows typical noise levels associated with various types of construction equipment.

Table 3.9-2: Typical Noise Levels for Construction Equipment

<i>Equipment</i>	<i>Estimated Noise Levels at Nearest Sensitive Receptors (dBA Leq)</i>		
	<i>25 feet</i>	<i>50 feet</i>	<i>100 feet</i>
Air Compressor	86	80	74
Backhoe	86	80	74
Concrete Mixer	91	85	79
Dozer	91	85	79
Grader	91	85	79
Jack Hammer	94	88	82
Loader	86	80	74
Paver	91	85	79
Pile-drive (Impact)	107	101	95
Pile-driver (Sonic)	101	95	89
Roller	91	85	79
Saw	82	76	70
Scarified	89	83	77
Scraper	91	85	79
Truck	90	84	78

Source: FTA, 2018.

Figure 3.10-2:
Existing Noise Contours



Source: Salter, 2021; City of Pacifica, 2020;
San Mateo County, 2020; Dyett & Bhatia, 2020.

REGULATORY SETTING

Federal, State, and local agencies regulate different aspects of environmental noise. Generally, the federal government sets noise standards for transportation-related noise sources closely linked to interstate commerce. These include aircraft, locomotives, and trucks. The State government sets noise standards for other transportation noise sources less closely linked with interstate commerce, such as automobiles, light trucks, and motorcycles. Noise sources associated with industrial, commercial, and construction activities are generally subject to local control through noise ordinances and general plan policies. While local general plans identify general principles intended to guide and influence noise from development and systems operation, it is typically noise ordinances that set forth the specific standards and procedures for addressing particular noise sources and activities.

Federal

Federal regulations for railroad noise are contained in 40 CFR, Part 201 and 49 CFR, Part 210. Noise limits are implemented through regulatory controls on locomotive manufacturers. For locomotives manufactured during or after 1980, noise limits are as follows:

- Stationary locomotives (at idle throttle setting) are not to exceed 70 dBA at 15 meters (approximately 50 feet) from the track pathway centerline;
- Stationary locomotives (at all other throttle settings) are not to exceed 87 dBA at 15 meters; and
- Moving locomotives are not to exceed 90 dBA at 15 meters.

Sounding locomotive horns or whistles in advance of highway-rail grade crossings has been used as a safety precaution by railroads since the late 1880s. The manner in which horns have been sounded (two longs, one short and one long) was standardized in 1938. In response to a growing national trend towards restrictions on the use of locomotive horns under local ordinances and a related increase in collisions, Congress passed the Swift Rail Development Act, which directed the Federal Railroad Administration to develop rules addressing this issue. On December 18, 2003, the Federal Railroad Administration published an Interim Final Rule that requires the use of locomotive horns or whistles when approaching road/rail grade crossing, except in approved quiet zones, where supplementary safety measures have been installed or adopted by the state or locality. The rule establishes that a horn sound level must be a minimum of 96 dBA and no louder than 110 dBA measured 100 feet in front of the locomotive and 15 feet above the rail. The rule became effective on December 18, 2004 (Federal Railroad Administration, 2003).

The federal truck pass-by noise standard is 80 dBA at 15 meters from the vehicle pathway centerline (trucks more than 4.5 tons, gross vehicle weight rating, under 40 CFR, Part 205, Subpart B). This standard is implemented through regulatory controls on truck manufacturers. Under regulations established by the Federal Highway Administration, noise abatement must be considered for federal or federally-funded projects involving the construction of a new highway or significant modification of an existing freeway. Abatement is considered when the project would result in a substantial noise increase or when the predicted noise levels approach or exceed the Noise Abatement Criteria (23 CFR Part 772). Under these criteria, a substantial increase is defined as a 12

dBA increase in the Leq during the traffic peak hour. The Noise Abatement Criteria differ among various activity categories and between exterior spaces and interior spaces. For sensitive uses, such as residences, schools, churches, parks, and playgrounds, the Noise Abatement Criteria for interior and exterior spaces during the traffic peak hour is 57 and 67 Leq, respectively.

State

California Department of Transportation (Caltrans)

Traffic Operations Noise

The California Department of Transportation Traffic Noise Analysis Protocol (Protocol) establishes the policies and procedures to be used in the assessment of traffic noise exposure and impact for new construction and reconstruction projects. The NAC in the Protocol are the same as those presented in 23 CFR 772 (see USDOT/FHWA information above). The Protocol defines a substantial project-related traffic noise level increase when the project's worst-case hour exceeds the ambient worst-case hour by 12 dB or more.

Rail Operations Noise

Caltrans endorses the use of the FTA noise criteria and methodologies for assessing project-related rail noise and vibration impacts.

Construction Noise

As presented in the Protocol, Section 14-8.2, Noise Control, Caltrans standard specifications establishes a construction noise exposure/production limit of 86 dB (Lmax)¹ at a distance of 50 feet. Additionally, this specification establishes that all internal combustion engines should be equipped with manufacturer-recommended mufflers, and that no internal combustion engines may be operated without mufflers.

California Code of Regulations (CCR)

Aircraft Operations

The California Airport Noise Standards, Title 21, Section 5000 et seq. of the California Code of Regulations (CCR) apply to any airport that is deemed to have a “noise problem” as established by the local County Board of Supervisors in accordance with the provisions in the regulation. Currently, within the Bay Area, Norman Y. Mineta-San José International Airport and San Francisco International Airport have been given this designation. The Standards establish a noise exposure limit “acceptable to a reasonable person residing in the vicinity of an airport” of 65 dB CNEL.

¹ The highest A-weighted sound level occurring during a noise event.

Noise Insulation Standard

The California Noise Insulation Standards found in CCR, Title 24 establish requirements for new multi-family residential units, hotels, and motels that may be subject to relatively high levels of transportation noise. In this case, the noise insulation criterion is 45 dB DNL/CNEL inside noise-sensitive spaces. For developments with exterior transportation noise exposure exceeding 60 dB DNL/CNEL, an acoustical analysis and mitigation (if required) must be provided showing compliance with the 45 dB DNL/CNEL interior noise exposure limit.

Local

Each county and city in California is required to adopt a Noise Element as part of its General Plan to identify, appraise, and remedy noise problems in the local community. Each Noise Element is required to analyze and quantify, to the extent practicable, current and projected noise levels associated with local noise sources. Beyond statutory requirements, local jurisdictions are free to adopt their own goals and policies in their Noise Elements. However, most jurisdictions chose to adopt noise/land use compatibility policies derived from State recommendations.

City of Pacifica General Plan Noise Element

The existing Pacifica General Plan includes policies and action programs in that are in place to ensure that noise levels in the city are reduced whenever possible. **Table 3-10.3** indicates acceptable limits of noise for various land uses for both exterior and interior environments. For new development in areas where the community noise environment is not considered “normally acceptable,” noise impacts may be mitigated through use of sound-reducing strategies.

Table 3.9-3: Allowable Noise Exposure

Noise-Sensitive Land Use	Outdoor Activity Areas ¹	Interior Spaces	
	DNL/CNEL ² , dB	DNL/CNEL ² , dB	L _{eq} dB ³
Residential	65	45	---
Transient Lodging (Hotels, Motels)	65	45	---
Hospitals, Nursing Homes	65	45	---
Theaters, Auditoriums, Music Halls	---	---	35
Churches, Meeting Halls	65	---	45
Office Buildings	---	---	45
Schools, Libraries, Museums	---	---	45

Notes:

¹ Outdoor activity areas generally include backyards of single-family residences and outdoor patios, decks or common recreation areas of multi-family developments.

² The CNEL is used for quantification of aircraft noise exposure as required by CAC Title 21.

³ As determined for a typical worst-case hour during periods of use.

Source: City of Pacifica General Plan, 2022

The General Plan also provides standards for exposure to stationary (non-transportation) noise sources such as industrial facilities, automotive servicing, or equipment yards, in **Table 3-10.4** below.

Table 3.9-4: Noise Level Performance Standards for Stationary Noise Sources¹

	<i>Daytime</i> <i>(7:00 a.m. – 10:00 p.m.)</i>	<i>Nighttime</i> <i>(10:00 p.m. – 7:00 a.m.)</i>
Hourly Equivalent Sound Level (L_{eq}), dBA	50	45
Maximum Sound Level (L_{max}), dBA	70	65

Notes:

¹As determined at the property line of the receiving noise-sensitive use.

Source: City of Pacifica General Plan, 2022

Policies include:

Noise

Guiding Policy NO-G-1: Coordination with Other Agencies. Continue to work with other agencies, airports and jurisdictions to reduce noise levels in Pacifica created by their operations.

Guiding Policy NO-G-2: Acceptable Noise Environment. Strive to achieve an acceptable noise environment for the environmental, health and safety needs of present and future residents of Pacifica.

Guiding Policy NO-G-3: Sensitive Land Uses. Protect noise sensitive land uses, such as schools, hospitals, and senior care facilities, from encroachment of and exposure to excessive levels of noise.

Implementing Policy NO-I-1: Community Noise Level Standards. Use the Community Noise Level Exposure Standards, shown in Table 9-1 in the proposed General Plan, as review criteria for new land uses. Require all new development that would be exposed to noise greater than the “normally acceptable” noise level range to reduce interior noise through design, sound insulation, or other measures.

Implementing Policy NO-I-2: Design Features for Noise Reduction. Require noise-reducing mitigation to meet allowable outdoor and indoor noise exposure standards in Table 9-2 in the proposed General Plan. Noise mitigation measures that may be approved to achieve these noise level targets include but are not limited to the following:

- Construct façades with substantial weight and insulation;
- Use sound-rated windows for primary sleeping and activity areas;

- Use sound-rated doors for all exterior entries at primary sleeping and activity areas;
- Use minimum setbacks and exterior barriers;
- Use acoustic baffling of vents for chimneys, attic and gable ends;
- Install a mechanical ventilation system that provides fresh air under closed window conditions.

Alternative acoustical designs that achieve the prescribed noise level standards may be approved, provided that a qualified Acoustical Consultant submits information demonstrating that the alternative designs will achieve and maintain the specific targets for outdoor activity areas and interior spaces.

Implementing Policy NO-I-3: Best Available Control Technology. Require new, fixed noise sources (e.g. mechanical equipment) to use best available control technology (BACT) to minimize noise and vibration.

Noise from mechanical equipment can often be reduced by applying soundproofing materials, mufflers, or other controls provided by the manufacturer.

Implementing Policy NO-I-4: Mechanical Equipment for New Residential Development. Ensure that building regulations require that noise-generating appliances serving new multi-family or mixed-use residential development are located or adequately insulated to protect residents from the noise.

Implementing Policy NO-I-5: Noise Criteria for City Equipment. Develop noise criteria for new equipment purchased by the City.

Implementing Policy NO-I-6: Construction Noise. Continue to limit hours for certain construction and demolition work to reduce construction-related noises.

Implementing Policy NO-I-7: Noise from Highways and Buses. Work with Caltrans and Sam Trans to mitigate transportation-related noise impacts on residential areas and sensitive uses. This may include encouraging installation of sound barriers or bus stop relocation in selected locations.

Implementing Policy NO-I-8: Airport Noise Disclosure Requirements. Update the Municipal Code to ensure that special disclosure requirements concerning airport noise refer to the most current CNEL noise contours developed for San Francisco International Airport.

Implementing Policy NO-I-9: Airport Noise Abatement Program. Continue to work with the airport in improving and implementing its noise abatement program.

Implementing Policy NO-I-10: Residential Sound Insulation Program. If the airport's federally-approved 65 dB CNEL annual noise contour is mapped within the

City, request that the San Francisco Airport's Residential Sound Insulation Program allocate available federal and airport funding to sensitive, noise-affected properties in Pacifica.

Implementing Policy NO-I-11: Noise Ordinance. Update the noise ordinance to implement General Plan policies and noise standards.

Implementing Policy NO-I-12: Noise Enforcement. Establish a Noise Abatement Unit made up of members of the Police and other departments to enforce the City's noise regulations, and assign primary responsibility for coordinating overall noise control effort to one City department.

Pacifica Municipal Code Noise Ordinance, Chapter 10: Loud, Disturbing, Unusual, and Unnecessary Noises

Title 5, Chapter 10 of the Pacifica Municipal Code makes it unlawful to cause any "loud, disturbing, unnecessary, or unnatural noise" that disturbs persons in Pacifica, and identifies specific types of noises including vehicle horns and amplifiers. It prohibits the use of pile drivers or similar equipment between 8 p.m. and 7 a.m., and restricts the hours of solid waste collection.

Pacifica Municipal Code Section 5-10.03.

This section 5-10.03 of the municipal code states, "It shall be unlawful for any person to make or continue, or cause to be made or continued, any loud, disturbing, unnecessary, or unusual noise or any noise which annoys, disturbs, injures, or endangers the comfort, health, repose, peace, or safety of other persons within the city." Noise disturbances listed under this regulation include:

- Vehicle horns and signaling devices;
- Radios, photographs, musical instruments, and similar devices;
- Loudspeakers, amplifiers, and similar advertising devices;
- Yelling, shouting, and similar noises;
- Animals and birds;
- Steam whistles;
- Exhausts;
- Defective or loaded vehicles;
- Loading and unloading vehicles and opening boxes;
- Construction or repairing buildings and excavating;
- Adjacent to schools, courts, churches, and hospitals;
- Shouting by hawkers and peddlers;
- Pile drivers, hammers, and similar equipment;

- Blowers, fans, and combustion engines;
- Auto body repairs; and
- Solid waste collection.

Section 5-10.03 specifies that operation between the hours of 8:00pm and 7:00pm of any pile driver, steam shovel, pneumatic hammer, and other construction equipment is prohibited. In addition, Title 5, Chapter 28 defines the terms for regulating loud parties. Chapter 29 requires general disclosure of the existence of the airport and the potential for noise from overflight, for all property in the city. Special disclosure is required for property within the airport's CNEL noise footprint as of 1983.

Impact Analysis

SIGNIFICANCE CRITERIA

Implementation of the Proposed Project would have a potentially impact if it would:

- Criterion 1:** Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies
- Criterion 2:** Cause the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.
- Criterion 3:** Expose people residing or working in the project area to excessive noise levels as identified in an airport land use plan.

METHODOLOGY AND ASSUMPTIONS

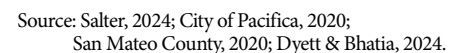
Noise exposure contours for the Pacifica Planning Area were modeled by Charles Salter Associates using the Federal Highway Administration's noise modeling procedure. These noise contours are conservative, meaning that the contours are modeled with minimal noise attenuation by natural barriers, buildings, and other obstacles that reduce noise. The noise level measured at a specific location may be lower than what is shown on the noise map, particularly adjacent to the sections of SR-1 which have physical sound barrier walls installed between the freeway and the city.

IMPACT SUMMARY

New development under the Proposed Project may temporarily increase noise and groundborne vibration levels due to construction activities. Development under the Proposed Project would be required to comply with the limitations on construction activity included in Pacifica's General Plan Noise Element and Chapter 10 of the Pacifica Municipal Code. Compliance with these provisions and noise polices in the Proposed Project, is mandatory and will ensure that construction impacts, while potentially a temporary nuisance, are less than significant.

With development under the Proposed Project, an incremental increase in the amount of land where noise sensitive uses could be subject to community noise levels above normally acceptable levels is expected, though these increases are less than 3 dB, or less than perceptible. However, only a very small amount of land would be subject to “clearly unacceptable” noise levels, while elsewhere noise could be reduced to less than significant levels by state and local building standards supported by policies in the General Plan.

Future Road Noise Levels



IMPACTS AND MITIGATION MEASURES

Impact 3.9-1 New development under the Proposed Project would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. (Less than Significant with Mitigation Incorporated)

Construction

Noise from individual construction projects carried out under the Proposed Project would likely result in temporary increases in ambient noise levels at 25 feet and at adjacent property lines. As the precise details and timeframes for individual development projects that would be carried out under the Proposed Project cannot be known at this time, it is not possible to determine exact noise levels, locations, or time periods for construction of such projects, or construction noise at adjacent properties.

Of the larger scale projects anticipated with buildout of the Proposed Project, construction could potentially expose existing sensitive noise receptors to sustained construction noise, including from construction-related traffic, demolition, and reconstruction activities. **Table 3.9-2** illustrates typical noise levels associated with construction equipment at a distance of 25 feet. At a distance of 25 feet from the construction site, noise levels similar to those shown in **Table 3.9-2** would be expected to occur with individual development projects. Noise would typically drop off at a rate of about 6 dBA per doubling of distance. Therefore, construction noise levels would be about 6 dBA lower than shown in the table at 50 feet from the noise source and 12 dBA lower at a distance of 100 feet from the noise source.

The severity of construction-related noise impacts depends on the proximity of construction activities to sensitive receptors, the presence of intervening barriers, the number and types of equipment used, and the duration of the activity. While these factors cannot be known precisely for future projects under the Proposed Project, individual projects would be required to comply with City standards. Per Pacifica Municipal Code Section 5-10.03, the operation of equipment used in construction or demolition work or in property maintenance work between the hours of 8:00pm to 7:00am is prohibited. Construction that complies with the time-of-day restrictions for construction activities would result in less than significant noise impacts with regard to the generation of noise in excess of thresholds.

Implementation of policies contained in the General Plan would further reduce construction noise and associated impacts. Policies N-1.1.2, N-1.1.4, and N-3.1.2 of the General Plan establish noise/land use compatibility standards as well as exterior and interior noise standards. Further, Policy N-3.1.4 requires the implementation of appropriate standard controls to mitigate noise impacts for all construction projects.

Therefore, compliance with existing time-of-day restrictions for construction activities as well as the applicable City Code and General Plan policies would ensure that impacts related to construction noise would be less than significant.

On-Site Operational Noise

Residential development associated with the Proposed Project is not likely to generate noise levels that would exceed the City's standards. The noise generated by on-site activities for new development would be subject to the City's maximum allowable exterior noise limits, contained in **Table 3.9-3**. The noise standard for exterior use areas (such as backyards) is 65 dB and 45dB for interior spaces of residential uses. Residential developments that comply with these noise standards would result in less than significant noise impacts with regard to the generation of noise in excess of thresholds. Therefore, compliance with the requirements of the General Plan and City Code would reduce potential on-site noise impacts to a less than significant level.

Traffic Noise

Table 3.9-4 shows the guidelines for "conditionally acceptable" and "normally unacceptable" noise levels that would be adopted with the Proposed Project. **Table 3.9-4** shows the existing and proposed totals of acreage with "clearly unacceptable" community noise exposure, based on definitions in **Table 3.9-4**. Areas subject to "conditionally acceptable" and "normally unacceptable" noise levels (per **Table 3.9-4**) can reasonably be reduced to less than significant by state and local building code standards, supported by policies in the Proposed Project. The total acreage potentially exposed to clearly unacceptable levels is shown in bold, and suggests that the Proposed Project will increase the number of total acres that are exposed to "clearly unacceptable" noise levels from an estimated two acres today to six acres at buildout. Policies included in the Proposed Project would reduce the Plan's impact on noise levels within Pacifica help to reduce this potential impact to a less than significant level.

Table 3.9-4: Land Use Compatibility for Community Noise Environments

	COMMUNITY NOISE EXPOSURE L _{dn} or CNEL, dB					
	55	60	65	70	75	80
Residential - Low Density Single Family, Duplex, Mobile Homes						
Residential - Multifamily						
Transient Lodging - Motels, Hotels						
Schools, Libraries, Churches, Hospitals, Nursing Homes						
Auditorium, Concert Halls, Amphitheaters						
Sports Arena, Outdoor Spectator Sports						
Playgrounds, Neighborhood Parks						
Golf Courses, Riding Stables, Water Recreation, Cemeteries						
Office Buildings, Business Commercial and Professional						
Industrial, Manufacturing Utilities, Agriculture						

	Normally Acceptable		Normally Unacceptable
	Conditionally Acceptable		Clearly Unacceptable

Source: City of Pacifica, 2022

Table 3.9-5: Existing and Proposed Exposure to Noise by General Plan Noise Standards

	<u>Existing Acres</u>			<u>Future Acres</u>		
	<i>Conditionally Acceptable</i>	<i>Normally Unacceptable</i>	<i>Clearly Unacceptable</i>	<i>Conditionally Acceptable</i>	<i>Normally Unacceptable</i>	<i>Clearly Unacceptable</i>
Low and Medium Density Residential ¹	298	20	0	346	27	1
High Density Residential, Mixed Use ²	33	5	1	67	9	1
<i>R-#</i>	-	-	-	11	6	0
<i>MU-#</i>	-	-	-	8	7	1
<i>MU-I-#</i>	-	-	-	2	1	0
Visitor-Serving Commercial ³	23	6	2	26	9	2
Public or Semi-Public ⁴	38	9	1	71	20	1
Park ⁵	6	-	<1	9	-	1
Low-Intensity Visitor Serving Commercial ⁶	1	-	-	1	-	-
Office/Commercial ⁷	2	-	-	3	-	-
Total Noise-Sensitive Uses	418	40	3	523	65	6

Notes:

Definitions of acceptable community noise exposure based on State of California Land Use Compatibility for Community Noise Environments. Standards apply to expected noise-sensitive development types, below.

1. These land use classifications are assumed to be developed with single-family houses, duplexes, and mobile homes.
2. These land use classifications are assumed to be developed with multifamily housing.
3. Transient lodging is expected to be developed in this area.
4. Schools and libraries would be developed in this category.
5. Playgrounds and parks would be developed in this category.
6. Golf courses, riding stables, water recreation or cemeteries would be expected in this category.
7. Office buildings, business commercial and professional uses would be expected to occur primarily in this classification.

Source: Dyett & Bhatia, 2024.

As summarized in **Table 3.9-1**, the Proposed Project would result in traffic noise increases at many of the roadway segments, but the Proposed Project's contributions would generally be below the increase in noise considered to be noticeable to the human ear (i.e., 3 dB). Consequently, the Proposed Project would not result in noticeable changes in traffic noise levels relative to 2040 conditions without the Project at any roadway segment. No substantial permanent increase in the ambient noise level would occur from vehicle traffic.

However, where noise would be greater than the "Normally Acceptable" noise level in 2040 as shown in **Table 3.9-5**, a traffic noise impact is considered to be potentially significant. Many of the Proposed Project sites (shown as R-#, MU-#, and MU-I-# in **Table 3.9-5**) are located in contours that are not normally acceptable for multifamily residential uses. Some small portions of the sites adjacent to SR 1 fall within the "clearly unacceptable" range, including sites 10, 11, 12, 18, 25, 38, and J.

However, the California Building Code and General Plan policies require that projects incorporate buffering and other noise design features that reduce noise to less than significant levels. The City's General Plan policies NO-G-3, NO-I-1, and NO-I-2 outline noise exposure regulations for sensitive receptors if noise levels exceed current guidelines. Policy NO-I-7 directs the City to work with Caltrans and Sam Trans to mitigate transportation-related noise impacts on residential areas and sensitive uses, including encouraging installation of sound barriers or bus stop relocation in select locations. Actions to mitigate noise levels are required if exterior noise levels exceed these standards. The interior noise exposure level for residences, schools, and other noise sensitive development is limited to 45 dBA, consistent with State noise standards. Actions that ensure interior noise levels do not exceed 45 dBA must be taken if exterior noise exposure exceeds the stated standards. Sites within "clearly unacceptable" noise contours will also be subject to **Mitigation Measure NO-1**, which requires specific acoustical noise analysis.

As such, implementation of General Plan policies and compliance with the California Building Code would ensure potential noise impacts to sensitive receptors along major roadways in the Planning Area will be less than significant despite increases in traffic noise.

Mitigation Measures

MM-NO-1: Acoustical Noise Analysis and Mitigation. Prior to the construction of sites 10, 11, 12, 18, 24, 38, and J, an acoustical noise analysis shall be prepared prior to the submittal of final tentative tract maps for review and approval by the City to ensure that exterior and interior noise levels are met. The acoustical analysis shall demonstrate that the buildings have been designed to limit interior noise levels to 45 dBA CNEL and exterior noise (backyards and habitable balconies and patios) to less than 65 dBA CNEL. Individual developments shall, to the extent feasible, implement site-planning techniques which include but are not limited to the following:

- Increase the distance between the noise source and the receiver;

- Use non-noise sensitive structures such as garages to shield noise-sensitive areas;
- Orienting buildings to shield outdoor spaces from a noise source;
- Individual developments shall incorporate architectural design strategies, which reduce the exposure of noise-sensitive spaces to stationary noise sources (i.e., placing bedrooms or balconies on the side of the structure facing away from noise sources). These design strategies shall be implemented based on recommendations of acoustical analysis for individual developments as required by the City to comply with City noise standards;
- Individual developments shall incorporate noise barriers, walls, or other sound attenuation techniques, based on recommendations of acoustical analysis for individual developments as required by the City to comply with City noise standards; and
- Elements of building construction (i.e., walls, roof, ceiling, windows, and other penetrations) shall be modified as necessary to provide sound attenuation. This may include sealing windows, installing thicker or double-glazed windows, locating doors on the opposite side of a building from the noise source, or installing solid-core doors equipped with appropriate acoustical gaskets

The City shall require that the noise attenuation measures be installed and be verified as effective in meeting the 45 (interior) and 65 (exterior) dBA CNEL requirement by an acoustical engineer prior to the issuance of certificates of occupancy.

Significance after mitigation: Less than significant

Impact 3.9-2 Implementation of the Proposed Project would not result in a generation of excessive groundborne vibration or groundborne noise levels. (Less than Significant)

Under the Proposed Project, the most significant source of an increase in excessive groundborne vibration or noise levels will be a result of increased traffic and construction noise from development projects associated with buildout of the Proposed Project.

Construction Vibration

The Proposed Project does not call for substantial construction projects to take place over the long term, so these increases in noise levels would remain temporary and would not cause substantial increases in noise levels. The extent of temporary or periodic noise levels as a result of construction projects cannot be stated with certainty until development projects are approved. However, as part of environmental review, each construction project will require its own project-level noise analysis to determine potential noise increases for the time-span of the project. These individual analyses will provide a detailed description of potential noise impacts as a result of the project.

Traffic Vibration

As described in Impact 3.9-1, the Proposed Project would result in traffic noise increases at many of the roadway segments, but the Proposed Project's contributions would generally be below the increase in noise considered to be noticeable to the human ear (i.e., 3 dB). Consequently, the Proposed Project would not result in noticeable changes in traffic noise levels relative to 2040 conditions without the Project at any roadway segment. No substantial permanent increase in the groundborne noise would occur from vehicle traffic.

In addition, noise from construction projects is regulated under the City of Pacifica Municipal Code (Title 5, Chapter 10), which prohibits the use of pile drivers or other similar equipment between the hours of 8 p.m. and 7 a.m. This section of the Municipal Code, in addition to policies of the Proposed Project, ensures that temporary or periodic noise increases will not have a significant impact under the Proposed Project. As a result, this impact is less than significant.

Vibration is generally a result of railroad traffic on a large scale, and can also occur from heating and air conditioning systems, door slams, foot traffic, nearby construction activities, and street traffic. Blasting, pile driving, vibratory compaction equipment, and heavy tracked vehicles are known to cause the highest vibration levels, followed by commuter rails and rapid transit systems.² Implementation of the Proposed Project would result in construction activities that could result in temporary groundborne vibration. Construction activities, including pile driving, associated with new development would be temporary, and the corresponding vibrational impacts would be relatively short-term. To protect future and existing sensitive land uses from excessive groundborne vibration during construction activities, the City's General Plan includes policies that require best available control technology to minimize noise and vibration and continues to limit the hours for construction and demolition work to minimize the impacts of noise and vibration on surrounding uses. In addition, there are neither planned commuter rails nor rapid transit lines that would run through Pacifica, and therefore there would be no contribution to groundborne vibration or noise levels from these sources. This impact is therefore less than significant.

Mitigation Measures

None required.

Impact 3.9-3 Implementation of the Proposed Project would not expose people residing or working in the project area to excessive noise levels 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. (Less than Significant)

The greatest potential for noise intrusion from airports occurs when aircraft land, take off, or run their engines while on the ground. San Francisco International Airport (SFO) is located approximately four miles east of the Planning Area. No part of the Planning Area and none of the

² County of San Mateo, North Fair Oaks Community Plan Update Draft EIR, August, 2011.

Housing Element sites are currently within the 65 dB CNEL noise contour, according to SFO's 2019 noise exposure maps. Should the 65 db noise contour expand in the future to include part of the Planning Area, those areas would meet the current eligibility threshold for noise-affected sensitive uses to receive funding through SFO's Residential Sound Insulation Program. SFO's Second Chance Initiative and Expanded Eligibility Initiative also offer acoustical treatment of eligible homes in the 65-dB contour.

SFO's Aircraft Noise Abatement Office maintains a noise abatement program that integrates parts of the approved Noise Compatibility Plan; City and County of San Francisco resolutions; stated goals of the San Francisco International Airport/Community Roundtable; and air traffic control requirements. The program includes a mix of regulatory and voluntary actions that together minimize the impacts of noise on communities while ensuring safety. This program, together with existing General Plan policies NO-I-15, NO-I-16, and NO-I-17, will reduce potential impacts under the proposed General Plan from airport noise. It would reduce the potential impact of conditionally acceptable noise levels to a less than significant level.

Mitigation Measures

None required.

3.10 Public Services and Recreation

This section provides an evaluation of potential impacts on public facilities and services as a result of the Proposed Project, including impacts related to fire, police, school services, and park and recreation facilities. This section describes existing public services and facilities in the Planning Area, as well as relevant federal, State, and local regulations and programs.

There were eight responses to the Notice of Preparation (NOP) related to topics addressed in this section. Comments highlighted the need to address environmental impacts associated with the provision of adequate public services and associated infrastructure with an increasing population. These comments are addressed under Impact 3.10-1 below.

Environmental Setting

PHYSICAL SETTING

Fire and Other Emergency Services

The cities of Brisbane, Daly City, and Pacifica are contributing members of the North County Fire Authority (NCFA), a Joint Powers Authority established in 2003. The NCFA provides both emergency response and non-emergency public safety services to the three cities and their 185,000 people in its service area. Two of the NCFA's 8 stations are in Pacifica. Fire Station 71, at 616 Edgemar Avenue, serves the north end of Pacifica, while Fire Station 72, at 1100 Linda Mar Boulevard, serves the south end. The Sharp Park neighborhood is within a four-minute travel area from Fire Station 71. **Figure 3.10-1** shows the locations of these fire stations.

Service Response

North County Fire Authority has the following service ratio and response time standards:

- Response time standards for fire service: Four-minute travel time for first fire due fire company to 90 percent of calls for fire service, and eight-minute travel time for all apparatus on-scene for fire calls for service.
- Response time standard for Emergency Medical Services (EMS): Under seven-minute travel time (6:59) for first response to 90 percent of calls.

Pacifica's long, narrow geography and its reliance on Highway 1 as the single north-south access route makes the city a challenge for fire response. A 2008 study of fire protection options for the

City of Pacifica indicated that the Vallemar, West and East Fairway Park, Rockaway Beach, and Rockaway neighborhoods in central Pacifica are beyond four-minute travel distance from northern San Mateo County fire stations, corresponding with the standard response time for first-due fire apparatus. The full assignment response time standard cannot be met in Pacifica from Vallemar south (Emergency Services Consulting, 2008). NCFA's EMS standard is for 90 percent of calls to be reached in less than seven minutes.

Pacifica has an ISO rating¹ of 4 on a scale from 1 to 10, with 1 being the highest. The City's rating is unlikely to be affected by population growth, but population growth will increase existing deficiencies in service delivery. The Fire Authority considers the city's geography to be the limiting factor for delivery of fire service. According to NCFA, to provide adequate emergency response for future population growth in Pacifica, Station 73 would need to be restored on a new site and more centrally located between the other two stations. In addition, a fourth new fire station, including one engine company and one truck company, is necessary to accommodate projected growth. The new station would likely be needed if the central part of Pacifica were to experience substantial new development, for example at the Quarry site. This area currently does not meet first-response time standards currently has a low density of development, and so it has fewer persons and structures threatened by fire (North County Fire Authority, 2024).

Police

The Pacifica Police Department responds to public safety calls, provides traffic safety and security for public events, and handles calls for assistance (some 20,000 annually). The Department handles dispatch services on evenings and weekends for the Department of Public Works and the North Coast County Water District (NCCWD), and participates when needed in the Northern San Mateo County Gang Task Force and the San Mateo County Narcotics Task Force. It has assigned officers to schools to help strengthen the relationship between schools, students, and the police. The Police Department serves the city from its station at 2075 Coast Highway, shown in in **Figure 3.10-1**. The 18,000 square foot station, opened in 2004, has been deemed adequate to support increased staff and a sufficient level of service for future population growth in Pacifica (Pacifica Police Department, 2024).

Service Response

In 2021, the Police Department had 33 sworn officer positions, or approximately one officer per 1,000 residents. In 2018, the average response time—the time between dispatch and officer arrival at the scene—was five minutes, fifty seven seconds (5:57) for code-1 calls; 6:05 for code-2 calls and 3:48 for code-3 calls (Pacifica Police Department, 2019). The Department's response time standards state that officers shall respond without delay to all calls for police assistance "as soon as possible consistent with normal safety precautions and vehicle laws." Emergency calls take precedence.

¹ Insurance Services Office (ISO) has a system for determining the price of fire insurance in a community through a 1 to 10 classification system.

Schools

Enrollment and Capacity

Pacifica School District serves students in kindergarten through 8th grade, while Jefferson Union High School District serves students in 9th through 12th grades. There are also three private schools within the city. School facilities are shown in **Figure 3.10-1**.

Pacifica School District

Pacifica School District (PSD) currently operates two TK-5 elementary schools, Sunset Ridge and Ortega, three K-8 schools, Ocean Shore, Vallemar, and Cabrillo, and one comprehensive middle school, Ingrid B. Lacy. The Linda Mar Education Center provides two pre-school special education, and support space for home-schooled children. Pacifica School District is a \$55 million program of renovations to all current schools with funding from a 2018 bond measure PSD closed several schools in the 1980s and 1990s, and currently has two school buildings not being used as full school sites (Linda Mar and Oddstad). The PSD sold the former Fairmont Elementary School site to St. Ignatius College Preparatory in 2018 for use as athletic fields. St. Ignatius demolished the school building in 2021. The PSD has identified the former Oddstad Elementary School for redevelopment into workforce housing.

As of 2023-2024, the PSD enrolls 2,714 students in Transitional Kindergarten through 8th Grade. Enrollment has been slowly declining in most recent years, with 3,114 students in 2017-2018. Overall, schools are currently at 85 percent capacity (see Table 3.10-1). PSD offers open enrollment at all schools, allowing families to enroll children at the school of their choice based on specific preference factors. This policy gives families the choice between sending children to a traditional elementary and middle school or to a K-8 school, and has also given the district flexibility.

Jefferson Union School District

Jefferson Union High School District (JUHSD) enrolls just under 5,000 high school and high-school-equivalent students in Brisbane, Colma, Daly City, and Pacifica. The district has two high schools in Pacifica. Terra Nova High School, in the Park Pacifica neighborhood, had an enrollment of 697 students for the 2023-2024 school year. Oceana High School, in East Sharp Park, had 491 students for the 2023-2024 school year. JUHSD offers open enrollment at all schools, allowing students to enroll at the school of their choice. Students from outside Pacifica attend high school in Pacifica, and Pacifica students also attend high school in Daly City.

Both Oceana and Terra Nova high schools have large campuses (56 acres and 43 acres, respectively) with football and soccer fields, baseball diamonds, tracks, tennis courts, and auditoriums. The facilities are adequate to handle current enrollment, and significant excess capacity exists at both schools. JUHSD bond-funded modernization projects include a new classroom building and 350-seat theater at Terra Nova and improvements to existing buildings.

Private and Parochial Schools

There are three private schools in the Planning Area. Pacific Bay Christian School, in the Linda Mar neighborhood, was founded in 1950. The school expanded to a second campus across Linda Mar Boulevard in the 1970s and added a high school in the late 1980s. Approximately 320 students are enrolled as of 2020. Good Shepherd School was established in 1968 by Good Shepherd Catholic Church in East Sharp Park and enrolls 149 students in grades K-8. Montessori School of Linda Mar was started in 1977 and serves pre-school-aged children.

Projected Enrollment

According to the California Department of Finance, school enrollment in San Mateo County is projected to decrease over the planning period. PSD projects a small enrollment growth of approximately 125 students over the next five years. Given the small projected enrollment gains in the longer term and the flexibility provided by using standard classrooms currently assigned for Art, Science, Maker Spaces and Computer Labs, existing facilities are adequate to maintain a sufficient level of services.

JUHSD projects enrollment growth based on elementary school enrollment in local districts, and historic trends. Based on its 2006 Facilities Master Plan (updated in 2014) and 2020 Developer Fee Study, the District believes its current facilities—with planned renovations—are sufficient to accommodate future need. Schools in Pacifica are currently enrolled at 68 percent capacity.

Table 3.10-1: Existing Public Schools by Enrollment Capacity

<i>School (Grade Levels)</i>	<i>2023-2024 Enrollment</i>	<i>Capacity</i>	<i>Enrollment as Percent of Capacity</i>
Pacifica School District			
Ortega (K-5)	402	552	73%
Sunset Ridge (K-5)	380	514	74%
Cabrillo (K-8)	534	569	94%
Ocean Shore (K-8)	401	461	87%
Vallemar (K-8)	519	541	96%
Ingrid B. Lacy (6-8)	469	570	82%
Linda Mar Educational Center (Pre-K-8)	9	N/A	N/A
Subtotal	2,714	3,207	85%
Jefferson Union High School District (Schools in Planning Area)¹			
Oceana (9-12)	491	1,000	49%
Terra Nova (9-12)	697	1,550	45%
Subtotal	1,188	2,550	47%

-
- I. JUHSD also operates three high schools in Daly City, enrolling 2,443 students in 2023-2024. Some Planning Area residents attend these schools.
-

Source: California Dept. of Education, 2023-2024, Pacifica School District, 2019; Jefferson Union High School District, 2020; Dyett & Bhatia, 2024.

Libraries

Pacifica is served by the San Mateo County Library (SMCL), a system with 12 branch libraries and a service area population of 285,149 as of 2017. Library facilities are shown in **Figure 3.10-1**. San Mateo County Libraries is governed by the San Mateo County Library Joint Powers Authority (Library JPA). The Library JPA was established in 1999 and is comprised of the cities of Atherton, Belmont, Brisbane, East Palo Alto, Foster City, Half Moon Bay, Millbrae, Pacifica, Portola Valley, San Carlos, Woodside, and the unincorporated areas of the county. Per the Library JPA Agreement, members own and are responsible for maintenance of library buildings and the Library JPA is responsible for library operations and maintaining minimum service levels.

Pacifica is the only member of the Library JPA where the branch is divided into two facilities. The Pacifica-Sharp Park library is located in West Sharp Park in the northern part of the city, while the Pacifica-Sanchez library is adjacent to the Park Mall shopping center in the south. Circulation and library visitor numbers have been lower in Pacifica compared to most other libraries in the SMCL system.

San Mateo County Library is a Special District and collects a portion of property taxes throughout its service area. Property taxes currently provide 90 percent of SMCL's funding (Pacifica Library Foundation, 2007). In 1999, a Joint Powers Authority (JPA) agreement was established between the member cities and County to improve the library's ability to coordinate on long-term management and funding. Under the agreement, the City of Pacifica is responsible for the cost of maintaining Pacifica's two libraries. The Library JPA provides 60 hours of service hours per week that are currently evenly divided between the two Pacifica libraries. Pacifica's current libraries do not meet library standards for seating, public access computers, and self-help equipment, core parts of today's library service expectations. Pacifica's two existing libraries combined provide approximately 10,524 square feet, translating to 0.26 square feet per service area resident, considerably less than the average for the library system as a whole, and far below the one square foot per resident recommended by the American Library Association. Pacifica's libraries also have unresolved problems related to accessibility, layout, parking, acoustics, shelving space, study rooms, and computers.

Parks

City parks and school playfields provide active use areas and areas for local passive enjoyment for Pacifica residents. Five categories are identified: district parks, neighborhood parks, pocket parks, special facilities, and school grounds. These are shown in **Figure 3.10-1**. As **Table 3.10-2** shows, Pacifica's City parks and school grounds total approximately 242 acres, providing 6.3 acres per 1,000 Pacifica residents in 2022.

Existing Parks and Recreation Facilities

District Parks

Pacifica has one park whose size and range of amenities translates to a service area larger than the immediate neighborhood. Frontierland Park, at the eastern edge of the Park Pacifica neighborhood, comprises 63 acres. It features a picnic area, sports fields, a children's play area, and undeveloped hillside land.

Neighborhood Parks

Pacifica has six neighborhood parks ranging in size from about four to 20 acres for a total of 55 acres. These parks are, from north to south, Fairmont West Park, Fairmont Park, Imperial Park, Fairway Park, Oddstad Park, and Sanchez Park.

Pocket Parks

Pacifica also has 11 small parks with playlots or public use areas serving the immediate vicinity. Edgemar Park, Skyridge Park, and Pomo Park are the largest of these, at one to two acres each. Other pocket parks include the City-owned Horizon, Brighton, Palmetto, and Portola Mini-Parks, and privately-developed mini-parks in the Timber Hill, Connemara, Cypress Walk, and Timber Hill subdivisions and on Monterey Road.

Special Facilities

Beach Boulevard Promenade is located above the seawall in the West Sharp Park neighborhood. It is served by public parking and is popular for walking and jogging. The Promenade provides picnic tables and access to the Pacifica Pier and Sharp Park Beach.

Pacifica Municipal Pier, built in 1973, is one of the Bay Area's most popular places to fish. The pier is adjacent to the promenade and picnic area along Beach Boulevard. A café is located at the foot of the pier.

The **Grace McCarthy Vista Point**, on Sharp Park Road, features a sheltered viewpoint with benches overlooking the Sharp Park neighborhood, the Pier, and the Ocean.

Pacifica Skate Park opened in 2005, the result of a successful community effort over many years. The skate park is located adjacent to the Pacifica Community Center on Crespi Drive.

School Playfields

Schools also provide recreational resources used by the community, providing about 112 acres of grounds, including playing fields, at nine sites. With the exception of the Oceana High School pool, the City does not have a joint-use agreement with either JUHSD or PSD to operate fields on evenings or weekends.

Athletic Fields and Courts

City parks include five baseball fields and two soccer fields. School sites provide another 15 tennis courts, 10 baseball or softball fields, eight soccer fields, four football fields, three gyms, two full tracks, and two swimming pools. The Jean E. Brink Pool, located at Oceana High School, is home to the City of Pacifica's aquatics program. The pool at Terra Nova High School is not open to the public. Because the City relies extensively on the school districts for recreational facilities, it is important for these facilities to remain available for community use during non-school hours. Pacifica's two high schools feature renovated athletic facilities at both campuses.

Playgrounds

Pacifica currently has 13 playgrounds within its district, neighborhood and pocket parks. West Edgemar-Pacific Manor, much of West Sharp Park, West Fairway Park, Rockaway Beach, and Pedro Point, as well as much of Linda Mar and Park Pacifica, are not within walking distance of a playground.

Other Amenities

Many parks feature fields where dogs can play or be walked on-leash, and an off-leash dog park has been developed at Sanchez Park. Dogs are also allowed off-leash at Esplanade Beach. A bocce ball court has been built at the community center, with donated funds and services.

Regional Parks and Beaches

Regional parks and beaches in the Planning Area total approximately 2,930 acres. Land is owned and managed by various agencies, including the National Park Service, the State of California, San Mateo County, the City and County of San Francisco, and the City of Pacifica. The City does not have permitting authority over park land owned by other public agencies.

Golden Gate National Recreation Area

Sweeney Ridge, Mori Point, Milagra Ridge, and land on Pacifica's Northern Coastal Bluffs are part of the National Park Service's Golden Gate National Recreation Area (GGNRA), which extends in segments from Point Reyes, through San Francisco, to the Santa Cruz Mountains. Additional land owned by the California Coastal Conservancy and the City of Pacifica on Pedro Point Headlands and Sweeney Ridge may be added to the GGNRA in the future. As of 2018, GGNRA estimated approximately 15.2 million visitors to the Recreation Area as a whole (National Park Service, 2021). Protected ridges and coastal bluffs in and adjacent to the GGNRA are features of major local and regional significance as well as being vantage points for impressive views of the coast and bayside ridges and valleys.

Figure 3.10-1:
Educational Institutions
and Public Facilities

Schools

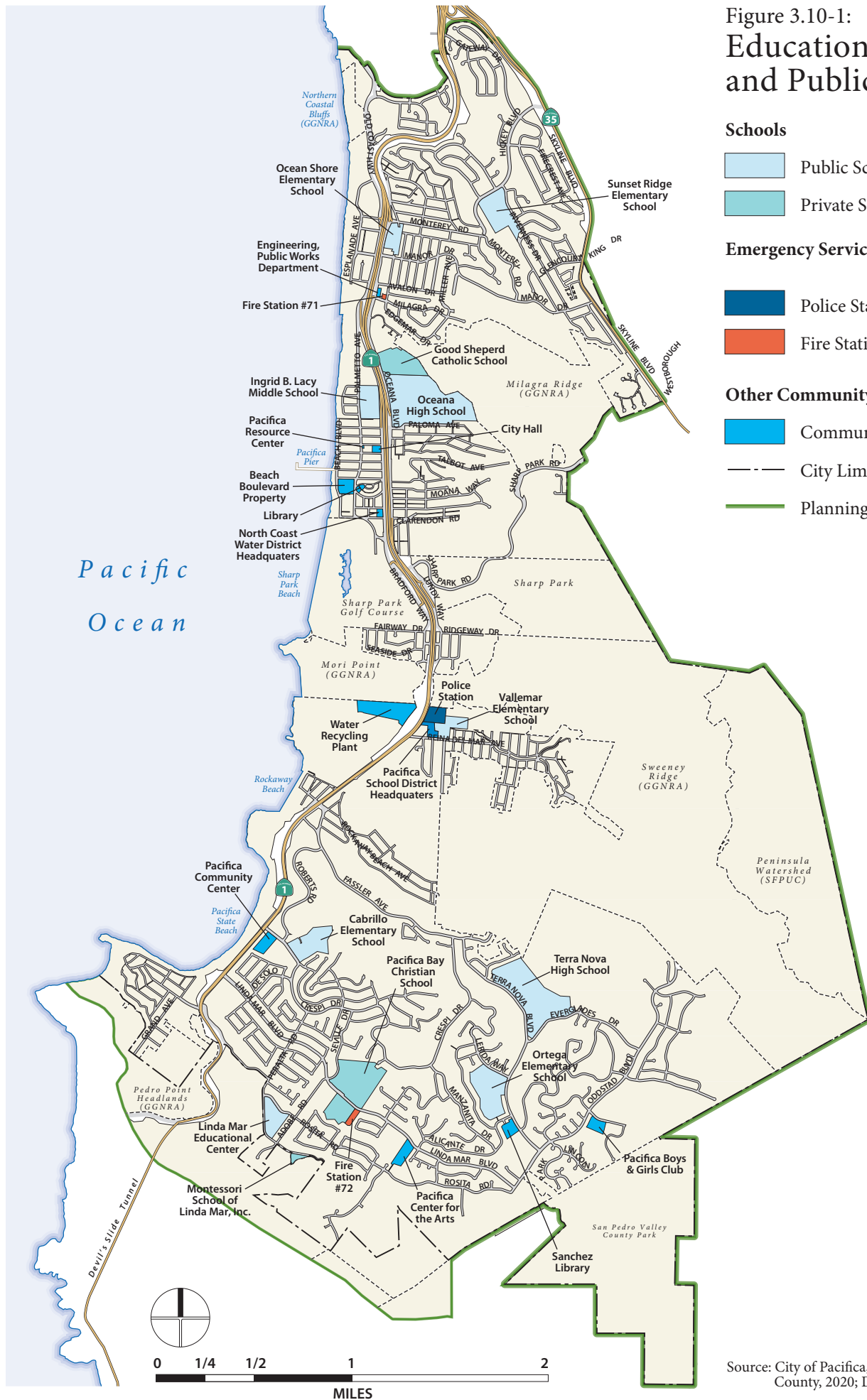
- Public School
- Private School

Emergency Services

- Police Station
- Fire Station

Other Community Facilities

- Community Facility
- City Limits
- Planning Area



Source: City of Pacifica, 2020; San Mateo County, 2020; Dyett & Bhatia, 2024.

Table 3.10-2: Existing Parks and Open Space

Park	Acres ¹	Park	Acres
District Parks		Special Facilities	
Frontierland Park	63	Grace McCarthy Vista Point	2.6
<i>Subtotal</i>	<i>63</i>	Pacifica Skate Park	1.4
Neighborhood Parks		Rockaway Beach Promenade	0.1
Fairmont Park	6.3	Beach Boulevard Promenade and Pier	1.3
Fairmont West Park	4.9	<i>Subtotal</i>	<i>5.4</i>
Fairway Park	6.9	School Playfields³	
Imperial Park	12.8	Cabrillo School	10.0
Oddstad Park	19.9	IB Lacy Middle School	4.0
Sanchez Park	4.5	Linda Mar School	4.0
<i>Subtotal</i>	<i>55</i>	Ocean Shore School	4.0
Pocket Parks		Oceana High School	19.0
Brighton Mini-Park	0.1	Oddstad School	5.0
Connemara Mini-Park ²	0.3	Ortega School	17.0
Cypress Mini-Park ²	0.5	Sunset Ridge School	11.0
Edgemar Park	1.2	Terra Nova High School	33.0
Horizon Mini-Park	0.1	Valleamar School	5.0
Monterey Mini-Park ²	0.6	<i>Subtotal</i>	<i>112</i>
Palmetto Mini-Park	0.1	Total	242
Pomo Park	0.8	Current Parks Ratio ⁴	6.3
Portola Mini-Park	0.2		
Skyridge Park	1.9		
Timber Hill Mini-Park ²	0.3		
<i>Subtotal</i>	<i>6.3</i>		

1. Acreage subtotals and totals may not add up due to rounding.

2. Private parks created as part of development, these are not counted as City parkland.

3. Owned and operated by Pacifica School District or Jefferson Union High School District.

4. Acres of publicly-owned land per 1,000 residents, at 2022 population of 38,048. 2022 population is greater than 2024 population; 2022 population is used for consistency with General Plan 2040 estimations

Sources: San Mateo County Assessor's Office, 2019; ACS Demographic and Housing Estimates, 2022; City of Pacifica, Dyett & Bhatia, 2024.

In 2015, GGNRA reached a Record of Decision for the Final General Management Plan (GMP)/Environmental Impact Statement (EIS), which serves as a foundation and framework for the management and use of park lands and articulates the desired future conditions for natural and

cultural resources and visitor experiences that will best fulfill the legislated purposes of the park. The GMP's preferred overall approach to its lands in San Mateo County is to "focus on the importance of improving access and engaging the community in these newest park lands (National Parks Service, 2015)."

Northern Coastal Bluffs

GGNRA manages approximately 17 acres of bluffs along the ocean in the far northern end of Pacifica. This land offers expansive views from Palmetto Avenue, and coastal bluff scrub considered to have high habitat value. The GMP would preserve and enhance the natural and scenic values and coastal processes here, with some pedestrian access.

Milagra Ridge

The 245-acre Milagra Ridge area provides habitat to the federally-protected Mission Blue Butterfly and the San Bruno Elfin Butterfly, and is considered sensitive to human disturbance. The park unit also offers spectacular views and historic resources. GGNRA manages Milagra Ridge with the primary goal of protecting and restoring natural habitat, while still providing public access. A recently completed housing development on lower Milagra Ridge included the additional preservation of 35 acres of open space that could be transferred to an appropriate public or private land steward.

Sharp Park

The 400-acre Sharp Park is the result of a 1917 land bequest by the Sharp family to the City and County of San Francisco, on the condition that the land remains in recreational use. Sharp Park contains an 18-hole public golf course, with 14 of those holes located in the Coastal Zone and occupying 128 acres between the ocean berm and Highway 1. Sharp Park Golf Course was established in 1932 and designed by British golf course architect, Alister MacKenzie. Sharp Park Golf Course provides low-cost golf to the general public, with reduced greens fees for Pacifica and San Francisco residents. Sharp Park Golf Course also includes habitat for the California red-legged frog and the endangered San Francisco garter snake. In 2009, the San Francisco Recreation and Park Commission adopted a restoration plan that would retain the golf course, while also creating more habitat by realigning parts of the course.

Sweeney Ridge

At 1,470 acres, GGNRA's Sweeney Ridge is the largest public open space tract in Pacifica. The park, reaching an elevation of 1,220 feet, offers views to Mount Tamalpais to the north, Mount Diablo to the east, Montara Mountain to the south, and the Farallon Islands to the west on clear days. Trailheads are located at Skyline College, Sheldance Nursery off Highway 1, and Sneath Lane off Skyline Boulevard. Under GGNRA's General Management Plan, Sweeney Ridge's natural landscape would be protected and trail amenities would be enhanced, including efforts to improve connections to the regional trail network and surrounding public lands. The City of Pacifica has recently acquired 331 acres on upper Cattle Hill directly adjoining Sweeney Ridge on the west and seeks to transfer the land to the appropriate public or private land steward.

The San Francisco Bay Discovery Site, where the Portola Expedition crossed over Sweeney Ridge in 1769 and for the first time came to view the Bay, is located on Sweeney Ridge. It is a National Register-designated historic site. Access to this landmark will be improved, and a hikers' hut added as part of a system of huts proposed for the Bay Area Ridge Trail.

Shelldance Nursery, just off Highway 1 at the base of Sweeney Ridge, provides shared-use trailhead parking for access to Sweeney Ridge and is used for park maintenance. Shelldance Nursery is identified in GGNRA's General Management Plan for new visitor facilities including restrooms, park orientation and information, a community stewardship/education center, enhanced trailhead parking, and an improved trail connection to Mori Point.

The GMP identifies the possibility that private, undeveloped land on the western face of Cattle Hill and at Millwood Ranch for potential acquisition or conservation easements.

Mori Point

Mori Point, a 106-acre promontory between Sharp Park and Rockaway beaches, was added to the GGNRA in 2002 after years of community involvement and the efforts of the Coastal Conservancy, Pacifica Land Trust, and the Trust for Public Land. Mori Point is accessible from the Coastal Trail along Calera Creek, from the Sharp Park levee at Clarendon and Beach Boulevard, or from Mori Point Road in the West Fairway Park neighborhood.

Pedro Point Headlands

Pedro Point Headlands is the coastal extension of San Pedro Mountain, jutting into the Pacific west of Highway 1 north of Devil's Slide. Most of Pedro Point Headlands within the Planning Area are now owned by the State of California or the City of Pacifica. In 2016, the City of Pacifica added five acres of land to the Headlands using funds granted by Measure A and a State of California Habitat Conservation Program grant. The construction of the Devil's Slide Tunnel allowed the bypassed highway segment to be converted to a trail in 2014. Parking areas and trailheads are also now available at this segment, and new trails have been developed to link the trailhead at the north end with trails on Pedro Point Headlands.

San Pedro Valley County Park

The Middle and South Forks of San Pedro Creek flow year-round through the 1,150-acre San Pedro Valley County Park, providing spawning habitat for migratory Steelhead salmon. The park entrance is reached from the south end of Oddstad Boulevard in Pacifica; near the entrance the park offers two group picnic areas and a small visitors' center. Approximately half of the park is within the Planning Area.

McNee Ranch State Park

McNee Ranch State Park adjoins San Pedro Valley County Park to the west. Trail connections between the parks allow hikers beginning in Pacifica to reach the summit of 1,900-foot North Peak and the ocean at Montara State Beach or Gray Whale Cove. Just 22 acres of this park are within the Planning Area.

Beaches

Pacifica State Beach

Pacifica State Beach, stretching more than a half mile between Pedro Point and the Aramai Point, is one of the most popular surfing spots in the San Francisco area. By a 2005 estimate, more than one million visitors use Pacifica State Beach every year. Most of the beach and dunes are owned by the State and are part of the state parks system, but are managed by the City of Pacifica. Restoration work completed in 2004 included purchasing of private property, rehabilitation of the Linda Mar Sewage Pumping Station, wetlands restoration, shoreline protection, dune restoration, improvements to the Coastal Trail, and new public restrooms.

Rockaway Beach

Rockaway Beach lies on a small bay between rocky headlands. The south end of the beach may be accessed from a seafront plaza at the end of Rockaway Beach Avenue in the Rockaway Beach district. A parking lot has been built in recent years connecting the north end of the beach to a new segment of the Coastal Trail crossing the Headlands between Rockaway Beach and Pacifica State Beach. The new section of Coastal Trail along Calera Creek can be reached from the south end of Rockaway Beach.

Sharp Park Beach and Pacifica Pier

Sharp Park Beach extends from Mori Point along the west side of the Sharp Park levee to the West Sharp Park neighborhood. The southern section is owned by the City and County of San Francisco as part of Sharp Park, while the northern portion is owned by the State. The beach is open to the public, and is popular for walking. It is reached from the south from a small trailhead at Mori Point, and from the north at the Beach Boulevard Promenade, where public parking is available. The Promenade also provides access to Pacifica Pier.

Trail System

The Planning Area today features 67 miles of trails, through GGNRA land and in San Pedro Valley County Park, and along the coast including segments along City streets. The trail system is shown in **Figure 3.10-2**. Previous planning efforts have sought to create a system that includes a coastal trail, a ridgeline trail, and lateral trails connecting the ridgeline to the coast.

Coastal Trail

Today, Pacifica's Coastal Trail runs almost the length of the Planning Area, from the Daly City boundary to Pedro Point Shopping Center. The route follows Palmetto Avenue alongside the Northern Coastal Bluffs, turns onto Esplanade Avenue through the West Edgemar-Pacific Manor neighborhood, and follows Palmetto again through West Sharp Park. The trail then branches into two parallel routes. The western route travels along the levee between Sharp Park Golf Course and Sharp Park Beach, and then east along the north side of Mori Point. The eastern route follows Francisco Boulevard south, meeting the other trail at the Mori Point trailhead. From this point, the Coastal Trail follows a path alongside Highway 1 and then arcs west along the restored section of

Calera Creek in the Rockaway Quarry site. After a short on-street segment in the Rockaway Beach district, the trail follows a path over the Aramai Point and then along the inland side of the dunes at Pacifica State Beach. The trail currently comes to an end at the south end of the beach. Pacifica's Coastal Trail is recognized as a segment of the California Coastal Trail.

The City in 2015 acquired an approximately five acre parcel in the Pedro Point Headlands which provided a critical link to other publicly-owned land in the Headlands. As a result, it should be possible to construct a trail west of Highway 1 to extend the Coastal Trail from its current terminus southward through the Pedro Point Headlands to connect with the Devil's Slide Trail beyond the city limits to the south.

Ridge Trails

The Sweeney Ridge trail, a segment of the Bay Area Ridge Trail, extends from the Portola Gate at the boundary of the Peninsula Watershed in the south to Milagra Ridge in the north. Lateral trail connections exist along Mori Ridge and Cattle Hill to the west, and the Sneath Lane right-of-way to the east. Trailheads with parking lots are at Milagra Ridge and Skyline College to the north and northeast, Sheldance Nursery off of Highway 1 to the west, and Sneath Lane off of Skyline Boulevard to the east. Parking and access improvements to the Fassler Avenue Trailhead were completed in 2020.

Milagra Ridge has a three-quarter mile hiking trail on paved road and/or dirt trail, bringing visitors to overlook points. Access to the trails is from a parking lot at the end of the College Drive extension north of Sharp Park Road. A new trail, the Milagra Battery Trail, was completed in 2016 and provides access west across the lower Milagra Ridge from a small parking lot at the end of Connemara Drive.

County and State Parks

Approximately ten miles of trails in San Pedro Valley County Park offer both easy walks and challenging climbs to the ridges, with views to the ocean. The park entrance is reached from the south end of Oddstad Boulevard in Pacifica, and features parking, a small visitors' center, restrooms, and picnic areas.

McNee Ranch State Park adjoins San Pedro Valley County Park to the west. Trail connections between the parks allow hikers beginning in Pacifica to reach the summit of 1,900-foot North Peak and the ocean at Montara State Beach or Gray Whale Cove.

Pedro Point Headlands

Trails at Pedro Point bring hikers from a trailhead on Highway 1 to an overlook point and to Pedro Summit. They are minimally improved, although the trailhead created with the opening of Devil's Slide Tunnels in 2014 has created a new public parking lot. As mentioned above, a trail connection is planned to fill the gap in the Coastal Trail between Pedro Point Shopping Center and Devil's Slide Trail.

Trailheads and Parking Areas

Existing trailheads exist at the Beach Boulevard Promenade; Mori's Point Road; Sheldance Nursery; Rockaway Beach; Crespi Drive at Highway 1; Pacifica State Beach; San Pedro Valley County Park; Milagra Ridge. Planning Area trails also can be reached from trailheads east of the ridge at Skyline College and at Sneath Lane. A trailhead without parking exists at the top of Fassler Avenue, and a trailhead with parking exists on Highway 1 approaching Devil's Slide Trail.

Park Acquisition and Maintenance

The City aims to meet the needs for active and passive recreation and enjoyment of the full range of Pacifica residents and visitors over the planning period. For local-serving parks, the General Plan provides standards for park size, service area, and distribution. For new development, the City will continue to require the dedication of land or payment of in-lieu fees to provide park land at a ratio of five acres per 1,000 residents. In addition, the General Plan requires the City to develop new parks in a timely manner using in-lieu fees or land dedicated as part of new development, to ensure that citywide park and recreation space is available to the community at a ratio of 6.3 acres per 1,000 residents by 2040.

In June 2021, City Council adopted the Fiscal Year 2021-2026 Capital Improvement Program that included funds to replace aging playground equipment at various City parks. Skyridge Park, Imperial Park, Marvilla Park, and Brighton Mini Park were selected for the FY 21-22 Priority Parks Project. These parks were identified as priority parks due to the age of the play structures, the lack of pedestrian paths and recreational amenities plus their location within the city. The City hired the multi-disciplinary/landscape architecture firm of NCE to prepare designs and construction for these parks.

Other Community Facilities

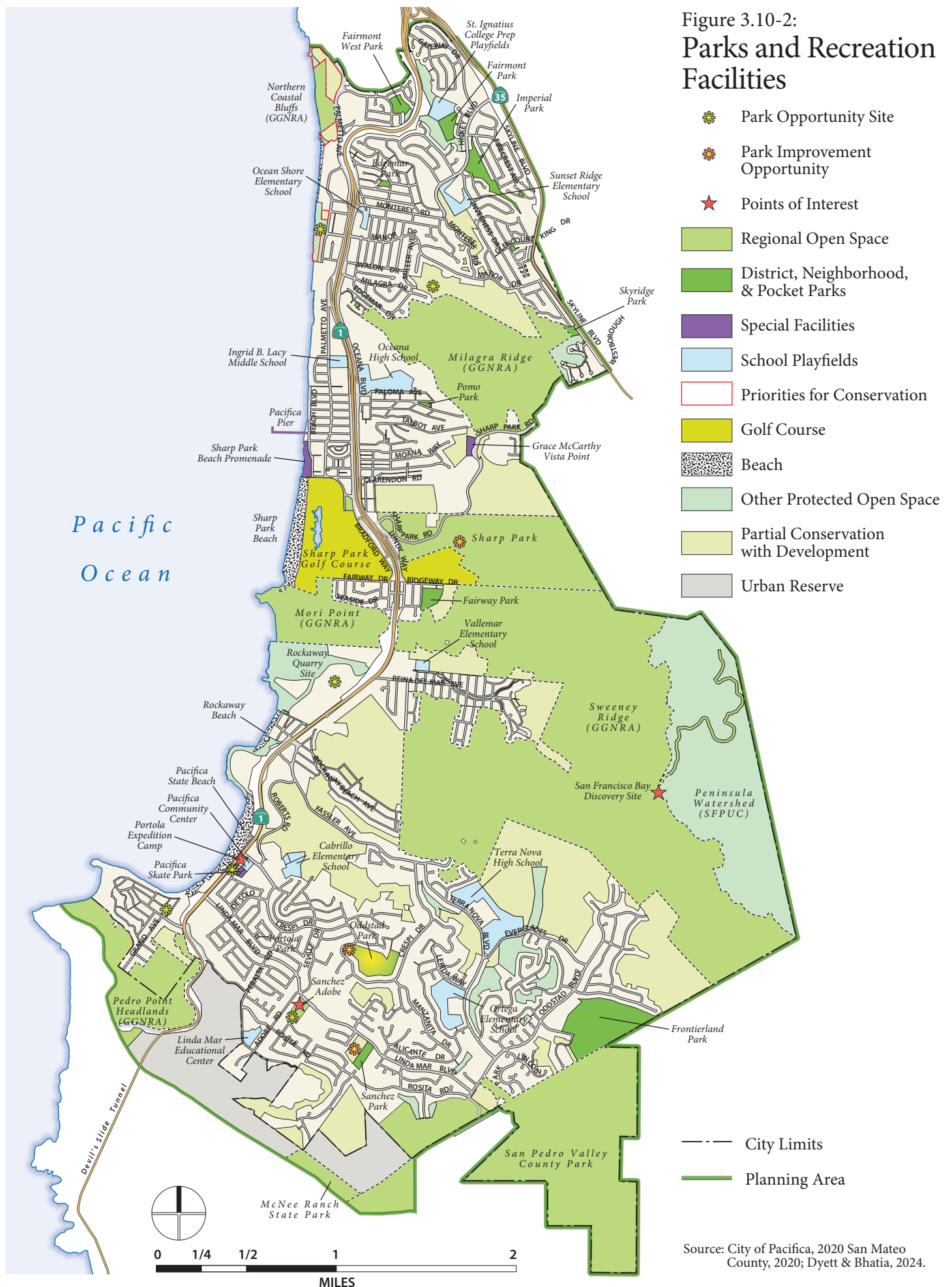
Community Facilities

The City of Pacifica defines community facilities as buildings needed to support daily operations of the City, as well as other buildings designed for community meetings, indoor recreational and instructional programs, and social activities. Examples of community facilities in Pacifica include:

- **Pacifica Community Center:** The Pacifica Community Center, located on Crespi Drive, is a multi-purpose venue that hosts special events, ongoing recreation classes, and daily programming for seniors, and provides meeting rooms for groups or public meetings. The center provides a daily nutritious lunch at the Community Center and serves 13,000 meals annually to seniors in Pacifica including the Meals-on-Wheels program. The Community Center also provides information and referrals concerning such issues as health insurance and legal assistance, and peer counseling. Funding comes from federal and County grants, the City general fund, and private contributions, including volunteer hours.
- **Pacifica Boys & Girls Club:** Boys & Girls Clubs is a national organization that provides a broad range of activities and aims to promote child development and well-being. Pacifica is home to a Boys & Girls Club on Yosemite Drive in Park Pacifica, as well as school-based clubs at two schools.

- **Pacifica Resource Center:** Pacifica Resource Center provides assistance to those in need in the community from a space on Palmetto Avenue in West Sharp Park. Its services include comprehensive needs assessment, emergency food and transportation, homelessness prevention services, budget planning, infant needs, and other direct and referral services.

Figure 3.10-2:
Parks and Recreation
Facilities



REGULATORY SETTING

Federal Regulations

There are no federal regulations related to public services or recreation that apply to the Planning Area.

State Regulations

California Fire and Building Code

The State of California provides minimum standards for building design through the California Building Code (CBC), which is located in Part 2 of Title 24, California Building Standards Code, of the CCR. The CBC is based on the International Building Code but has been amended for California conditions. It is generally adopted on a jurisdiction-by-jurisdiction basis, subject to further modification based on local conditions. Commercial and residential buildings are plan-checked by local building officials for compliance with the CBC. Typical fire safety requirements of the CBC include: the installation of sprinklers in all high-rise buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildfire hazard areas.

California 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.

Senate Bill 50, California Government Code 65995(b), Education Code Section 17620, and the Mitigation Fee Act

Senate Bill (SB) 50 (funded by bonds sold under Proposition 1A, approved in 1998) limits the power of cities and counties to require mitigation of school facilities impacts as a condition of approving new development and provides instead for a standardized developer fee. SB 50 generally provides for a 50/50 State and local school facilities funding match. SB 50 also provides for three levels of statutory impact fees. The application level depends on whether State funding is available, whether

the school district is eligible for State funding, and whether the school district meets certain additional criteria involving bonding capacity, year-round school, and the percentage of moveable classrooms in use.

SB 50 amended the California Government Code Section 65995, which contains limitations on Education Code Section 17620, the statute that authorizes school districts to assess development fees within school district boundaries. Government Code Section 65995(b)(3) requires the maximum square footage assessment for development to be increased every two years, according to inflation adjustments. On January 24, 2018, the State Allocation Board approved increasing the allowable amount of statutory school facilities fees (Level I School Fees) to \$3.79 per square foot of assessable space for residential development of 500 square feet or more, and to \$0.61 per square foot of chargeable covered and enclosed space for commercial/industrial development.

Enacted as Assembly Bill (AB) 1600, the Mitigation Fee Act requires a local agency establishing, increasing, or imposing an impact fee as a condition of development to identify the purpose of the fee and the use to which the fee is to be put. The agency must also demonstrate a reasonable relationship between the fee and the purpose for which it is charged, and between the fee and the type of development plan on which it is to be levied. The act came into force on January 1, 1989.

Quimby Act

The 1975 Quimby Act (California Government Code section 66477) authorized cities and counties to pass ordinances requiring that developers set aside land, donate conservation easements, or pay fees for park improvements. Under the Quimby Act, fees must be paid and land conveyed directly to the local public agencies that provide park and recreation services communitywide; however, revenues generated through the Quimby Act cannot be used for the operation and maintenance of park facilities. The act states that the dedication requirement of parkland can be a minimum of three acres per thousand residents or more, and equal to the existing parkland provision (up to five acres per thousand residents) if the existing ratio is greater than the minimum standard. In 1982, the act was substantially amended. The amendments further defined acceptable uses of or restrictions on Quimby funds, provided acreage/population standards and formulas for determining the exaction, and indicated that the exactions must show a reasonable relationship to a project's impacts as identified through studies required by CEQA.

California Commission on Peace Officer Standards and Training

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.

Local Regulations

Pacifica Municipal Code

Article 1 of Chapter 3 covers regulations related to Fire Protection including adoption of the 2022 California Fire Code and its various amendments.

Chapter 10, Parks, Beaches, and Recreation Facilities, covers a variety of regulations for recreations areas and parks in order to provide for their safe use and enjoyment. Chapter 2 of Article 3 defines the Parks, Beaches, and Recreation Commission, who are responsible for recommendations to the City Council in the acquisition, development, and maintenance of parks, beaches, and other recreational areas and to encourage the planning and implementation of a comprehensive recreation program which will serve the needs of all age groups in the city.

Section 10-1.803 regulates parkland dedications and requires developers to dedicate land or pay an in-lieu fee to provide park land at five acres per 1,000 residents. Section 10-1.804 regulates school site dedications. As a condition of the approval of a final subdivision map, a subdivider who develops or completes the development of one or more subdivisions within one or more school districts maintaining an elementary school shall dedicate to the school district or districts such lands as the City shall deem to be necessary for the purpose of constructing thereon the elementary schools necessary to assure the residents of the subdivision adequate public school service.

City of Pacifica General Plan 2040

The City of Pacifica General Plan 2040 (General Plan) includes the following goals and policies associated with public services and recreation:

Land Use

Guiding Policy LU-G-4: Higher-Density Housing. Locate higher-density housing outside of Coastal Vulnerability Zones and in accessible places close to community shopping areas and transportation.

Implementing Policy LU-I-13: Public Service Priorities. Ensure that existing and planned public works facilities accommodate needs generated by development or uses permitted over the planning period.

In the event that existing or planned public works facilities can accommodate only a limited amount of new development, services to coastal dependent land use, essential public services and basic industries vital to the economic health of the region, state, or nation, public recreation, commercial recreation, and visitor-serving land uses shall not be precluded by other development.

Implementing Policy LU-I-14: Hillside Preservation. Update the Hillside Preservation District and the zoning map to ensure that all steep and sensitive terrain is subject to these regulations. The Hillside Preservation map (Figure 4-4) should be used as a guide.

Circulation

Guiding Policy CI-G-7: Congestion on Highway 1. In consultation with Caltrans, seek solutions to ease the traffic congestion that occurs on Highway 1 near the Reina Del Mar, Fassler Avenue, and Linda Mar Boulevard intersections. Strive for the greatest benefit with the least environmental impact possible.

Economic Sustainability

Implementing Policy ES-I-36: Appropriate Site Design. Ensure that development projects adjacent to protected natural areas are designed to minimize impacts on those areas by employing low impact development techniques for stormwater management, using native/non-invasive landscaping, and minimizing nighttime lighting and glare.

Conservation

Implementing Policy CO-I-1 Creek Protection and Restoration. Maintain, protect, and restore Pacifica's creeks, including San Pedro, Calera, Sanchez, and Milagra creeks, as environmental and aesthetic resources. Actions will include, but are not limited to:

- Continuing restoration efforts along San Pedro Creek to improve conditions for steelhead by removing obstacles to fish passage, placing rock weirs to facilitate fish passage, and by monitoring the effectiveness of these projects;
- Partnering with local organizations, such as the San Pedro Creek Watershed Coalition, Go Native, the Pacifica Land Trust, and others, on restoration efforts;
- Exploring opportunities to collaborate with other agencies and organizations on stream restoration and riparian habitat restoration along Sanchez and Calera creeks;
- Enforcing restrictions on the planting of invasive species near creek areas;
- Identifying and working with property owners to take advantage of unique opportunities where human active use (e.g., through trail development) would enhance creek appreciation without disrupting ecological function;
- Requiring a minimum of 100-foot setbacks from the top of creek banks, or from the outer edge of riparian vegetation, where it exists, for development proposed adjacent to creeks, in keeping with City regulations and Best Management Practices. Exceptions to such buffer requirements should be supported by a biological report demonstrating that the adjusted buffer, in combination with incorporated siting, design or other mitigation measures, shall prevent impacts that significantly degrade the creek. Buffer adjustments should also be limited to where the entire subject legal lot is within the buffer or where it is demonstrated that development outside the buffer would have a greater impact on the creek.

Implementing Policy: CO-I-4 Wetlands Preservation. Prohibit new development in existing wetlands except as allowed under the federal Clean Water Act and the California Coastal Act. Continue to require formal delineations of wetlands subject to State or federal regulations prior to any proposed development project where potential wetlands have been identified. If impacts on wetlands are unavoidable, compensation measure should be in line with the State's no-net-loss goal regarding wetlands.

Implementing Policy CO-I-7: Maintain Functional Capacity of Wetlands. Ensure that any diking, filling, or dredging in existing wetlands maintains or enhances their functional capacity.

Implementing Policy CO-I-26: Protection of Biological Resources with New Development. Protect sensitive habitat areas and special-status species through implementation of the following measures:

- 1) Discourage development and/or buildout in critical habitat of special status species during the development review process.
- 2) Pre-construction plant and wildlife surveys: Project applicants shall engage a qualified biologist to conduct presence/absence biological surveys for sensitive plant and wildlife species prior to construction adjacent to or within identified special status communities and other sensitive areas identified in Figure 7-3 of the proposed General Plan. If special status species are identified, the qualified biologist shall consult with the California Department of Fish and Wildlife (CDFW) and establish no-disturbance buffers around avian nests, bat roosts, and sensitive plants to avoid disturbance and direct impacts to these resources during construction. If no special status species are detected during surveys, then construction-related activities may proceed. Nesting birds, in particular, are protected by two means; they receive protection under the Migratory Bird Treaty Act, and nesting raptors (in the order Falconiformes or Strigiformes) are protected under the State Fish and Game Code, §3503.5.
- 3) Require biological resource assessments be conducted prior to approval for any development within 300 feet of creeks, wetlands, or other sensitive habitat areas shown on Figure 7-3 of the proposed General Plan.
- 4) Require on-site monitoring of biological resources by a qualified biologist throughout the duration of construction activity.
- 5) Require compensatory mitigation by means of habitat preservation, restoration, and enhancement; for the loss of any critical habitat and/or special status communities.

The City will coordinate with the U.S. Fish and Wildlife Service, National Marine Fisheries Service, California Department of Fish and Wildlife, and Regional Water Quality Control Board in providing project applicants with the best guidance to avoid impacts to special status species and habitat areas including creeks, wetland features, woodlands, or other sensitive natural features.

Open Space and Community Facilities

Guiding Policy OC-G-8: Coastal Access and Recreational Opportunities. Provide maximum coastal access and recreational opportunities for all people consistent with public safety and the need to protect public rights, rights of property owners, and natural resource areas from overuse, including access at each point identified on Figure 6-3.

Guiding Policy OC-G-9: Management of Public Access. Regulate the time, place, and manner that public access is provided, based on such factors as topographic and site constraints; the fragility of natural resources; public safety; and the privacy of adjacent residential uses.

Guiding Policy OC-G-10: Distribution of Public Coastal Facilities. Continue to distribute public facilities, including parking areas or facilities, so as to mitigate against the impacts of overcrowding or overuse by the public of any single area.

Implementing Policy OC-I-2: Park Development to Meet Park Standards. Develop new parks in a timely manner using in-lieu fees or land dedicated as part of new development, to ensure that Citywide park and recreation space is available to the community at a ratio of 6.3 acres per 1,000 residents by 2040.

Implementing Policy OC-I-3: Community Use of School Grounds and Recreation Facilities. Explore joint-use agreements and seek to strengthen these as needed to ensure community use of play areas and indoor recreation facilities at school sites.

Implementing Policy OC-I-4: Emphasize Park Maintenance and Improvements. Enhance existing parks to improve the quality and usability of Pacifica's park land, and make improvements such that park facilities are equitably distributed throughout Pacifica. In particular:

- Improve existing sports fields in partnership with local non-profit youth and adult athletic groups;
- Add playgrounds or expand play areas at Fairway, Imperial, and Oddstad parks;
- Convert parking area to park space at Oddstad, and make improvements at the park's entrance.
- Provide an off-leash dog area at a location in the northern part of the City.

Implementing Policy OC-I-10: Pocket Park Opportunity Sites on Public Land. Explore opportunities to develop pocket parks on public land that is not otherwise needed as neighborhood gathering places and play areas.

Potential sites are on street stubs or right-of-way not needed to serve future development, and within easy walking distance to adjacent residences. Amenities should include, but not be limited to, play or exercise equipment in park-deficient areas, and benches or picnic tables at scenic overlook points.

Implementing Policy OC-I-37: Public Shoreline Access. Continue to ensure that new development does not interfere with the public's right of access to the sea where public access to the sea has been acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

Formalized public access locations are shown on the Open Space and Trails map in the General Plan and in the Public Access and Recreation chapter of the Local Coastal Land Use Plan.

Implementing Policy OC-I-45: Fees and Time Restrictions. Ensure that public beaches and parks in the Coastal Zone maintain free and lower-cost user fees and parking fees, and

minimize parking lot and beach curfews to the extent feasible in order to maximize public access and recreation opportunities.

Implementing Policy OC-I-46: Northern Coastal Bluffs. Promote potential trail improvements by GGNRA to create controlled public access to the bluffs, while protecting Northern Coastal scrub and other vegetation. (See Points 1 and 2 on Figure 6-3.)

Implementing Policy OC-I-47: Esplanade Bluff. Develop a small public park or viewing area and a trail on City-owned bluff top land along the 400-block of Esplanade Avenue (Point 5 on Figure 6-3), if such improvements are feasible.

Implementing Policy OC-I-48: Coastal Access Point South of RV Park. Complete planned improvements to public access along the easement south of the RV Park (Point 7 on Figure 6-3), including trail improvements and natural restoration.

Implementing Policy OC-I-49: Beach Boulevard. Ensure that public access to the coast at the Promenade and Pier (Points 9 and 10 on Figure 6-3) is maintained and enhanced by redevelopment at the City-owned 2212 Beach Boulevard site, including continuation of public parking.

Implementing Policy OC-I-50: Rockaway Beach. Ensure that public access to Rockaway Beach (from Points 17 and 19 on Figure 6-3) is maintained.

Implementing Policy OC-I-51: Rockaway Headlands. On the Headlands south of Rockaway Beach, create public access to coastal views (Point 20 on Figure 6-3).

Implementing Policy OC-I-52: Pedro Point Headlands. Extend trails on Pedro Point Headlands to a coastal overlook point. (See Point 27 on Figure 6-3.)

Implementing Policy OC-I-53: Rockaway Quarry. If a safe public route can be developed on the Quarry uplands, create coastal access along a new trail connecting Rockaway Beach with Mori Point, as part of a conservation proposal or new development.

Implementing Policy OC-I-60: Library/Learning Center. Support San Mateo County Library and local efforts to continue a two-branch library system, with a large full-service branch at Sharp Park, and one smaller, self-service “open access” model branch with Community Center Annex at Sanchez.

Implementing Policy OC-I-61: Library Site Reuse and Redevelopment. In the event that a new library is developed, work with San Mateo County Library to identify appropriate future land uses for existing Library branch sites compatible with surrounding neighborhoods.

Safety

Implementing Policy SA-I-91: Response Time. Support efforts by NCFA to meet its response time standards throughout the City.

This effort may include construction of a third fire station in the central part of Pacifica, near the police station or the Quarry site. The City could provide land or shared facilities.

Implementing Policy SA-I-94: Development Review. Review development proposals to ensure that they incorporate appropriate fire-mitigation measures, including adequate provisions for evacuation and access by emergency responders, and vegetation clearances that do not impact ESHAs or wetlands.

Implementing Policy SA-I-95: Plan Review in Fire-Prone Areas. Continue to request the North County Fire Authority participation in plan review of new buildings in potentially fire-prone areas.

Implementing Policy SA-I-96: Fire Prevention Inspections. Continue to require a fire prevention inspection of every permitted business and multi-family development covered by the North County Fire Authority.

Implementing Policy SA-I-97: Fire Prevention Education. Continue educating the public about local fire hazard prevention programs. Work cooperatively with the North County Fire Authority to promote public awareness of fire safety and emergency life support.

Implementing Policy SA-I-98: Vegetation Management. Promote and support the North County Fire Authority's Vegetation Management Program to reduce urban/wildland interface fire hazards through public education and fuel reduction projects.

Implementing Policy SA-I-110: Police Response. Continue to respond without delay to all calls for police assistance as soon as possible consistent with normal safety precautions and vehicle laws. Periodically review procedures and response times to ensure equitable service across the community.

Local Coastal Land Use Program (1980)

The Access component of the 1980 LCLUP is based on the goals and policies set forth in the 1976 Coastal Act Coastal Resources Planning and Management Policies and the basic goals of the state for the coastal zone. The purpose of the Access component is to assure that maximum public access to the coast and the public recreation area is guaranteed.

Impact Analysis

SIGNIFICANCE CRITERIA

For the purposes of this EIR, a significant impact would occur if implementation of the Proposed Project would:

- Criterion 1:** Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
- a. Fire protection,
 - b. Police protection,
 - c. Schools,
 - d. Parks, or
 - e. Other public facilities;
- Criterion 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; or
- Criterion 3:** Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

METHODOLOGY AND ASSUMPTIONS

Criteria from Appendix G of the State CEQA Guidelines were used to determine whether the Proposed Project would have a significant impact related to public services and recreation. Potential project-related impacts were analyzed based on their potential to result in either physical degradation of public facilities, or a reduction of public service ratios such that construction of a new public service facility would be required to meet service ratio needs. Future service ratios anticipated under project conditions were compared to goal ratios identified in applicable documents (e.g., the General Plan), as well as other local planning documents, to identify the project's potential to result in impacts.

IMPACTS

Impact 3.10-1 Development under the Proposed Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: fire protection, police protection, schools, parks, or other public facilities. (Less than Significant)

Fire Protection

The Proposed Project will redesignate and rezone sites within the city to allow for an additional 2,175 housing units which would likely increase the Planning Area's demand for emergency fire response and preventive services.

The Fire Authority has stated an existing need for additional facilities and staffing in order to meet fire response standards for Vallemar and areas in southern Pacifica. Although the NCFA does not expect that the city's ISO rating will be affected by population growth, it expects that growth would exacerbate existing deficiencies in service delivery (North County Fire Authority, 2009). The area's geography and access challenges posed by the circulation system and a mid-point station in Pacifica with a truck and engine company has been proposed as a potential solution. The City's General Plan supports consideration of this and other options to ensure adequate fire protection services throughout the city (Implementing Policy SA-I-91). This effort may include restoration of Station 73 and construction of a new fourth fire station in the central part of Pacifica, such as near the police station or the Quarry site. The City could provide land or shared facilities.

Development associated with the Proposed Project could increase the urgency of new facilities needs if it were to allow significant increases in people and structures in areas that are already challenging to reach, or if it significantly intensified congestion between the fire station and southern Pacifica neighborhoods. Sites to be rezoned under the Proposed Project reflect the priority given in the General Plan overall and Housing Element specifically to focus development on infill locations, including existing commercial shopping centers (Guiding Policy LU-G-4). Further, the Hillside Preservation District and the zoning map will be updated to ensure that all steep and sensitive terrain is subject to hillside preservation regulations that preclude high intensity development (Implementing Policy LU-I-14).

Development under the Proposed Project would also be required to adhere to General Plan policies that seek to reduce fire risk through a variety of methods, including development review and consistent inspection, public awareness programming, and vegetation management (Implementing Policies SA-I-94, SA-I-95, SA-I-96, SA-I-97, and SA-I-98). General Plan land use policies promote infill development to ensure that new development is clustered and served by adequate infrastructure and public services (Implementing Policy LU-I-13), while General Plan circulation policies seek to ease congestion on major accessways like Highway 1 (Guiding Policy CI-G-7).

Though the Proposed Project anticipates the need for construction or enhancement of fire protection facilities to achieve service standards, the underlying need for these activities is pre-existing. Neither the single new NCFA facility under discussion nor any facilities enhancement or sharing programs that may be considered as solutions will substantially increase the area of developed land in Pacifica. Moreover, the environmental impacts related to traffic, noise, and air quality and GHG emissions during construction and operation of the Proposed Project have been considered at a programmatic level throughout this EIR. Detailed design of new or altered fire protection facilities has not yet been completed, so site specific impacts cannot be evaluated at this time and were not considered in this EIR analysis. However, construction of the new facilities would be subject to separate project-level CEQA review at the time the design is proposed in order to identify and mitigate project-specific impacts not identified in this EIR as appropriate. Given these considerations, and adherence to General Plan policies that aim to support adequate levels of fire service, this impact is expected to be less than significant for fire services.

Police Service

In order to maintain a police service ratio of at least 1 sworn officer per 1,000 residents for the buildout population under the General Plan and Proposed Project, the Pacifica Police Department would need to hire 14 additional sworn officers (see **Table 3.10-3**). Of these 14 officers, five of which would be needed to accommodate additional population under the Proposed Project. This small staff increase would not necessitate any new construction of police facilities, as the current police headquarters is less than 20 years old and considered adequate for maintaining current levels of service for anticipated future population growth.

Table 3.10-3: Police Officers Needed at Buildout

	<i>Population</i>	<i>Sworn Officers</i>
<i>2021</i>	38,048	33*
<i>2040 General Plan without Proposed Project</i>	41,050	42
<i>2040 General Plan with Proposed Project</i>	46,440	47
Additional at Buildout Compared to 2021	8,392	14

*: The Police Department's current staffing ratio is slightly less than 1 officer per 1,000 population due to current reduced staff.

Source: City of Pacifica Police Department, 2021; 2022 ACS 5-Year Estimates; Dyett and Bhatia, 2024.

Though there is no guarantee that maintaining the service ratio will adequately account for all staffing and facilities needs that may arise in the future, any changes and associated impacts will be made over time in response to the future demands of the population. According to the General Plan Implementing Policy SA-I-110, the City will periodically review procedures and response times to ensure equitable police service across the community. Given these considerations and General Plan policies to support adequate levels of police service, this impact is considered less than significant for police services.

Schools

Buildout of the Proposed Project will add to the existing population, which will also increase the number of households in Pacifica. These households will add elementary, middle, and high school students to the city. Using past trends of the Pacifica School District, future school enrollment can be projected.

According to the California Department of Finance, population growth for San Mateo County in ages 14 and under is forecasted to be generally negative, and enrollment district-wide for students K-12 is expected to decrease by 11,000 students by 2028. Based on this projection, the estimated increase in students for Pacifica is expected to be generally flat or negative. Buildout of the Proposed Project will generate approximately 590 new students enrolled in public schools grades K-12 by 2040. A breakdown of the projected additional students in Pacifica to 2040 is shown in **Table 3.10-4** below.

Table 3.10-4: Future School Enrollment by District

<i>School District¹</i>	<i>2023-2024 Enrollment</i>	<i>Projected 2040 Enrollment²</i>	<i>Capacity</i>
Pacifica School District	2,714	3,108	3,207
Jefferson Union High School District ³	1,188	1,384	2,550
Total		4,492	

1. Includes Linda Mar Educational Center (Pre-K-8)

2. Calculated using student generation rates for projected buildout of new housing units (PSD student generation rate: 0.316 for single family, 0.181 for multifamily; JUHSD student generation rate: 0.09 for all housing types). These student generation rates are equivalent to the rates used in the General Plan DEIR.

3. Only includes schools within the district that are located in the Planning Area (Oceana and Terra Nova High Schools)

Sources: California Department of Education, 2024; Dyett & Bhatia, 2024; Pacifica School District, 2019; Jefferson Union High School District, 2020.

As seen in **Table 3.10-4** above, it is projected that school enrollment will likely be within the designated capacity for the Pacifica School District and Jefferson Union High School by 2040. However, if enrollment goes beyond capacity, there does exist the potential to re-open the Linda Mar site as a school (Duspiva, 2013).

While this projection is based on student generation rates for projected buildout consistent with past housing development student generation, overall, the number of school aged children is expected to remain fairly stable in California. The DOF estimates that enrollment in California public schools will decrease by 0.93 percent over the next decade, and that San Mateo County enrollment will decrease by 0.88 percent. As shown in **Table 3.10-5**, below, enrollment has consistently decreased over the past seven school years.

Table 3.10-5: Pacifica Public School District Enrollment Trends

Grade Level	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
Pacifica School District ¹	3,114	3,111	3,110	3,006	2,811	2,759	2,737
Change	-36	-3	-1	-4	-195	-52	-22
Jefferson Union High School District ²	1,533	1,411	1,409	1,342	1,315	1,274	1,188
Change	-46	-122	-2	-67	-27	-41	-86
1. Includes Pacifica Home Study							
2. Only includes schools within the district that are located in the Planning Area (Oceana and Terra Nova High Schools)							

Source: California Dept. of Education, 2024; Dyett and Bhatia, 2024.

Over the next 20 years, Pacifica School District anticipates only small increases in school enrollment. The District plans to address its facilities needs while maintaining existing square footage of instructional areas district-wide by refurbishing and modernizing existing spaces. The District also completed a Facilities Master Plan in 2019 outlining different improvements, such as expanding restrooms, adding fencing, replacing portable classrooms, and upgrading technology (Pacifica School District, 2017). Further, the District has indicated that existing facilities are adequate to meet future needs. The Jefferson Union High School District also projects that the District's current facilities are sufficient to accommodate the future needs of the population. Therefore, no additional school facilities will be necessary under the buildout of the Proposed Project. Further, SB 50 imposes school impact fees which are levied by school districts to require the payment of fees to mitigate school impacts. This would be a required fee for all developers and payments are based on the square footage and land use type of the new development. Therefore, impacts are less than significant.

Parks

Currently, Pacifica maintains 242 acres of District Parks, Neighborhood Parks, Pocket Parks, Special Facilities, and School Playfields, resulting in a park ratio of 6.3 acres per 1,000 residents. This ratio is higher than the existing park standard of 5 acres per 1,000 residents. These existing park standards do not include any requirements for Special Facilities or School Playfields. With the projected population under the Proposed Project, the citywide park standard is expected to be 5.6 acres per 1,000 residents. This ratio remains higher than the existing park standard of 5 acres per 1,000 residents.

However, General Plan Implementing Policy OC-I-2 requires that the City develop new parks in a timely manner using in-lieu fees or land dedicated as part of new development, to ensure that citywide park and recreation space is available to the community at a ratio of 6.3 acres per 1,000

residents by 2040. Therefore, new park development accompanying population growth would be expected to accommodate additional park demand at a level consistent with current usage.

The General Plan focuses the development of new parkland on underused public land and as part of new development. These policies would allow the City to avoid siting parkland on undisturbed, undeveloped land in order to reduce environmental impacts. Other General Plan policies establish guidelines for construction practices, siting, and design that require best management practices (BMPs) to protect water quality, identification of sensitive environmental habitat, and the protection of sites determined to have high habitat value. These guidelines include Low-Impact Development (LID) strategies to ensure that developed sites properly manage stormwater, and buffer requirements to protect habitats (Implementing Policies ES-I-36 and CO-I-26). General Plan policies also place prohibitions on wetland development and use of invasive species and require that biological productivity be maintained in coastal areas (Implementing Policies CO-I-1, CO-I-4, and CO-I-7). Certain types of parks, such as pocket parks, are anticipated to occur in infill areas, which would serve to limit potential impacts (Implementing Policy OC-I-10).

The environmental impacts related to traffic, noise, and air quality and GHG emissions during construction and operation of the park facilities in connection with proposed development on housing sites have been considered throughout this EIR. Detailed design of the new park facilities has not yet been completed, so site specific impacts cannot be evaluated at this time and were not considered in this EIR. However, construction of new parks would be subject to separate project-level CEQA review at the time the design is proposed in order to identify and mitigate project-specific impacts as appropriate. As such, compliance with existing regulations would reduce impacts to a less than significant level related to the provision of park facilities.

Other Public Facilities

Pacifica is served by the San Mateo County Libraries system, governed by the San Mateo County Library Joint Powers Authority (Library JPA). Pacifica is the only member of the Library JPA with two library branches: the Pacifica Sharp-Park Library and the Pacifica-Sanchez Library. The City of Pacifica is responsible for the cost of maintaining Pacifica's two library facilities. Pacifica's current libraries do not meet library standards for seating, accessibility, layout, parking, acoustics, shelving space, study rooms, and computers. Pacifica's two existing libraries combined provide approximately 10,524 square feet, translating to 0.26 square feet per service area resident, which is far below the one square foot per resident recommended by the American Library Association. An increase in population would further deteriorate the physical condition and service levels if no mitigating efforts are taken to improve the capacity of the libraries.

The City of Pacifica has been working toward building modern library facilities to meet the community's needs for almost two decades. In 2018, the City selected to move forward with a two-branch library system strategy, with one large full-service branch at Sharp Park, and one smaller "open access" model branch with a Community Center Annex at Sanchez. The City's General Plan would also support efforts to create a library/learning center that would function as a community gathering place, ensure that public facilities are adequate to meet the needs of residents, and that would identify appropriate land uses for existing library sites in the event that a new library is developed (Implementing Policies OC-I-60 and OC-I-61). Environmental impacts associated with the development of a new library site are subject to regulations such as the California Building Code

and NPDES permit process, as well as construction best management practices to limit land disturbance, development review to protect significant biological resources, promotion of water- and energy-efficient construction and landscaping, and management of archaeological materials found during development. Thus, while new library facilities will be necessary to meet the current and future needs of the city's population, because this need was pre-existing and protections are in place to ensure that the development of new facilities will not have an adverse environmental impact, this impact is considered less than significant.

Mitigation Measures

None required.

Impact 3.10-2 Development under the Proposed Project would not 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 (Less than Significant)

Physical deterioration of parks and facilities would occur if population increase were to take place without a corresponding increase in park development. Additional population would be expected to place added physical demands on existing park facilities by increasing the number of people using the parks, lengthening the periods of time during which the parks would be in active use, and/or increasing the intensity of use over the course of a typical day. Without proper maintenance, vital park elements such as vegetation, water resources, built structures, paths, sport facilities, and others would face increased wear over the planning period, and their useful lives could be shortened.

The City's General Plan policies prioritize the development of parkland in underserved areas, allowing for a more even distribution of park amenities throughout the city. These measures may prevent overutilization of parks by providing residents with greater access to parks within their own neighborhoods (Implementing Policy OC-I-4). The General Plan also includes guidelines intended to reduce the intensity of required maintenance. As discussed in Impact 3.10-1, General Plan Implementing Policy OC-I-2 requires that the City develop new parks in a timely manner using in-lieu fees or land dedicated as part of new development, to ensure that citywide park and recreation space is available to the community at a ratio of 6.3 acres per 1,000 residents by 2040. Therefore, new park development accompanying population growth would be expected to accommodate additional park demand at a level consistent with current usage. As such, substantial physical deterioration is not expected to occur or be accelerated at these facilities under the Proposed Project.

The City's regional parks and beaches will likely see an increase in use under buildout of the Proposed Project. Many of these sites contain sensitive natural resources, including protected species, coastal bluffs and landforms, wetland, and riparian habitat. Increased traffic to these recreation areas could have a negative impact on these resources unless access is properly tended to, and appropriate buffers and conservation protections are enforced. The City's General Plan promotes coordination with the various entities that manage these areas to ensure that they receive the necessary attention (Guiding Policies OC-G-8, OC-G-9, and OC-G-10). Additionally, the

General Plan contains many policies that extend trails and augment coastal access for all visitors (Implementing Policies OC-I-37 and OC-I-45 through OC-I-53).

Therefore, usage due to the Proposed Project would not substantially deteriorate or accelerate the deterioration of existing parks and recreational facilities, resulting in a less than significant impact.

Mitigation Measures

None required.

Impact 3.10-3 Development under the Proposed Project would not require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. (Less than Significant)

A significant impact would result if development under the Proposed Project would require the construction or expansion of recreational facilities such that environmental impacts would occur. As discussed under Impact 3.10-1, the increased local population generated by the Proposed Project would likely use existing public service and community facilities within the city, including community centers and school spaces that could be used for community activities (General Plan Implementing Policy OC-I-3). In addition, the General Plan anticipates that regional recreational facilities, such as the beach and trail system, will have access improvements and be expanded to accommodate an increasing population.

However, as detailed under Impact 3.10-1, an increase in population under the Proposed Project would further deteriorate the physical condition of library facilities and service levels if no mitigating efforts are taken to improve their capacity. The City of Pacifica has been working toward building modern library facilities to meet the community's needs and the City's General Plan would also support efforts to create a library/learning center that would function as a community gathering place, ensure that public facilities are adequate to meet the needs of residents, and that would identify appropriate land uses for existing library sites in the event that a new library is developed (Implementing Policies OC-I-60 and OC-I-61).

Project implementation would therefore result in increased use of recreational facilities in the city and the surrounding area. However, given the extent of existing facilities in Pacifica and the surrounding area and that the need for additional library facilities was pre-existing and protections are in place to ensure that the development of new facilities will not have an adverse environmental impact (see Impact 3.10-1), this impact is considered less than significant. As such, overall implementation of the Proposed Project would have a less than significant impact with respect to impacts associated with the construction or expansion of recreational facilities.

Mitigation Measures

None required.

3.11 Transportation

This section evaluates the potential impacts to transportation that could arise from implementation of the Proposed Project. The analysis evaluates the possible impacts of the Proposed Project on vehicle miles traveled (VMT), and determines if the Proposed Project would conflict with adopted policies, plans, and programs regarding public transit and bicycle and pedestrian facilities, substantially increase hazards due to a design feature or incompatible uses, or result in inadequate emergency access.

There were several comments on the Notice of Preparation related to transportation. The California Department of Transportation (Caltrans) submitted a comment letter with multiple comments regarding the transportation impacts, sorted by topic areas of travel demand analysis, multimodal transportation planning, integrated transportation and land use planning, and climate change/sea level rise. The City of Pacifica Emergency Preparedness & Safety Commission also submitted a letter requesting that vehicular evacuation routes be considered and evaluated. In addition, 25 public commenters submitted letters to express concerns about additional traffic, safety, and emergency access. These comments are addressed in the following Environmental Setting and Impact Analysis.

Environmental Setting

PHYSICAL SETTING

Streets and Highway System

Three major routes connect Pacifica to the rest of the region. State Route (SR) 1 (or the Coast Highway) traverses the city from north to south, connecting Pacifica to Daly City and San Francisco to the north, and to Half Moon Bay and the San Mateo County coastline to the south. SR 35 (or Skyline Boulevard) generally runs along the eastern edge of Pacifica and is a major north-south route connecting to Santa Clara County and San Francisco. Sharp Park Road follows a southwest-northeast route through the center of Pacifica, connecting SR 1 (Coast Highway) with SR 35 (Skyline Boulevard). It continues east of SR 35 in South San Francisco as Westborough Boulevard. Each of these major roadways intersects with I-280, an eight-lane major regional freeway on the Bay peninsula located between a half mile and two miles from the Planning Area.

Pacifica's roadway network is comprised of freeways and multi-lane highways, two-lane highways, arterials, collectors, and pedestrian priority zones, as described below. Each classification reflects the character of the roadway as well as its function within the context of the entire circulation system. Each classification has standards that consider a facility's relation to surrounding land uses,

existing right-of-way, accessibility via other roadways, and appropriate travel speeds. It prioritizes travel modes for each road, and how to accommodate multiple travel modes. **Figure 3.11-1** illustrates the existing roadway network with street classifications.

Roadway Classification

Freeways and Multi-Lane Highways

Freeways typically have speed limits of 55 and 65 miles per hour (mph) and four to eight lanes, with physical medians and uninterrupted flow. Multilane highways generally have posted speed limits between 40 and 55 mph (C/CAG, 2019). Unlike freeways, multilane highways are interrupted by intersections or driveways. These roadway types serve high volumes of high-speed regional vehicle traffic, including automobiles and trucks. Bicycling and pedestrians are prohibited.

In Pacifica, SR 1 north of Linda Mar Boulevard and SR 35 (Skyline Boulevard) both have segments that are freeways and segments that are multilane highways. Interstate 280 is an important regional freeway near but outside the Planning Area.

Two-Lane Highways

The 2019 C/CAG Congestion Management Program defines a two-lane highway as a two-lane roadway with one lane for use by traffic in each direction. In Pacifica, SR 1 is considered a two-lane highway south of Linda Mar Boulevard.

Arterials

In Pacifica, arterials are classified as roadways that are wider, accommodate higher volumes of traffic, or may provide access to the state highway system. Arterials generally provide important connections between different areas of Pacifica. They have frequent intersections and points of access and may pass through pedestrian-intensive commercial areas. These roadways serve relatively high volumes of vehicles but are also important links for bicycle and pedestrian movement. Most arterials in Pacifica have existing or planned bike lanes. In most cases, arterials are also the location of bus service in Pacifica. Along certain arterials, notably Palmetto Avenue, Esplanade Avenue, and sections of Oceana Boulevard, Paloma Avenue and Manor Drive, the pedestrian environment is prioritized.

In the northern section of the City, Sharp Park Road, Manor Drive, and Monterey Road/Hickey Boulevard all serve as through-passages between SR 1 and SR 35. Francisco Boulevard, Oceana Boulevard, Palmetto Avenue and Lundy Way each run parallel to SR 1 and provide access points to on/off ramps. Since these roadways provide access to the state route system and experience higher volumes of vehicle traffic, they are classified as arterials.

Due to the bisecting nature of SR 1, certain roadways are vital to traffic circulation west of SR 1. Palmetto Avenue is the only roadway west of State Route 1 to extend from the northern edge of the city to central Pacifica. At the southern terminus of Palmetto Avenue, Lakeside Drive connects Palmetto Avenue to Francisco Boulevard. Paloma Avenue provides one of the few connections between the east and west sides of Pacifica across SR 1. Esplanade Avenue and West Avalon Drive connect to Palmetto Avenue and front the ocean in northern Pacifica, circling the Manor Plaza

commercial area. Reina Del Mar Avenue, Fassler Avenue/Terra Nova Boulevard and Linda Mar Boulevard provide direct routes between SR 1 and neighborhoods on the south side of Pacifica.

Collectors

In Pacifica, collectors have slower permitted speeds than arterials, serve short, local trips, and accommodate travel between residential neighborhoods and arterials. Collectors are generally larger streets in residential areas but have smaller widths than arterials. Collectors have moderate volumes of vehicular traffic, and equally accommodate automobiles, bicycles, and pedestrians within the right-of-way. Transit use, if any, is incidental, and pedestrians are provided with continuous sidewalks on both sides of the street, to the greatest extent feasible. On-street parking is allowed and encouraged.

In northern Pacifica, Gateway Drive, Inverness Drive, and upper Monterey Road are considered collectors since these roadways are gateways between neighborhoods and arterials or are through-passages between arterials. Paloma Avenue east of Highway 1 is a collector and joins residential areas to Oceana Boulevard. There are more collectors in the more residential southern part of Pacifica. These include segments of Rockaway Beach Avenue, Crespi Drive, San Pedro Avenue, Rosita Road, and Oddstad Boulevard.

Figure 3.11-1:
Roadway Network
and Planned
Improvements



Source: City of Pacifica, 2020; DKS, 20019;
San Mateo County, 2020; Dyett & Bhatia, 2024.

Transit Service

The San Mateo County Transit District (SamTrans) provides bus service throughout San Mateo County and into San Francisco and Palo Alto. SamTrans provides local service in Pacifica as well as service to and from BART and Caltrain stations. **Figure 3.11-2** details existing bus routes in Pacifica.

Bus Routes

As of 2024, SamTrans Coastside bus routes include service to the City of Pacifica. There are 10 Coastside bus routes, eight of which intersect with the Planning Area. Route 10 runs from Daly City BART to Terra Nova High School; Route 12 runs from Pacifica School to Fairmont Shopping Center; Route 14 is the Linda Mar Circulator; Route 19 serves Lacy School, Linda Mar, and Terra Nova School; Route 42 serves Pacifica, Daly City, San Bruno, and South San Francisco; Route 110 connects Linda Mar Park & Ride to Daly City BART; Route 112 connects Linda Mark Park & Ride to Colma BART; and Route 117 connects Linda Mark Park & Ride to Moonridge Apartments.

BART and Caltrain

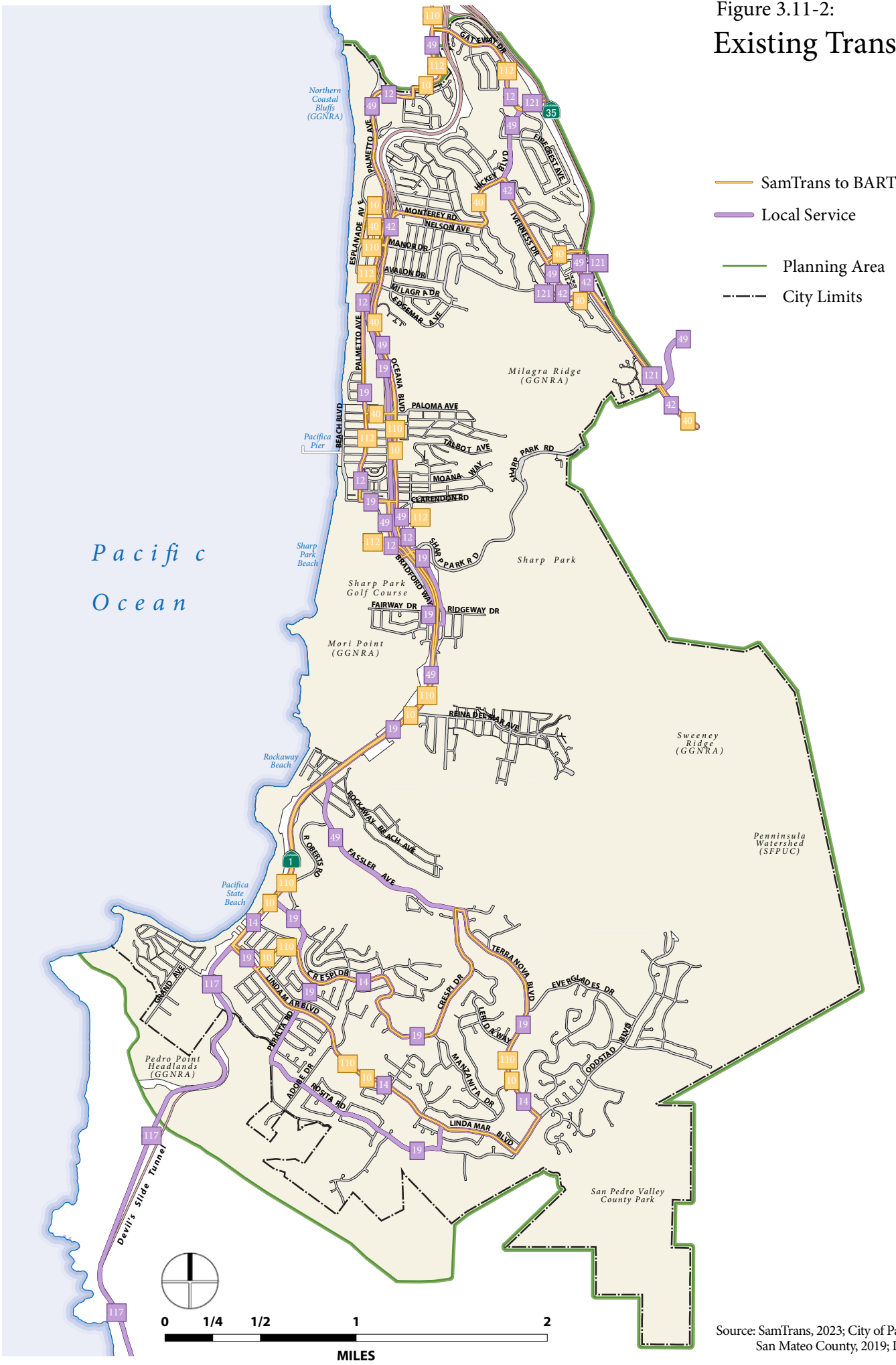
Bay Area Rapid Transit (BART) provides heavy rail rapid transit to Alameda, Contra Costa, San Francisco, and San Mateo Counties. The Colma, Daly City, San Bruno, and South San Francisco BART stations are accessible to Pacifica residents via bus connections or by car.

Caltrain is a passenger rail line providing commuter service over a 77-mile route between downtown San Francisco and Gilroy, through San Jose and along the San Francisco Peninsula. Service is provided with headways between 5 and 20 minutes during the peak hours, 30 minutes during off-peak hours during weekdays, and one hour on weekends. The San Bruno station is approximately eight miles east of Pacifica.

Dial-a-Ride Service

All SamTrans buses are accessible to persons with disabilities. However, the San Mateo County Transit District also operates dial-a-ride (or paratransit) service for persons who cannot use fixed-route bus service, as required by the Americans with Disabilities Act (ADA). Paratransit service in the Planning Area is called RediCoast. Certified RediCoast customers may schedule trips over the phone.

Figure 3.11-2:
Existing Transit Routes



Source: SamTrans, 2023; City of Pacifica, 2019;
San Mateo County, 2019; Dyett & Bhatia, 2024.

Transportation Demand Management

Transportation Demand Management (TDM) refers to strategies and incentives to increase the efficiency of the transportation network by promoting alternatives to single-occupancy-vehicle travel at peak hours. The current Congestion Management Plan (CMP), adopted in 2019, provides continued support for TDM programs in San Mateo County (C/CAG, 2019). These programs may include employer-based shuttle programs for large employers; alternative commuting support services; and school carpool programs. TDM programs may help to support alternative travel methods in Pacifica.

Pedestrian and Bicycle Network

Bicycle Circulation

Pacifica's Bicycle system includes four types of bikeway classifications, consistent with Chapter 1000 of the Caltrans Highway Design Manual:

- Class I facilities (bike paths or trails) have exclusive right-of-way, are separated from roads, and exclude general motor vehicle traffic.
- Class II facilities (bike lanes) are marked by painted stripes on the roadway. While the striping provides preferred space for bicycles, they are still part of the paved road and are not exclusive for bicycles.
- Class III facilities (bike routes) share traffic lanes with automobiles. Some Class III bicycle routes include shared lane markings or “sharrows” that recommend proper bicycle positioning in the center of the travel lane and alert drivers that bicyclists may be present. Others include more robust traffic calming features to promote bicyclist comfort and are known as “bicycle boulevards.”
- Class IV facilities (separated bikeways) are for the exclusive use of bicycles and includes a separation required between the separated bikeway and the through vehicular traffic. The separation may include, but is not limited to, grade separation, flexible posts, inflexible posts, inflexible barriers, or on-street parking.

Figure 3.11-3 shows Pacifica's bikeway network. Within Pacifica, there are 11 miles of bicycle facilities. Existing facilities are broken into two primary categories: on-street bikeways and trails. The Coastal Trail is the centerpiece of Pacifica's trail network and accounts for most of the system's mileage. The Coastal Trail and Palmetto Avenue are the primary active transportation north-south spines of Pacifica's active transportation network; both are west of Highway 1. Highway 1 and the side path (about 10-feet wide), where present, also provides north-south connectivity, but in a higher-stress environment. Currently, bike lanes are primarily on three corridors: Linda Mar Boulevard, Palmetto Avenue, and the uphill side Sharp Park Road. The Palmetto and Linda Mar facilities provide access to schools, and the Sharp Park facility connects to the Milagra Ridge Trail. However, many of the shared-use paths within Pacifica lack comfortable bikeways along major arterials and gaps at barriers and may leave people who want to bike disconnected from the many destinations within Pacifica. Bike racks are close to most major destinations along the two bike routes, but are not present at Rockaway Beach, the beach access location at the end of Esplanade Avenue, in the Pedro Point area, at some of the public schools, or in the Pacific Manor commercial area.

Pacifica's scenic setting, recreational amenities, and connections to major regional open spaces and trails make it ideal for recreational bicycle riding, and for local trips along the coastline or in the valley neighborhoods. However, at present the network of bicycle routes is inconsistently developed and not well marked.

Improvements to the bicycle system included in the proposed General Plan are also shown in **Figure 3.11-3**. This system would provide bicyclists with a complete network of continuous and safe access along the coastal corridor and between neighborhoods.

Pedestrian Circulation

Sidewalks and Crosswalks

Based on October 2008 and 2019 field observations, most arterial and residential streets have sidewalks. Sidewalks are not present along major roadways including SR 1, SR 35, and Sharp Park Road. Where sidewalks are present, they are generally between four and six feet wide and in good condition. Crosswalks are provided at all study intersections with appropriate striping and, where appropriate, pedestrian signals.

Pedestrian and Bicycle Crossings of Highway 1

Highway 1 is a freeway between Pacifica's northern city limits and the Fairway Park neighborhood. Within city limits, there are thirteen crossings of Highway 1. There are five at-grade crossings (ground level with intersections), five above-grade (overpasses) crossings, and three below-grade crossings (underpasses and tunnels). Pedestrian/bicycle overcrossings are located at Milagra Drive and San Jose Avenue, with an undercrossing at Sharp Park Golf Course.

Figure 3.11-3:
Existing and Proposed
Bicycle Network



Hiking and Pedestrian Trails

Pacifica is home to a network of trails along the Pacific Ocean and on inland ridges. Some are paved and allow for cycling and pedestrians, while others are unpaved and only accommodate pedestrians. Some are open to horseback riders. A brief summary of existing trails follows:

- The Coastal Trail is a seven-mile coastal trail starting from Sharp Park Beach, crossing Mori Point, passing through Rockaway Beach, and ending at Pacifica State Beach near the Linda Mar district.
- Milagra Ridge, part of the Golden Gate National Recreation Area (GGNRA), has paved paths for hiking and bicycles and unpaved paths for hiking only.
- Mori Point is an addition to the GGNRA. With significant contributions from local volunteers, Mori Point now features an elevated trail with wooden decking leading to a viewing platform overlooking a new habitat pond; an accessible trail loop; and a new link in the Coastal Trail.
- The GGNRA's Sweeney Ridge unit features Mori Ridge Trail, connecting Shelldance Nursery at Highway 1 with Sweeney Ridge (approximately 2.4 miles); Baquiano Trail, from the top of Fassler Avenue eastward to the Portola Discovery Site (approximately 1.5 miles); Sneath Lane from San Bruno west to the Discovery Site, and Sweeney Ridge Trail, extending along the crest and connecting these trails.
- Sweeney Ridge Trail a part of the larger Bay Area Ridge Trail, a 310-mile intermittent trail loop around the Bay Area. The Bay Area Ridge Trail continues along the Fifield and Cahill Ridges to the south. To the north, it is interrupted at Milagra Ridge; a separate segment resumes near Mussel Rock just north of Pacifica.

Freight Movement

In addition to moving people, the roadway system in Pacifica carries trucks moving goods. Trucks move through the city and to destinations in the city, particularly in commercial areas. However, there is very little industrial activity in the Planning Area, and there are minimal locally originating truck trips.

SR 1 and SR 35 are State-designated truck routes, including their segments in the Planning Area. The routes allow truck traffic to pass through the city with minimal impact on residential neighborhoods, local vehicular traffic and pedestrians. They also aim to discourage the use of Sharp Park Road for through truck traffic because of its sharp curves and grade change. Designated truck routes do not prevent trucks from using other streets as needed for local trips.

Existing Travel Patterns

Existing travel patterns are analyzed in terms of origin and destination, trip type, and travel mode, using information from the C/CAG travel demand model. In **Table 3.11-1**, "home-based work trips" are distinguished from "other trips," such as recreation-, shopping-, and school-related trips, and trip types are shown by the geography of trip production (home location for home-based travel) and attraction (work or other location).

Table 3.11-1: Daily Travel Patterns

Trip Attraction (e.g., Work Site)	Percent of Trips by Trip Type		
	Home-Based Work Trips	All Other Trips	Total Trips
Daily Travel starting in Pacifica			
Within Pacifica	10%	52%	41%
San Mateo County (not Pacifica)	38%	35%	35%
San Francisco	41%	11%	19%
Other Counties	11%	2%	5%
Total	100%	100%	100%
Daily Travel starting outside Pacifica			
Within Pacifica	28%	64%	59%
San Mateo County (not Pacifica)	39%	27%	29%
San Francisco	23%	6%	9%
Other Counties	9%	3%	4%
Total	100%	100%	100%

Source: DKS Associates, 2021.

Home-based work trips from Pacifica (Pacifica residents) to San Francisco or to other parts of San Mateo County account for 79 percent of the trips in this category, with only 10 percent of such trips staying in Pacifica. In other words, the great majority of Pacifica’s resident workforce commutes out of the city. Alternatively, 28 percent of commuter trips to jobs in Pacifica originate in Pacifica, representing the second largest source with the first being the remainder of San Mateo County with 39 percent. The majority of home-based work trips to and from Pacifica are non-local, however.

On the other hand, 52 percent of all “other” trips that begin in Pacifica have local destinations and 64 percent of “other” trips with Pacifica destinations also begin there. This indicates that well over half of recreation-, shopping- and school-related trips are local. Altogether, about half (41 percent of trips from Pacifica, 59 percent of trips to Pacifica) of all trips are made entirely within the city.

Table 3.11-2 details the share of trips to and from Pacifica made by transit. Three percent of trips made by Pacifica residents are made by public transit. For trips from Pacifica, more people drive to Caltrain and BART. Trips to San Francisco employment and other attractions are the most likely to be made by transit. Transit accounts for only a small fraction (0.12 percent) of trips within Pacifica. Trips made by residents of locations outside of Pacifica to employment in Pacifica and other attractions are much less likely to be made by transit.

Table 3.11-2: Transit Mode Share of All Trips

<i>Destination</i>	<i>Drive-Access to Transit¹</i>	<i>Walk-Access to Transit²</i>	<i>Total Access Trips to Transit</i>
Trips from Pacifica			
Pacifica	0.00%	0.12%	0.12%
San Mateo County (not Pacifica)	0.17%	0.61%	0.78%
San Francisco	10.47%	3.97%	14.45%
Other Counties	0.94%	0.62%	1.56%
Total	2.12%	1.05%	3.17%
Trips to Pacifica			
Pacifica	0.00%	0.12%	0.12%
San Mateo County (not Pacifica)	0.05%	0.44%	0.48%
San Francisco	0.01%	1.36%	1.37%
Other Bay Area Counties	0.18%	0.69%	0.88%
Total	0.02%	0.34%	0.36%

Notes: 1) Includes Park-and-Ride trips and “Kiss and Ride” (drop off) trips to bus, BART or Caltrans stations; 2) Transit stop is reached by walking

Source: DKS Associates, 2021.

Planned Improvements

The City currently has one roadway improvement project in the planning stage within the Planning Area. This improvement is related to the Manor Drive Overcrossing project, described below and shown in Figure 3.11-1. Other improvements to the roadway network are expected to be needed during the General Plan planning period to achieve a balance between existing and future land use and traffic carrying capacity. Major street improvements planned or programmed for Pacifica are shown in **Figure 3.11-1** and described below.

Manor Drive Overcrossing

SR 1 bisects Pacifica, and makes travel between the east and west sides of the city difficult in some locations. In the northern area of the city, there are three crossings of State Route 1 in a three-mile stretch. These crossings connect neighborhoods east of State Route 1 to residential and commercial areas and beaches west of the highway. One of these crossings, at Manor Drive, provides a direct connection between the Pacific Manor shopping area, Pacifica’s northern neighborhoods and beyond. The overcrossing and its intersections must handle a variety of different travel movements, and have dimensions that make these movements difficult for trucks and buses. To alleviate these circulation concerns, the Manor Drive overcrossing would be widened, and signal control is recommended to be added at the intersections of Manor Drive with Oceana Boulevard and Palmetto Avenue. The project would also include a new on-ramp to SR 1 from Oceana at Milagra Drive. The overcrossing improvement was identified in the 2004 extension of Measure A. The

project is currently under environmental review and will take two to three years to complete after the environmental review has concluded.

Additional Improvements to Accommodate General Plan Buildout

Additional improvements are justified based on the analysis of existing traffic conditions and projected future traffic conditions with projected growth during the General Plan planning period, compared to the city's level of service standards as described in the following sections. These improvements are supported by General Plan policies in the next section.

Planned Transit Improvements

In March 2022, the SamTrans Board of Directors approved a set of changes to the SamTrans bus network through a project known as Reimagine SamTrans. This new network was crafted after careful consideration of what was heard from the public, from over 200 outreach meetings and thousands of comments and survey responses over the course of two and a half years. Future phases of implementation will include more service on weekends and during midday or evening times on 10 routes, new routes to San Mateo County community colleges, and new on-demand services areas.

The Congestion Management Plan (CMP), most recently adopted in 2019, renews support from the City/County Association of Governments of San Mateo County (C/CAG) for a variety of congestion relief programs. These include the Local Transportation Services program, which helps to fund transportation services that meet the unique characteristics and needs of a jurisdiction. Funds are awarded on a competitive basis. This program may help to support existing or future local bus services in Pacifica.

TRAFFIC OPERATIONAL CONDITIONS

Consistent with state law, this EIR uses vehicle miles traveled (VMT) as the threshold for determining potentially significant environmental impacts related to transportation. However, CEQA Guidelines Appendix G also requires that EIRs evaluate consistency with programs, plans, ordinances or policies addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. Therefore, this EIR analyzes the Proposed Project's compliance with the San Mateo County Congestion Management Program (CMP) which, pursuant to Government Code Section 65089, requires an analysis of level of service (LOS) on the CMP roadway system within San Mateo County. As noted in the Regulatory Setting section, the CMP legislation requires use of the LOS metric, and the legislation may be amended in the future to better align with the shift to VMT as the preferred measure of transportation impacts under CEQA (C/CAG, 2019).

Intersection Operations

Methodology and Performance Standards

The intersection operational analysis was conducted for the morning and afternoon peak hours within the study area. Note that descriptions of the LOS methodologies are provided below in the Methodology and Assumptions section of the Transportation chapter, and that LOS calculations for all analysis scenarios are included in Appendix E.

As stated in the General Plan, the most significant congestion occurs on SR 1 and SR 35, where some intersections and roadway segments currently operate at a LOS E or F during peak periods. The City of Pacifica has established a policy to limit further deterioration of traffic conditions by maintaining LOS D for City streets. The performance standards set by the C/CAG for the San Mateo County Congestion Management Program (CMP) apply to CMP roadway segments.

Intersection Operational Analysis Results

Table 3.11-3 summarizes the intersection operational analysis results for the 2040 Proposed Project scenario in comparison to the Existing and 2040 Preferred Conditions from the 2040 General Plan. The operations of the five CMP study intersections do not change much between the General Plan Preferred and 2040 Proposed Project scenarios except for the intersection of Hickey Boulevard and SR 35 (Intersection 1). With optimized signal splits, the delay at this intersection decreases by about 4 seconds in the morning peak hour, although the level of service remains at LOS D. Of the eight non-CMP intersections, one additional intersection would fall below the performance threshold with the traffic associated with additional development. Paloma Avenue and Francisco Boulevard (Intersection 5) is expected to operate at a LOS E, with over 49 seconds per vehicle delay during the afternoon peak hour. This intersection previously operated at an acceptable level of service under the General Plan Preferred scenario.

Table 3.11-3: Intersection Operational Analysis Results Summary

No.	Intersection	Control	Peak Hour	Existing Conditions		2040 Proposed Project Conditions		2040 Rezone Conditions	
				Delay	LOS	Delay	LOS	Delay	LOS
1	Hickey Blvd & CA-35*	Signalized	AM	41.7	D	50.8	D	46.7	D
			PM	39.1	D	50.8	D	51.3	D
2	Manor Dr & Oceana Blvd	AWSC3 Signalized Build	AM	32.1	D	96.9	F	97.5	F
			PM	23.0	C	71.7	E	93.9	F
3	Manor Dr & Palmetto Ave	AWSC3 Signalized Build	AM	18.0	C	63.1	E	66.3	E
			PM	23.2	C	44.3	D	54.9	D
4	Paloma Ave & Oceana Blvd	AWSC3 Signalized Build	AM	66.6	F	48.4	D	51.5	D
			PM	15.4	C	23.5	C	31.4	C
5	Paloma Ave & Francisco Blvd	AWSC3	AM	12.2	B	20.8	C	21.0	C
			PM	13.9	B	28.7	D	49.3	E
6	Paloma Ave & Palmetto Ave	AWSC3	AM	11.2	B	17.5	C	18.1	C
			PM	9.8	A	13.2	B	15.3	C
7	Clarendon Rd & Oceana Blvd	AWSC3	AM	9.8	A	11.9	B	13.2	B
			PM	10.2	B	11.6	B	12.5	B
8	Clarendon Rd & Francisco Blvd	AWSC3	AM	12.4	B	17.1	C	20.3	C
			PM	12.3	B	15.3	C	16.3	C
9	Francisco Blvd & CA-1	AWSC3	AM	5.0	A	5.0	A	5.0	A
			PM	5.0	A	5.0	A	5.0	A
10	CA-1 & Reina Del Mar Ave*	Signalized	AM	61.0	E	69.6	E	80.0	E
			PM	35.5	D	58.2	E	71.0	E
11	CA-1 & Fassler Ave*	Signalized	AM	35.5	D	38.8	D	45.0	D
			PM	47.8	D	37.0	D	40.3	D
12	CA-1 & Crespi Dr*	Signalized	AM	12.2	B	14.7	B	17.7	B
			PM	7.1	A	9.7	A	10.0	B
13	CA-1 & Linda Mar Blvd*	Signalized	AM	24.0	C	28.0	C	28.9	C
			PM	27.2	C	43.6	D	45.2	D

* Intersections included in C/CAG's Congestion Management Program (CMP) for San Mateo County.

1 Delay is in seconds per vehicle. For signalized intersections, delay is based on average stopped delay. For unsignalized intersections, delay is based at the worst approach for two-way stop-controlled intersection.

2 LOS = Level of Service, AWSC = All-Way Stop Control

Source: Pacifica General Plan 2040 and DKS Associates, 202

Segment Operations

Methodology

Operational analysis of roadway segments evaluated for the General Plan was updated using traffic volumes forecasted for the 2040 Proposed Project scenario. Note that descriptions of the LOS methodologies are provided below in the Methodology and Assumptions section of the Transportation chapter, and that LOS calculations for all analysis scenarios are included in Appendix E.

Roadway Segment Analysis Results

Table 3.11-4 summarizes the roadway segment operational analysis results for the 2040 Proposed Project scenario compared to the Existing and 2040 Preferred Conditions. All 10 non-CMP roadway segments are still expected to operate at acceptable levels of service in both peak periods. Of the 16 CMP studied roadway segments, one segment is expected to exceed the LOS threshold under the 2040 Proposed Project scenario. During the afternoon peak hour, the v/c ratio of SR 1 from Fassler Avenue to Crespi Drive in the southbound direction is expected to increase from 0.97 (LOS E) under the 2040 Preferred scenario to 1.03 (LOS F) under the 2040 Proposed Project scenario. SR 1 between San Pedro Avenue and Linda Mar Boulevard is expected to somewhat improve its v/c from LOS F to LOS E in the morning peak period. This could be due to increased congestion resulting in changes in route in the traffic assignment. All the other segments are expected to operate at similar levels of service compared to the 2040 Preferred scenario.

Table 3.11-4: Roadway Segment Analysis Results Summary

Roadway Segment	Location	Class	Direction	Measure of Effectiveness (MOE)	Peak Hour	Existing Conditions		2040 General Plan Buildout Conditions		2040 Proposed Project + General Plan Buildout Conditions	
						MOE	LOS	MOE	LOS	MOE	LOS
Hickey Blvd	Between SR 35 and Gateway	Type II	Southbound	V/C Ratio	AM	0.26	A	0.25	A	0.26	A
					PM	0.57	A	0.27	A	0.56	A
			Northbound	V/C Ratio	AM	0.45	A	0.40	A	0.43	A
					PM	0.33	A	0.31	A	0.33	A
SR 35*	Between South of SR 1 and Hickey Blvd	Type I	Southbound	V/C Ratio	AM	0.60	A	0.64	B	0.61	A
					PM	0.07	C	0.85	D	0.86	D
			Northbound	V/C Ratio	AM	0.07	B	0.75	C	0.77	C
					PM	0.58	A	0.68	B	0.65	B
SR 35*	Between Hickey Blvd and Timber Hill St	Type I	Westbound	V/C Ratio	AM	0.90	D	0.53	A	0.51	A
					PM	0.90	D	0.67	B	0.71	B
			Eastbound	V/C Ratio	AM	0.87	D	0.51	A	0.58	A
					PM	0.88	D	0.64	B	0.60	A
Reina del Mar Ave	Between SR 1 and Lauren Ave	Type I	Westbound	V/C Ratio	AM	0.34	A	0.40	A	0.41	A
					PM	0.27	A	0.31	A	0.32	A
			Eastbound	V/C Ratio	AM	0.36	A	0.42	A	0.43	A
					PM	0.22	A	0.26	A	0.26	A
Fassler Ave	Between SR 1 and Ebken St	Type I	Westbound	V/C Ratio	AM	0.21	A	0.22	A	0.22	A
					PM	0.38	A	0.39	A	0.40	A
			Eastbound	V/C Ratio	AM	0.39	A	0.40	A	0.40	A
					PM	0.20	A	0.20	A	0.20	A
		Type II	Westbound	V/C Ratio	AM	0.11	A	0.13	A	0.13	A

Table 3.11-4: Roadway Segment Analysis Results Summary

Roadway Segment	Location	Class	Direction	Measure of Effectiveness (MOE)	Peak Hour	Existing Conditions		2040 General Plan Buildout Conditions		2040 Proposed Project + General Plan Buildout Conditions	
						MOE	LOS	MOE	LOS	MOE	LOS
Crespi Dr	Between SR I and Roberts Rd		Eastbound	V/C Ratio	PM	0.20	A	0.25	A	0.26	A
					AM	0.18	A	0.24	A	0.24	A
					PM	0.15	A	0.18	A	0.18	A
Linda Mar Blvd	Between SR I and De Solo Dr	Type II	Westbound	V/C Ratio	AM	0.22	A	0.23	A	0.23	A
					PM	0.42	A	0.41	A	0.41	A
			Eastbound	V/C Ratio	AM	0.30	A	0.29	A	0.29	A
					PM	0.29	A	0.30	A	0.31	A
SR I*	Between San Pedro Ave and Linda Mar Blvd	Two-Lane Highway I	Combined Directions	V/C Ratio	AM	0.27	C	1.03	F	0.74	E
					PM	0.20	B	1.05	F	0.98	F
SR I*	Between Linda Mar Blvd and Crespi Dr	Four-Lane Highway	Northbound	V/C Ratio	AM	0.61	C	0.67	C	0.72	D
					PM	0.43	B	0.58	C	0.60	C
			Southbound	V/C Ratio	AM	0.30	B	0.43	B	0.43	B
					PM	0.69	C	0.79	D	0.83	D
SR I*	From Crespi Dr to Sea Bowl Ln	Four-Lane Highway	Northbound	V/C Ratio	AM	0.76	D	0.90	E	0.95	E
					PM	68.00	C	0.68	C	0.69	C
	From Sea Bowl Ln to Fassler Ave		Northbound	V/C Ratio	AM	0.78	D	0.90	E	0.95	E
					PM	0.52	C	0.68	C	0.69	C
			Southbound	V/C Ratio	AM	0.36	B	0.52	C	0.52	C

Table 3.11-4: Roadway Segment Analysis Results Summary

Roadway Segment	Location	Class	Direction	Measure of Effectiveness (MOE)	Peak Hour	Existing Conditions		2040 General Plan Buildout Conditions		2040 Proposed Project + General Plan Buildout Conditions	
						MOE	LOS	MOE	LOS	MOE	LOS
	From Fassler Ave to Crespi Dr				PM	0.83	D	0.97	E	1.03	F
SR 1*	Between Fassler Ave and Reina del Mar Ave	Four-Lane Highway	Northbound	V/C Ratio	AM	1.17	F	1.30	F	1.35	F
					PM	0.70	D	0.87	E	0.87	E
			Southbound	V/C Ratio	AM	0.59	C	0.76	D	0.75	D
					PM	1.16	F	1.35	F	1.42	F
SR 1*	Between Reina del Mar Ave and Mori Point Rd	Four-Lane Highway	Northbound	V/C Ratio	AM	1.23	F	1.37	F	1.42	F
					PM	0.72	D	0.89	E	0.89	E
			Southbound	V/C Ratio	AM	0.66	C	0.84	D	0.83	D
					PM	1.24	F	1.42	F	1.48	F
SR 1*	Between Mori Point Rd and Westport St	Four-Lane Highway	Northbound	V/C Ratio	AM	1.23	F	1.37	F	1.42	F
					PM	0.72	D	0.89	E	0.89	E
			Southbound	V/C Ratio	AM	0.66	C	0.84	D	0.83	D
					PM	1.24	F	1.42	F	1.48	F

* Roadway segments included in C/CAG's Congestion Management Program (CMP) for San Mateo County.

1 MOE = Measures of Effectiveness. For arterials, MOE is measured in v/c ratios (volume to capacity ratios).

2 LOS = Level of Service is based on 2019 C/CAG of San Mateo County Final CMP criteria

Source: Pacifica General Plan 2040 and DKS Associates, 2024

REGULATORY SETTING

State

California Department of Transportation

The California Department of Transportation (Caltrans) is responsible for planning, designing, constructing, and maintaining all State highways. Caltrans has guidelines for traffic operations on State Highway facilities. Through its Active Transportation Program (ATP), Caltrans sets the requirements for the content of active transportation master plan and requires an adopted plan to be eligible for state funding.

California Public Utility Commission

The California Public Utility Commission (PUC) is the state agency with regulatory and safety oversight over railroad rail transit, and passenger transportation companies in California.

California Transportation Commission Regional Transportation Plan Guidelines

California law relating to the development of the Regional Transportation Plans (RTPs) is primarily reflected in Government Code Section 65080. Pursuant to Government Code section 65080(d), Metropolitan Planning Organizations (MPOs) that are located in nonattainment areas must update their RTPs at least every four years. If the current RTP is determined to be adequate such that an update is not warranted, the MPO may re-adopt the current RTP.

The RTP Guidelines require that an RTP addresses three distinct elements—a policy element, an action element, and a financial element. In addition, when applicable, RTPs shall be consistent with federal planning and programming requirements and shall conform to the RTP Guidelines adopted by the California Transportation Commission (CTC). The CTC cannot program projects that are not identified in the RTP.

Under Government Code Section 14522, the CTC is authorized to prepare guidelines to assist in the preparation of RTPs. The CTC's RTP guidelines suggest that projections used in the development of an RTP should be based upon available data (such as from the Bureau of the Census), use acceptable forecasting methodologies, and be consistent with the Department of Finance baseline projections for the region. The guidelines further state that the RTP should identify and discuss any differences between the agency projections and those of the Department of Finance. The most recent update to the RTP guidelines was published in 2010, and includes new provisions for complying with Senate Bill 375 (see below), as well as new guidelines for regional travel demand modeling.

Senate Bill 743

SB 743 has changed the way transportation impact analysis is conducted as part of CEQA compliance. With these changes, automobile delay, level of service (LOS), and other similar measures of vehicular capacity or traffic congestion are no longer the basis for determining significant impacts under CEQA. According to SB 743, these changes are intended to “more appropriately balance the needs of congestion management with statewide goals related to infill

development, promotion of public health through active transportation, and reduction of greenhouse gas emissions.” In December 2018, the Governor’s Office of Planning and Research (OPR) completed an update to the CEQA Guidelines to implement the requirements of SB 743. The guidelines state that VMT must be the metric used to determine significant transportation impacts. The guidelines require all lead agencies in California to use VMT-based thresholds of significance for transportation impact analysis in CEQA documents published after July 2020.

Assembly Bill 1358

According to Assembly Bill (AB) 1358, the 2008 California Complete Streets Act, all cities and counties are required to plan for the development of multimodal transportation networks in their general plans beginning in January 2011. Upon any substantive revision of the circulation element of the general plan, the legislative body of a city or county is required to modify the circulation element to plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways, defined to include motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation, in a manner that is suitable to the rural, suburban, or urban context of the general plan.

Senate Bill 375

With the passage of Senate Bill (SB) 32, the Global Warming Solutions Act of 2006, the State of California committed itself to reducing greenhouse gas (GHG) emissions to 1990 levels by 2020. The Sustainable Communities and Climate Protection Act of 2008 (California Senate Bill 375) requires that metropolitan planning organizations (MPOs) in California prepare a Sustainable Communities Strategy (SCS) for meeting their greenhouse gas reduction targets, through coordinating planning for land use, transportation, and housing. The SCS demonstrates how the region will meet its greenhouse gas (GHG) reduction targets through integrated land use, housing and transportation planning. The SCS must identify a transportation network that is integrated with the forecasted development pattern for the plan area and will reduce GHG emissions from automobiles and light trucks in accordance with targets set by the California Air Resources Board.

There are four major components to SB 375. First, SB 375 requires regional GHG emissions targets. CARB’s Regional Targets Advisory Committee will guide the adoption of targets to be met by 2020 and 2035 for each Metropolitan Planning Organization (MPO) in the state. These targets, which MPOs may propose themselves, must be updated every 8 years in conjunction with the revision schedule of the housing and transportation elements of local general plans. Second, MPOs are required to create a Sustainable Communities Strategy (SCS) that provides a plan for meeting regional targets. The SCS and the Regional Transportation Plan (RTP) must be consistent, including action items and financing decisions. If the SCS does not meet the regional target, the MPO must produce an Alternative Planning Strategy that details an alternative plan for meeting the target. Third, SB 375 requires regional housing elements and transportation plans to be synchronized on 8-year schedules. In addition, Regional Housing Needs Assessment (RHNA) allocation numbers must conform to the SCS. If local jurisdictions are required to rezone land as a result of changes in the housing element, rezoning must take place within 3 years of adoption of the housing element. Finally, MPOs must use transportation and air emissions modeling techniques that are consistent with the guidelines prepared by the CTC. Regional Transportation Planning Agencies, cities, and counties are encouraged, but not required, to use travel demand

models that are consistent with CTC guidelines. The adopted RTP, per SB 375 (Plan Bay Area), is discussed below.

Regional

Regional Transportation Plan (Plan Bay Area)

Plan Bay Area is overseen by the MTC and the Association of Bay Area Governments (ABAG). The adopted Plan Bay Area 2040 (July 2017) serves as the region's SCS and the 2040 RTP (preceded by Transportation 2035), integrating transportation and land use strategies to manage GHG emissions and plan for future population growth. A public review draft of Plan Bay Area's update, Plan Bay Area 2050, was released in May 2021 and focuses on four key issues: the economy, the environment, housing and transportation; outlines 35 strategies for growth and investment through 2050; and identifies a path to make the Bay Area more equitable for all residents and more resilient in the face of unexpected challenges. The final Plan Bay Area 2050 was adopted in October 2021.

San Mateo C/CAG

As the designated Congestion Management Agency for San Mateo County, C/CAG is primarily responsible for administering the State-mandated Congestion Management Program (CMP). C/CAG-designated CMP roadway system components in Pacifica include Highway 1 (SR 1) and Skyline Boulevard (SR 35). C/CAG's LOS standard for intersections on this network is LOS E or better. LOS is a qualitative description of operations ranging from LOS A, when the roadway facility has excess capacity and vehicles experience little or no delay, to LOS F, where the volume of vehicles exceeds the capacity, resulting in long queues and excessive delays. LOS E represents "at-capacity" conditions, and LOS F represents "over-capacity" conditions. The Governor's Office of Planning and Research (OPR) is responsible for identifying the alternative metric and updating the CEQA Guidelines on transportation impact analysis. OPR has selected VMT as the new metric regarding transportation impact assessment under CEQA guidelines in December 2018 with statewide application beginning on July 1, 2020. Since the CMP legislation requires use of the LOS metric, the legislation may be amended in the future.

C/CAG is also responsible for preparing the Countywide Transportation Plan, which establishes a long-range transportation vision for the county and informs the *Regional Transportation Plan and Sustainable Communities Strategy* prepared by the MTC and ABAG. C/CAG also partners with local jurisdictions and other transportation agencies to develop transportation plans and studies for areas and projects with countywide and regional significance.

Local

Bicycle and Pedestrian Master Plan

The City of Pacifica Bicycle and Pedestrian Master Plan Update 2020 (Plan) establishes a long-term vision for improving walking and bicycling in Pacifica through policy, program, and project recommendations. Through the implementation of this Plan, the city can become a community where walking and bicycling is encouraged and the health of its residents and environmental sustainability is prioritized.

Impact Analysis

SIGNIFICANCE CRITERIA

For the purposes of this EIR, a significant impact would occur if the Proposed Project would:

- Criterion 1:** Conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, and bicycle and pedestrian facilities.
- Criterion 2:** Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).
- Criterion 3:** Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment).
- Criterion 4:** Result in inadequate emergency access.

METHODOLOGY AND ASSUMPTIONS

Vehicle Miles Traveled Analysis

As discussed above, Senate Bill 743 and the resulting CEQA Guidelines update completed in early 2019 replaces the use of LOS for determining transportation impacts with an evaluation of VMT. This EIR incorporates this change and uses VMT findings to make impact determinations later in this document.

The same methodology used to calculate VMT metrics for the general plan analyses was applied to assess the Proposed Project 2040 scenario. The calculations derive from the most recently published 2040 scenario of the trip-based travel demand model jointly maintained by C\ACAG and the Santa Clara County VTA.

The standard 2040 scenario reflects regional growth assumptions aligned with the previous regional transportation plan/Sustainable Community Strategy, Plan Bay Area 2040. DKS modified the land use inputs for the City of Pacifica Transportation Analysis Zones (TAZs) by adding growth increments reflecting the rezone sites to the previously developed assumptions for the General Plan. See Appendix E for more detail on the steps taken to calculate the VMT metrics.

Vehicle Miles Traveled Threshold

A key consideration in assessing the potential for VMT impacts is the selection of a threshold of significance. The City of Pacifica has not formally adopted VMT baselines or thresholds of significance. In lieu of locally adopted VMT baselines or thresholds, this analysis relies on the thresholds of significance established for the General Plan.

For the purposes of this EIR, a significant VMT impact would occur if the Proposed Project will result in:

- Residential VMT per Capita within the Planning Area exceeding a level of 15 percent below the existing citywide average VMT per Capita; or
- Employment VMT per Employee within the Planning Area exceeding a level of 15 percent below the existing Countywide average VMT per Employee.

Traffic Forecasts

The travel demand associated with the Proposed Project was forecasted using the model jointly maintained by the City\County Association of Governments (C\CAG) of San Mateo County and the Santa Clara County Valley Transportation Authority. The C\CAG-VTA model is regional and encompasses the nine-county Bay Area. The version of the model used incorporates land use forecasts for 2040 that are consistent with the Plan Bay Area 2040 Regional Transportation Plan/Sustainable Community Strategy (RTP/SCS). Inputs for the Transportation Analysis Zones (TAZs) covering Pacifica were based on the land use quantities for the Preferred General Plan alternative with modifications to reflect the Proposed Project. A total of 2,175 additional housing units and 250 jobs were assumed for the 2040 Proposed Project scenario.

Full model runs for the base year (2019) and Proposed Project forecast year (2040) were conducted to calculate a growth increment for study intersection peak hour approach volumes. This growth increment was used in conjunction with turning movement counts collected for the general plan analyses to arrive at updated turning movement forecasts. See Appendix E for more detail on the steps taken to calculate the traffic forecasts.

IMPACTS

Impact 3.11-1 Implementation of the Proposed Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, and bicycle and pedestrian facilities (Less than Significant)

A significant impact would occur if implementation of the Proposed Project would conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, and bicycle pedestrian facilities. New residential and non-residential development under the Proposed Project would typically be expected to result in additional vehicular trips and the increased use of streets for all modes of transportation. Applicable local regulations and plans related to transportation include Plan Bay Area 2050 and C/CAG's Congestion Management Program.

Plan Bay Area 2050

As noted in the *Regulatory Setting* above, Plan Bay Area (PBA) 2050 acknowledges the transportation sector's significant role in climate change, accounting for over 40 percent of California's greenhouse gas emissions. The plan emphasizes the importance of transportation choices and their relationship with housing and employment opportunities. Strategies focus on meeting the needs of historically marginalized communities, ranging from more frequent bus service to safety-enhancing improvements for pedestrians and cyclists. Plan Bay Area does not recommend a specific GHG or VMT reduction target or target-setting method for local

governments, but rather recommends local land use and transit strategies local governments can implement. Similar to the goals and strategies of Plan Bay Area, the Proposed Project would support a land use pattern with higher-density and infill developments where appropriate, including at existing commercial shopping centers. The Proposed Project also anticipates mixed-use development at some of the sites which would further support alternative modes of travel within the Planning Area.

Development under the Proposed Project would also be required to adhere to the City's General Plan policies that support PBA goals and strategies. For example, Implementing Policy CI-I-3 would incorporate complete streets concepts at each stage of the development process for projects affecting the right-of-way. Implementing Policy CI-I-5 would require pedestrian-oriented amenities and design in visitor-oriented commercial and mixed-use areas. Implementing Policy CI-I-28 would also enhance the pedestrian network with an interconnected system of walkways, continuous sidewalks on both sides of the street, and pedestrian crossings as part of higher-intensity redevelopment of large sites. As such, implementation of the Proposed Project would be consistent with Plan Bay Area 2050 transportation goals and the impact would be less than significant.

Congestion Management Program

As described in the Regulatory Setting, C/CAG is primarily responsible for administering the State-mandated Congestion Management Program (CMP). The C/CAG-designated CMP roadway system components in Pacifica include Highway 1 (SR 1) and Skyline Boulevard (SR 35). C/CAG's LOS standard for roadway segments on these roadways is LOS E or better. With buildout of the Proposed Project, the operations of the five CMP study intersections do not change much between the General Plan Preferred and Proposed Project scenarios except for the intersection of Hickey Boulevard and SR 35 (Intersection 1). With optimized signal splits, the delay at this intersection decreases by about 4 seconds in the morning peak hour, although the level of service remains at LOS D, as shown in Table 3.11-3.

However, of the of the 16 CMP studied roadway segments, one segment is expected to exceed the LOS threshold under the 2040 Proposed Project scenario, as shown in Table 3.11-4. During the afternoon peak hour, the v/c ratio of SR 1 from Fassler Avenue to Crespi Drive in the southbound direction is expected to increase from 0.97 (LOS E) under the 2040 Preferred scenario to 1.03 (LOS F) under the 2040 Proposed Project scenario. SR 1 between San Pedro Avenue and Linda Mar Boulevard is expected to somewhat improve its v/c from LOS F to LOS E in the morning peak period. This could be due to increased congestion resulting in changes in route in the traffic assignment. All the other segments are expected to operate at similar levels of service compared to the 2040 Preferred scenario.

The CMP transportation impact analysis (TIA) policy provides the significance criteria for an impact to a freeway segment. The criteria differ for those that currently comply with the CMP LOS standard and those that do not comply. CMP Appendix L, Section III.2 indicates that for General Plans, an acceptable approach to mitigate transportation impacts to the CMP roadway network is to have a local jurisdiction adopt a trip reduction policy that requires new development to make measurable reductions in their trip generation and that requires these trip reduction requirements to be incorporated in the standard conditions of approval. It goes on to provide that trip reduction

measures should include a plan for monitoring trip generation and procedures to determine if established targets are met or exceeded.

CMP Appendix I provides a “menu” of transportation demand management (TDM) measures acceptable to C/CAG and that may be implemented to reduce vehicle trips. These TDM measures typically apply only to projects that will generate 100 or more AM or PM peak hour trips. It indicates that projects must reduce demand for all new peak hour trips, including the first 100 trips. Therefore, the City’s General Plan Implementing Policy CI-I-50 requires conditions of approval for development projects that exceed the CMP threshold for impacts to the CMP transportation network to require adoption of TDM measures authorized by the CMP to make measurable reductions in their trip generation and to require a monitoring plan to determine if established trip reduction targets are met or exceeded.

The Proposed Project would thus be required to comply with General Plan policies that reduce congestion and encourage alternative modes of transportation other than vehicle trips, and specifically ensure compliance with the CMP and to reduce congestion on CMP roadway segments. Therefore, the Proposed Project would be consistent with the CMP and the impact of the Proposed Project would be less than significant.

Conclusion

Future development consistent with the Proposed Project would not conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Therefore, adoption of the Proposed Project and compliance with existing regulations would result in a less-than-significant impact related to conflicts with transportation plans.

Mitigation Measures

None required.

Impact 3.11-2 Implementation of the Proposed Project would conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b). (Significant and Unavoidable)

CEQA Guidelines Section 15064.3 requires that the determination of significance for transportation impacts be based on VMT instead of a congestion metric such as LOS. The change in the focus of transportation analysis is the result of SB 743. For the purposes of this EIR, the following thresholds of significance are used to determine if the Proposed Project has an impact under the terms of Criteria 2:

(a) Vehicle Miles Traveled:

1. A significant impact would occur if the Proposed Project increases the Vehicle Miles Traveled (VMT) per person above the baseline conditions.

In the case of the Proposed Project scenario, the baseline condition is considered the 2015 No Project condition, as established for the current General Plan EIR. **Table 3.11-5** also establishes

thresholds based on a 15 percent reduction from the various baseline VMT rates. The threshold of significance based on a 15 percent reduction would be a VMT per capita of 13.4 miles per resident for the City of Pacifica; and a home-based work VMT per employee of 14.2 at the countywide level.

Table 3.11-5 summarizes the VMT calculations for Pacifica under the 2015 Base Year, 2040 Preferred General Plan, and 2040 Proposed Project conditions. As expected with the addition of multifamily units and retail employment, the VMT per capita for Pacifica is expected to drop to 12.4 by 2040 under the Proposed Project scenario, which is below the threshold of significance. The Pacifica VMT per employee for the Proposed Project scenario also decreases relative to the Preferred General Plan scenario. However, the resulting VMT per employee under the 2040 Proposed Project scenario is 19.83, which falls above the threshold of significance.

Table 3.11-5: Pacifica VMT Metrics

	2015 Base Year	Threshold of Significance	2040 Preferred	2040 Proposed Project
Home-Based VMT	614,525		617,804	597,863
Population	38,973		42,887	48,065
VMT/capita	15.77	13.4¹	14.4	12.4
HBW VMT	104,516		160,884	149,977
Employment	5,841		7,316	7,565
VMT Per Employee	17.89	14.2²	21.99	19.83

Notes:

1. Threshold of significance based on 15% reduction from the 2015 baseline VMT per capita for Pacifica.
2. Threshold of significance based on 15% reduction from the 2015 baseline VMT per employee for San Mateo County.

Source: C/CAG 2020 Travel Demand Model, C/CAG and DKS Associates, 2024.

As previously noted, the Proposed Project will affect VMT in the area. It should be noted that the VMT information presented is produced from the regional travel demand model and only accounts for the built environment variables to which the model is sensitive. Additional policies in Pacifica's General Plan Circulation Element supporting variables the model is not sensitive to (such as connectivity in neighborhoods, presence of bicycle and pedestrian facilities, and transportation demand management (TDM) measures) are not reflected in these estimates. Thus, the VMT estimates in this analysis are conservatively high.

The California Air Pollution Control Officers Association (CAPCOA) has prepared a *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity* (December 2021) intended to quantify the effect of GHG and VMT reduction practices for local governments, communities, and private developers. Numerous General Plan policies reflect employment VMT reduction practices recommended by CAPCOA, which include employer-based TDM strategies, non-motorized transportation incentives, and transit service enhancements. Therefore, buildout under the Proposed Project would be required

to comply with several General Plan policies that reflect multiple recommended CAPCOA strategies, resulting in additional reduction in the significant VMT per employee impact from new development under the Proposed Project.

Specifically, General Plan Implementing Policy CI-I-50 would reduce potential impacts by requiring TDM measures for developments that exceed the CMP threshold for impacts and by requiring a monitoring plan to determine if established trip reduction targets are met or exceeded for individual developments. Additionally, General Plan goals and policies strive to develop a multi-modal transportation network that would provide transportation alternatives to the single-occupant vehicle and encourage complete street design.

The City will implement all applicable policies in the General Plan Circulation Element to reduce the demand for vehicle travel within and through the Planning Area, as well as work with local, regional, and state agencies to implement regional transportation improvements. Additionally, new developments under the Proposed Project would be required to evaluate their project-specific impacts on the transportation system and fund improvements to maintain acceptable levels of service, except where exemptions are identified in the Circulation Element of the General Plan. However, even with implementation of these policies, the impact would remain significant and unavoidable and require further mitigation.

In order to further reduce VMT per employee, mitigation measures VMT-1 and VMT-2 are recommended. These measures would require businesses that employ 20 or more people to implement an employee commute trip reduction program as well as encourage telecommuting. Implementation of commute trip reduction programs and remote work options could reduce VMT per employee, however it is difficult to quantify the exact reduction potential of these mitigation measures as MM-VMT-1 applies only to new non-residential development of a certain size and MM-VMT-2 is a voluntary measure. MM-VMT-2 responds to the recent surge of remote and hybrid work schedules following the COVID-19 pandemic. While both measures could reduce VMT metrics, it is unlikely that either would be sufficient in reducing these metrics to the proposed thresholds and the impact would conservatively remain significant and unavoidable.

Mitigation Measures

MM-VMT-1: Require applicants for non-residential projects that employ 20 or more people—which is equivalent to 12,000 square feet of retail space, 6,000 square feet of office space, 20,000 square feet of industrial space, or 22 hotel rooms to implement an employee commute trip reduction (CTR) program approved by the City. The CTR program shall identify alternative modes of transportation to the project, including transit schedules, bike and pedestrian routes, and carpool/vanpool availability. Information regarding these programs shall be readily available to employees and clients. The project applicant or designee shall implement at least one of the following incentives for commuters as part of the CTR program, or another equally effective incentive:

- Ride-matching assistance
- Subsidized public transit passes
- Vanpool assistance or employer-provided vanpool/shuttle

- Car-sharing program (e.g. Zipcar)
- Bicycle end-trip facilities, including bike parking, lockers, and showers.

MM-VMT-2: Encourage businesses to implement telecommuting, hybrid, and alternative work schedules that allow employees to utilize remote work options while reducing vehicle-based commutes.

Level of Significance After Mitigation: Significant and Unavoidable

Impact 3.11-3 Implementation of the Proposed Project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment) (Less than Significant)

The Proposed Project does not specify design features for the transportation system in the Planning Area and would thus not substantially increase hazards due to a design feature.

The Proposed Project would support a land use pattern with higher-density and infill developments where appropriate, including mixed-use development at existing commercial shopping centers. Overall, the General Plan land use diagram and policies emphasize infill development where appropriate, and transition areas and buffers between land uses of varying intensities, which would serve to reduce potential conflicts between users of the transportation system associated with each land use, including farm equipment, commercial and industrial truck traffic, commute traffic, pedestrians, and cyclists. The specific design and operations of individual future development projects cannot be known at this time; however, policies included in the General Plan serve to reduce potential impacts from future development.

For example, Implementing Policy CI-I-1 would require new streets created as part of new developments to continue existing street patterns. Implementing Policy CI-I-24 also continues to require a Site Development Permit for developments on lots with unimproved streets to ensure off-site improvements meet City standards. To further address safety concerns, Implementing Policy CI-I-23 requires incorporating safety measures in improvement designs for intersections, roadways, pedestrians, transit, and bicycle facilities. In addition, General Plan policies that promote bicycle and pedestrian safety as well as the development of safe routes to school, and that require mitigation of traffic-related impacts would help to further identify and address potential safety concerns (Implementing Policies CI-I-26, CI-I-28, CI-I-29, and CI-I-40).

The Proposed Project would also adhere to the City's Complete Streets requirements in the project development process (Implementing Policy CI-I-3). Complete Streets by their nature would improve safety and compatibility between different transportation modes as well as between the transportation system and adjacent land uses. Therefore, with adherence to policies included in the General Plan, impacts from increasing hazards due to a design feature or incompatible uses under the Proposed Project would be less than significant.

Mitigation Measures

None required.

Impact 3.11-4 Implementation of the Proposed Project would not result in inadequate emergency access. (Less than Significant)

A significant impact would occur if implementation of the Proposed Project resulted in inadequate emergency access. As discussed above, implementation of the Proposed Project would primarily involve higher-density and infill developments, including mixed-use development at existing commercial shopping centers. Such infill development would be in areas with existing emergency access.

Further, project level review required by the City includes site access review for emergency vehicles and traffic control plans as needed that account for emergency vehicles. General Plan Implementing Policy CI-I-25 requires all developers to incorporate emergency access needs consistent with Title 10 of the Municipal Code. Even so, implementation of the Proposed Project and increases in regional travel passing through Pacifica would increase the amount of vehicular traffic in and around Pacifica and may therefore increase the number of potential emergency access conflicts. For more information on impacts to emergency response plans and emergency evacuation plans, please see Impact 3.13-1 in Section 3.13: Wildfire.

However, potential improvements to the roadway network, such as the Manor overcrossing project, would contribute to mitigating the impacts of additional traffic on emergency response times. Furthermore, traffic signal preemption devices on emergency vehicles, as well as emergency sirens, will improve emergency response times even in instances of intersection congestion during peak commute periods. As such, implementation of General Plan policies will improve connections between communities, providing additional access routes, and ensure that inadequate emergency access does not occur and will result in a less-than-significant impact.

Mitigation Measures

None required.

3.12 Utilities and Service Systems

This section assesses potential environmental impacts from future development under the Proposed Project as related to public utilities, including water, wastewater, and stormwater systems, and solid waste services. This section describes existing water, wastewater, stormwater, and solid waste infrastructure and services in the Planning Area, as well as relevant federal, State, and local regulations and programs.

There was one response to the Notice of Preparation (NOP) regarding topics covered in this section. The commenter expressed concern about increased water demand and sewage and water treatment capabilities. These topics are addressed in the following Impact Analysis.

Environmental Setting

PHYSICAL SETTING

Potable Water

The North Coast County Water District (NCCWD) supplies water to Pacifica and part of San Bruno. NCCWD is an independent water district, not affiliated with the City of Pacifica and not within the City's permitting authority. The district gets virtually all of its water from the San Francisco Public Utilities Commission (SFPUC) and the Hetch Hetchy system. The District has rights to the use of a limited amount of surface water from the South Fork of San Pedro Creek for six months of the year, accounting for one to two percent of the District's water use. Pacifica's water is pumped from San Andreas Lake and the Harry Tracey Water Treatment Plant in Millbrae via a main distribution line under Skyline Boulevard, to the Milagra Ridge storage tank. From there, water for northern Pacifica is pumped to the Christian Hill tank on Skyline Boulevard and then distributed by gravity to smaller tanks and to customers. Water for southern Pacifica is piped from the Milagra Ridge tank to the Royce tank, off Fassler Avenue, and then to smaller tanks and to customers. Overall, the system is divided into 32 pressure zones, each separated by pressure-reducing valves (BAWSCA, 2021).

Water Use

The NCCWD system's 11 storage tanks or reservoirs have a total capacity of 18.25 million gallons, enough to supply the service area with water for 5.8 days at the District's average daily usage rate of 2.43 million gallons per day (mgd) (BAWSCA, 2021). The District's contract with SFPUC allows for a maximum purchase of 3.84 mgd.

Projected Demand

The 2020 North Coast County Water District Urban Water Master Plan (UWMP) projected a population estimate for the City of Pacifica of approximately 40,510 people in 2040, and 41,330 in 2045 (NCCWD, 2021). As such, the UWMP does not account for population growth under the Proposed Project. Under the terms of the contract with the San Francisco Public Utilities Commission, the District's maximum supply (maximum wholesale allocation) 4,299.2 AFY, or approximately 1,402 MG per year. Total water demand within the District was 847 million gallons (MG) per year (or 2.32 million gallons per day) on average between 2016 and 2023. Residential customers are the largest water use category followed by commercial/industrial, other, non-revenue water, and dedicated irrigation.

Without accounting for growth under the Proposed Project, and considering historical water use, expected population increase and other growth, climatic variability, water conservation, and other assumptions, water demand within the District is projected to decrease to 819 MG (or 2.24 mgd) by 2045, a reduction of 3.4 percent compared to the 2016-2020 average. This existing allocation is sufficient to meet the needs of the District from the present through 2045 (NCCWD, 2021).

Table 3.12-1: Historical Water Demand and Supply 2016-2023

Year	Supply (mgd)	Demand (mgd)
2016-2017	2.26	2.26
2017-2018	2.40	2.40
2018-2019	2.34	2.34
2019-2020	2.43	2.43
2020-2021	2.45	2.45
2021-2022	2.22	2.22
2022-2023	2.13	2.13

Source: BAWSCA Annual Survey- North Coast County Water District, 2022-2023.

Water Conservation

Water use in the NCCWD has been steadily declining in recent years due to conservation programs and infrastructure repair throughout the system. Water conservation will be important in coming years. In 2008, SFPUC capped the amount of water it takes from the Tuolumne River and delivers to water districts. The agency limited its aggregate deliveries to Bay Area Water Supply and Conservation Agency (BAWSCA) members to 184 mgd, and established interim supply limitations on each water district. SFPUC may impose environmental surcharge fees on water districts which exceed their limitation during years when the system-wide limitation is exceeded. This is expected to put pressure on agencies to reduce water use, as demand in the SFPUC service area overall continues to rise.

The push for water conservation is also coming from the State, which has recently strengthened its requirements for water districts and local jurisdictions. The Water Conservation Act of 2009, or SB 7, sets an overall target to reduce urban per capita water use by 20 percent by the end of 2020, with

an interim target of 10 percent by the end of 2015. The Water Conservation in Landscaping Act, as modified by AB 1881, provides a Model Water Efficient Landscape Ordinance and requires that all jurisdictions adopt it or one at least as effective. The District is in compliance with its 2020 water use target of 124 gallons per capita per day (GPCD), having reduced its potable water use in 2020 to 65 GPCD.

The City of Pacifica owns and operates the Calera Creek Water Recycling Plant which produces advanced treated effluent from the City's treatment plant (Calera Creek Water Recycling Plant). The District receives a portion of the total amount of advanced treated effluent produced annually from the Calera Creek Water Recycling Plant, under an Agreement between the City and the District. The District began receiving advanced treated effluent from the plant, and further treated to Title 22 tertiary recycle water and began delivering the tertiary recycled water to customers (for irrigation use), in August 2013. The District's recycled water customers in Pacifica include the SFPUC (Sharp Park Golf Course), Fairway Park, Oceana High School, and the Ingrid B. Lacy Middle School.

In 2015, the District also began offering recycled water, for irrigation use, to residential customers. The District established a Recycled Water Filling Station at the main office in West Sharp Park, where residents of Pacifica can obtain recycled water for irrigation use, subject to special permitting and training requirements regarding the use of recycled water. During 2020, the District supplied approximately 16 MG through its recycled water system to six customers and residential recycled water filling station at its offices. Of this 16 MG recycled water demand, approximately 9 MG was met by recycled water and 7 MG was supplemental potable water. This volume also includes approximately 7 MG of deliveries that are wheeled on behalf of SFPUC through the District's system to the Sharp Park Golf Course, which is owned and operated by the San Francisco Recreation and Parks Department and is not included in the District's gross water demand or supply. The District is evaluating areas to expand its recycled water system to serve additional customers. The projected recycled water demand in 2045 is 9 MG, not accounting for these potential additional future customers or the recycled water wheeled to the Sharp Park Golf Course (SFPUC, 2021).

Infrastructure Modernization

Pacifica's water pipes and storage reservoirs are aging and in need of modernization. NCCWD's current Capital Improvement Plan is focused on pursuing additional sources of supply, addressing water storage deficits by increasing tank size or adding new tanks, and pipe upgrades. Replacement of the pipeline on Palmetto Avenue was identified as the highest priority in the 2016 Long-Term Water Master Plan and was completed as part of Phase I of the Palmetto Avenue Streetscape improvements.

Beyond these modernization efforts, Pacifica and NCCWD are dependent upon the safety and durability of the larger Hetch Hetchy system. California Assembly Bill 1823 identifies nine projects essential to the maintenance of water supply following a major earthquake, and requires that they be carried out. In 2002, the SFPUC adopted a \$2.9 billion capital improvement program to undertake a system upgrade (BAWSCA, 2021).

Water Quality

SFPUC monitors water at the source and at local water treatment plants for turbidity, organic and inorganic chemicals, microbial quality, mineral content, and radiological quality. NCCWD monitors water as it enters the District's system, and takes weekly water samples from various locations. Pacifica's water is consistently high-quality and safe to drink, meeting all standards set by the California Department of Health Services and the United States Environmental Protection Agency (NCCWD, 2021).

Wastewater

The City operates its wastewater collection system which includes approximately 100 miles of gravity sewer mains, twenty miles of pressure (force) mains, and five sewage pump stations. All sewage is pumped via the three largest pump stations (Sharp Park, Linda Mar, and Rockaway) to the Calera Creek Water Recycling Plant (CCWRP), which is located centrally in the system just west of Highway 1 opposite Reina Del Mar in the Vallemar area. The other two pump stations serve smaller areas within the collection system.

Calera Creek Water Recycling Plant

The Calera Creek Water Recycling Plant (CCWRP), located on the south flank of Mori Point, is a tertiary treatment plant, brought online in 2000 to replace the old Wastewater Treatment Plant in West Sharp Park. The new plant was among the first in California to use ultraviolet disinfection, which allows effluent to be released to wetlands without residual chlorine. The plant has facilitated the creation and restoration of wetlands along Calera Creek, bringing year-round flow to a naturalized stream channel. The CCWRP is also the source for a portion of Pacifica's irrigation water.

Testing at the Calera Creek Water Recycling Plant generally indicates that discharge meets applicable water quality standards associated with the plant's operating permits with the Regional Water Quality Control Board (RWQCB). While the discharge from the new plant has significantly reduced pollutant loading to the Pacific Ocean, there have been some isolated instances of non-compliance with water quality standards (RWQCB, 2017).

Usage and Capacity

Average annual wastewater flows have been declining in recent years, from 3.7 million gallons per day (mgd) on average in 2001 to 2.9 mgd in 2008. Flows are projected to rise to 3.2 mgd by 2012 (City of Pacifica, 2009). The CCWRP has a dry weather capacity of 4.0 million gallons per day (mgd), a peak hourly dry weather capacity of 7.0 mgd, and a peak hourly wet weather capacity of 20 mgd (RWQCB, 2017). Considering the rate of growth projected in the Proposed Project, the Plant is believed to have adequate capacity for the next 15 to 20 years.

Planned Improvements

According to the 2021 City of Pacifica Collection System Master Plan, sewer improvement projects that would be needed to reduce the risk of the overflows in the collection system due to insufficient

capacity for design peak wet weather flows. As such, the City intends to undertake the following projects (City of Pacifica, 2021):

1. Crespi Drive

Improvement Project 1 would relieve Capacity Deficiency 1 identified in the capacity analysis. The project includes replacement of approximately 474 LF of 6-inch pipe with 8-inch pipe and 1,054 LF of 8-inch pipe with 12-inch pipe on Crespi Drive from Peralta Road to Barcelona Drive using pipe bursting (a smaller pipe diameter was modeled (e.g., 10-inch) but was not large enough to eliminate capacity deficiencies for this reach). The existing 8-inch pipe segments along Crespi Drive (west of La Mirada Way) that are recommended for replacement are located within the City's planned R&R project for the Meter 23 sewershed area, but the existing 6-inch pipe segments are not. However, since these pipes are small diameter and are adjacent to the current extents of the planned R&R project, the City is considering expanding the R&R program to also include the undersized 6-inch pipe segments.

2. Linda Mar Boulevard

Improvement Project 2 would relieve Capacity Deficiency 2 identified in the capacity analysis. The project includes replacement of approximately 307 LF of 20-inch pipe with 27-inch pipe on Linda Mar Boulevard between De Solo Drive and Peralta Road using open-cut remove and replace. However, since this capacity deficiency is downstream of the planned R&R project for the Meter 23 sewershed area, additional flow monitoring may be performed after implementation of the R&R project to confirm if the modeled deficiency is still present.

3. Fremont Avenue

Improvement Project 3 would relieve Capacity Deficiency 3 identified in the capacity analysis. The project includes replacement of approximately 278 LF of 12-inch pipe with 15-inch pipe on Fremont Avenue between Nelson Avenue and Monterey Road using pipe bursting. However, the City may perform additional flow monitoring prior to implementing Project 3 to better isolate I&I in the Meter 10 sewershed area and confirm if the modeled deficiency is still present.

4. Catalina Avenue

Improvement Project 4 would relieve Capacity Deficiency 4 identified in the capacity analysis. The project includes replacement of approximately 940 LF of 10-inch pipe with 12-inch pipe on Catalina Avenue and Beachview Avenue from Brookhaven Court to Crestmoor Circle using pipe bursting. However, the City may perform additional flow monitoring prior to implementing Project 4 to better isolate I&I in the Meter 10 sewershed area and confirm if the modeled deficiency is still present.

Storm Drains

Pacifica's storm drainage system consists of a collection system and two pump stations. This drainage system acts to convey drainage to area creeks or the ocean. Two areas in the city, Linda Mar and lower Sharp Park, are too low to allow drainage to a creek or the ocean and are served by pump stations to prevent street flooding. The Streets Division of Pacifica's Public Works

Department maintains 290,000 linear feet of storm drain pipes with 989 storm drain inlets within the city right-of-way and easements (City of Pacifica, 2021).

San Mateo Countywide Water Pollution Prevention Program

The San Mateo County Water Pollution Prevention Program (SMCWPPP) was established in 1990 with the assistance of the San Mateo County City/County Association of Governments. The primary goal of the SMCWPPP is to reduce pollution carried by stormwater throughout San Mateo County into local creeks, San Francisco Bay, and the Pacific Ocean, and to maintain compliance with the National Pollutant Discharge Elimination System (NPDES) permit. The program is managed and maintained by San Mateo County and the 21 participating cities, including Pacifica.

San Pedro Creek/Linda Mar Storm Drain Treatment/Diversion Project

In 2004, the City completed the Pacifica State Beach Improvement Project, a complex initiative requiring the cooperation of many agencies and funding sources. Among the project's key elements was the diversion of stormwater from the Anza and Linda Mar pump stations to two constructed wetland treatment swales. The project has successfully redirected polluted water from first-flush release into the ocean, and together with other elements of the project, has resulted in improved water quality.

Stormwater Management and Site Planning

Site planning covers issues concerning the ground on which buildings sit. Key principles of site planning generally include minimizing disturbance to native vegetation and drainage and minimizing the use of impervious surfaces so that water can drain naturally. Many aspects of sustainable site planning pertain to stormwater management and water use. Stormwater should be allowed to drain on-site to the greatest extent possible, using "Low Impact Development" (LID) measures like permeable paving and rainwater harvesting. LID requirements have been built into the Municipal Regional Permit governing stormwater drainage in Pacifica. Water use, meanwhile, can be reduced by planting native and low-water-use plants, grouped based on their water requirements, using automated watering systems, and limiting the use of turf grass. These and other measures are part of the State's Model Water Efficient Landscaping Ordinance, which is being implemented by the City of Pacifica.

Solid Waste

Solid waste collection and recycling services in Pacifica are provided by Recology of the Coast, a division of Recology. Recology, based in San Francisco, operates a number of waste transfer and materials recovery facilities, including the recycling yard at 1046 Palmetto Avenue in Pacifica. While Recology hauls waste from Pacifica to several landfills across the Bay, most landfill waste goes to the Corinda Los Trancos (Ox Mountain) Landfill in Half Moon Bay, which has a remaining capacity of 22,180,000 tons out of 60,500,000 tons, and is cited for closure in 2034 (CalRecycle, 2024). Ox Mountain is permitted to receive up to 3,598 tons of waste per day and receives, on average, a total of 1,949 tons a day, resulting in a residual capacity of 1,649 tons/day.

Recology emphasizes waste reduction and diversion, and is the largest compost facility operator by volume in the United States. In Pacifica, Recology of the Coast currently provides curbside pick-up of garbage, recyclables, and green waste for both residential and commercial customers.

The City has enacted an ordinance requiring all food vendors to use biodegradable or compostable service ware. Both Pacifica and San Mateo County have recycling divisions that provide information to help residents and businesses reduce and divert waste from landfills.

Recycling and Hazardous Wastes

Residential recyclable waste is collected every other week. Organic waste is collected every week on the regular garbage day from Pacifica homes. There is no door-to-door hazardous waste collection service in Pacifica, but residents may drop off household hazardous waste at the Recology of the Coast's Recycling Yard at no cost (Recology, 2024).

Solid Waste Diversion

To reduce waste disposal and promote recycling, the California Integrated Waste Management Act of 1989 (AB 939) promotes an integrated approach to managing waste. The California Public Resources Code Section 41780 (A)(2) requires that cities and counties divert 50 percent of all solid waste produced within their jurisdiction through source reduction, recycling, and composting. **Table 3.12-2** below shows the diversion rates of waste management in Pacifica. In 2007, the California Department of Resources Recycling and Recovery (CalRecycle) changed the method of calculating diversion rates to one based on the average per capital solid waste disposal rate. The disposal targets for Pacifica were met for both residential and employment disposal for the years 2016-2022, with the exception of residential disposal that was over the target in 2019.

**Table 3.12-2: Pacifica Integrated Waste Management Authority
Diversion Rates**

<i>Year</i>	<i><u>Population Disposal (PPD)^{1,2}</u></i>		<i><u>Employment Disposal (PPD)</u></i>	
	<i>Target</i>	<i>Annual</i>	<i>Target</i>	<i>Annual</i>
2016	3.5	3.2	33.2	26.7
2017	3.5	2.7	33.2	21.6
2018	3.5	3.3	33.2	26.2
2019	3.5	3.9	33.2	30.9
2020	3.5	3.5	33.2	27.4
2021	3.5	3.3	33.2	27.4
2022	3.5	2.8	33.2	20.3

1 In 2007, California Department of Resources Recycling and Recovery (CalRecycle) introduced a new system of measuring diversion rates based on a per capita disposal measurement system equivalent to the 50 percent diversion requirement. The previous system is no longer used. The new per capita disposal measurement system is one of several "**factors**" in determining a jurisdiction's compliance with the intent of AB 939, and allows CalRecycle and jurisdictions to set their primary focus on successful implementation of diversion programs.

2 PPD = Pound per person per day.

Source: California Department of Resources Recycling and Recovery, 2024.

Gas and Electricity

Electricity

Pacific Gas & Electric (PG&E) provides gas and electric services to Pacifica homes and businesses with energy obtained from power plants, natural gas fields, and renewable energy sources in northern California.

Natural Gas

PG&E provides local natural gas service to the City of Pacifica. One natural gas transmission line feeds into the city.

REGULATORY SETTING

Federal, State, and Local Regulations

Water

Federal Clean Water Act

The Clean Water Act is the principal federal law addressing water quality. The primary objectives include the regulation of pollutant discharges to surface water, financial assistance for public wastewater treatment systems, technology development, and non-point source pollution prevention programs. The Clean Water Act also requires that states adopt water quality standards to protect public health and welfare and enhance the quality of water.

Safe Drinking Water Act

The Safe Drinking Water Act (SDWA), administered by the U.S. EPA in coordination with the states, is the main federal law that ensures the quality of drinking water. Under the SDWA, EPA sets standards for drinking water quality and oversees the states, localities, and water suppliers who implement those standards. The Department of Public Health administers the regulations contained in the Act in the State of California.

California Water Code

California Water Code (Porter-Cologne Act) establishes a program to protect water quality and beneficial uses of state water resources and includes groundwater and surface water. The State

Water Resources Control Board and the San Francisco Bay Regional Water Quality Control Board are the principal state agencies responsible for control of water quality in California and the San Francisco Bay Area region, respectively.

California Department of Public Health

A major component of the State Department of Public Health, Division of Drinking Water and Environmental Management, is the Drinking Water Program which regulates public water systems. Regulatory responsibilities include the enforcement of the federal and state Safe Drinking Water Acts, the regulatory oversight of public water systems, issuance of water treatment permits, and certification of drinking water treatment and distribution operators. State regulations for potable water are contained primarily within the Food and Agricultural Code, the Government Code, the Health and Safety Code, the Public Resources Code, and the Water Code. Regulations are from Title 17 and Title 22 of the California Code of Regulations.

The regulations governing recycled water are found in a combination of sources including the Health and Safety Code, Water Code, and Titles 22 and 17 of the California Code of Regulations. Issues related to treatment and distribution of recycled water are generally under the influence of the RWQCB, while issues related to use and quality of recycled water are the responsibility of the California Department of Public Health.

California Environmental Quality Act, SB 610, and SB 221

Section 15083.5 of the CEQA Guidelines requires the City to request certain information from the public water supply system(s) serving the Planning Area. This requested information includes: an indication of whether the projected water demand associated with the Proposed Project was included in its last urban water management plan; and, an assessment for any major development projects “whether its total projected water supplies available during normal, single-dry, and multiple-dry water years as included in the 20-year projection contained in its urban water management plan will meet the projected water demand associated with the proposed project, in addition to the system’s existing and planned future uses.”

Senate Bill 610 became effective January 1, 2002, and requires cities in connection with CEQA review to consider water supply assessments to determine whether projected water supplies can meet the project’s anticipated water demand. SB 610 also requires additional factors to be considered in the preparation of urban water management plans and water supply assessments.

SB 610 and CEQA Guidelines Section 15083.5 identifies those projects generally as a residential development of more than 500 dwelling units; a commercial or industrial business employing more than 1,000 persons; or any other project that would have a water demand at least equal to a 500 dwelling unit project. SB 221 contains similar provisions as SB 610 but is intended for use with large residential subdivisions and is usually required at the time of tentative tract map approval.

Assembly Bill (AB) 1668 and Senate Bill (SB) 606

Passed in 2018, AB 1668 and SB 606 establish guidelines for efficient water use and a framework for the implementation and oversight of the new standards, which must be in place by 2022. The

two bills strengthen the state's water resiliency in the face of future droughts with provisions that include:

- Establishing water use objectives and long-term standards for efficient water use that apply to urban retail water suppliers; comprised of indoor residential water use, outdoor residential water use, commercial, industrial and institutional (CII) irrigation with dedicated meters, water loss, and other unique local uses.
- Providing incentives for water suppliers to recycle water.
- Identifying small water suppliers and rural communities that may be at risk of drought and water shortage vulnerability and provide recommendations for drought planning.
- Requiring both urban and agricultural water suppliers to set annual water budgets and prepare for drought.

Each urban water supplier, starting in November of 2023, will calculate its own objective based on the water needed in its service area for efficient indoor residential water use, outdoor residential water use, commercial, industrial and institutional (CII) irrigation with dedicated meters and reasonable amounts of system water loss from leaks, the fact sheet states. In determining their objectives, water suppliers will also consider other unique local uses and credits for potable water reuse, based on standards adopted by the state water board.

San Francisco Bay Regional Water Quality Control Board

The San Francisco Bay Regional Water Quality Control Board (RWQCB) governs many of the regulations associated with utilities, specifically potable water, sanitary sewers, storm drains, and recycled water.

RWQCB has the authority to enforce water quality regulations found in the Clean Water Act based on the Porter-Cologne Water Quality Control Act.

In December 2018, the State Water Resources Control Board adopted amendments to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary, establishing water quality objectives to maintain the health of the State's rivers and the Bay-Delta ecosystem (the Bay-Delta Plan Amendment) (SWRCB 2019). The State Water Resources Control Board has stated that it intends to implement the Bay-Delta Plan Amendment by 2022, assuming all required approvals are obtained by that time. Implementation of the Bay-Delta Plan Amendment will result in a substantial reduction in the City's SFPUC water supplies from the Tuolumne River watershed during dry years, requiring rationing in the city to a degree greater than that previously anticipated to address supply shortages that were not accounted for in the NCCWD's prior 2015 Urban Water Management Plan. The full extent of potential rationing that may be required was not known at the time of NCCWD's 2020 UWMP adoption due to ongoing litigation over the Bay-Delta Plan Amendment.

North Coast County Water District

North Coast County Water District (NCCWD) supplies water to Pacifica and part of San Bruno, and gets virtually all of its water from the San Francisco Public Utilities Commission and the Hetch Hetchy system. NCCWD has rights to the use of a limited amount of surface water from the South Fork of San Pedro Creek for six months of the year, accounting for one to two percent of the District's water use.

NCCWD Urban Water Management Plan

NCCWD's 2020 Urban Water Management Plan (UWMP) documents the district's planning efforts to ensure adequate water supplies to meet existing and future demands for water. The UWMP presents forecasted supplies and demands up to the year 2045 and describes the District's recycled water and conservation programs. The UWMP also describes what happens in a water shortage and discusses drought management programs.

Wastewater

The RWQCB administers regulations related to wastewater discharges under the Federal Water Pollution Control Act of 1972, as amended, more commonly known as the Clean Water Act. Wastewater discharges are guided by NPDES (National Pollutant Discharge Elimination System) permits granted by the RWQCB.

The City Municipal Code Title 6, Chapter 13, Article 2 established regulations for the treatment disposal, and control of wastewater and industrial wastes for the city. The intent of the regulations is to maintain proper disposal of wastewater and provide standards for discharges that enter community sewers.

City of Pacifica Green Infrastructure Plan

The City of Pacifica Green Infrastructure Plan (City of Pacifica 2019), approved in September 2019, guides sustainable development in the City of Pacifica with a focus on converting the city's storm drainage systems from a traditional "grey" infrastructure system, in which stormwater flows across impervious surfaces directly into storm drains, to an integrated approach that will direct runoff to vegetated areas for infiltration. The plan intends to identify and prioritize low-impact development (LID) opportunities citywide in which such stormwater management infrastructure can be installed in the form of bioretention areas, stormwater tree well filters, suspended pavement systems, pervious pavement, infiltration facilities, green roofs, and rainwater harvesting facilities.

City of Pacifica Storm Drainage Master Plan

Published in 2022, the purpose of the Storm Drainage System Master Plan is to identify capacity deficiencies in the storm drainage system, develop feasible alternatives to correct these deficiencies, and plan the infrastructure that will serve future development. Proposed improvements primarily address model simulated flooding under the existing 10-year and 50-year design storm events, as well as projects to address the areas of concern noted by the city's residents. Additionally, the Plan

recommends the implementation of a storm drain maintenance and inspection program as a part of a long-term rehabilitation/replacement program.

Pacifica Municipal Code

Title six of the Municipal Code regulates Sanitation and Health. In Chapter 12, the City has adopted a Storm Water Management and Discharge Control Ordinance, set in place to regulate the discharge of stormwater, regulate stormwater discharge, and ensure that the City remains in compliance with state and regional stormwater regulations. The City may establish controls on the volume and rate of storm water runoff from new developments and redevelopments as may be appropriate to minimize the discharge and transport of pollutants including, but not limited to, a requirement to limit storm water runoff to pre-project levels. In addition, Chapter 10 regulates the use of the sewer system and Chapter 13 regulates wastewater control.

Solid Waste

Resource Conservation and Recovery Act (Amended 1986)

The Resource Conservation and Recovery Act is a federal act regulating the potential health and environmental problems associated with solid waste hazards and non-hazardous wastes. Specific regulations addressing solid waste issues are contained in Title 40, Code of Federal Regulations.

California Integrated Waste Management Board

The California Integrated Waste Management Board (CalRecycle) establishes the statewide regulations for solid waste collection and disposal, including state-mandated diversion goals. Regulations authored by CalRecycle (Title 14) were integrated with related regulations adopted by the State Water Resources Control Board pertaining to landfills (Title 23, Chapter 15) to form Title 27 of the California Code of Regulations.

The California Integrated Waste Management Act

The California Integrated Waste Management Act of 1989, or AB 939, mandated that all jurisdictions in the State divert at least 50 percent by 2000 through source reduction, composting, and recycling activities. The Act gives the highest priority to source reduction and defines it as the act of reducing the amount of solid waste generated in the first place. Recycling and composting are given the next highest priority. The Act specifies that all other waste that is not diverted be properly and safely disposed of in a landfill or through incineration. The California Integrated Waste Management Act also mandates that each jurisdiction adopt a Source Reduction and Recycling Element (SRRE) which specifies how the community will meet the 50 percent goals set forth in the Act. Each community is also required to take measures to reduce solid waste generation and to provide for the safe disposal of special and hazardous wastes.

The California Solid Waste Reuse and Recycling Access Act

Subsequent to the California Integrated Waste Management Act, additional legislation was passed to assist local jurisdictions in accomplishing the goals of AB939. The California Solid Waste Reuse

and Recycling Access Act of 1991 directs the California Integrated Waste Management Board (CIWMB) to draft a model ordinance (which San Mateo County has adopted) relating to adequate areas for collecting and loading recyclable materials in development projects. The model ordinance is used by the County as the basis for imposing recycling conditions on new development projects and on existing projects that add 30 percent or more to their existing floor area. Beginning in 1994, the model ordinance requires that any new development project for which an application is submitted include adequate, accessible and convenient areas for collecting and loading recyclable materials.

The Solid Waste Disposal Measurement System Act

The Solid Waste Disposal Measurement System Act of 2008, SB 1016, amended the California Integrated Waste Management Act procedures for measuring and reporting diversion requirements. Starting in 2009, jurisdictions are required to calculate the 50 percent diversion requirement in a per capita disposal rate equivalent. CalRecycle will determine the per capita disposal rate equivalent for each jurisdiction.

CalRecycle delegates local permitting, enforcement, and inspection responsibilities to Local Enforcement Agencies (LEA). The Pacifica Municipal Code contains regulations related to solid waste and recycling in Title 6, Chapter 5.

Assembly Bill 1826

Assembly Bill 1826 (AB 1826) requires that state agencies, businesses, and multifamily complexes that generate specific quantities of organic or solid waste each week enroll in organic recycling programs through an applicable solid waste disposal company (CalRecycle 2016). Organic recycling programs may take the form of composting, mulching, or anaerobic digestion. Businesses and multifamily residential housing complexes that generate the following quantities are required to implement organic or solid waste recycling programs under AB 1826:

- Eight or more cubic yards of organic waste per week as of April 1, 2016;
- Four or more cubic yards of organic waste per week as of January 1, 2017; and
- Four or more cubic yards of solid waste per week as of January 1, 2019.

CalRecycle is currently evaluating whether California has achieved its statewide organic disposal goal of reducing organic waste disposal to 50 percent of 2014 levels by 2020. If this goal is not achieved, organic composting and recycling requirements will be expanded such that businesses that generate two or more cubic yards of solid waste per week must comply.

Gas and Electricity

California Public Utilities Commission

The California Public Utilities Commission (CPUC) regulates Investor-Owned Utilities (IOUs) including those that offer electric, natural gas, steam, and petroleum service to consumers. The CPUC regulates both electric and natural gas rates and services provided by these utilities including

in-state transportation over the utilities' transmission and distribution pipeline systems, storage, procurement, metering and billing. Natural gas regulations are found in General Orders 58, 94, 96, and 112, while electrical distribution regulations are found in General Orders 95, 128, 131, 165, and 166.

California Energy Efficiency Standards (CALGreen) for Residential and Nonresidential Buildings—Green Building Code (2011), Title 24 Updates

The California Green Building Standards code (Part 11, Title 24) was adopted as part of the California Building Standards Code (24 California Code of Regulations [CCR]). The California Green Building Standards Code (CALGreen) applies to the planning, design, operation, construction, use and occupancy of newly constructed buildings and requires the installation of energy and water efficient indoor infrastructure for all new projects beginning after January 1, 2011. CALGreen also requires newly constructed buildings to develop a waste management plan and divert at least 50% of the construction materials generated during project construction.

The current 2019 Building Energy Efficiency Standards for the State of California were adopted on January 1, 2020. While the 2019 standards do not require zero net energy buildings, they are expected to result in substantially reduced carbon emissions from newly constructed residential and nonresidential buildings throughout California. New requirements under the 2019 standards include solar photovoltaic systems on all new homes, as well as measures that encourage energy storage technologies, such as batteries, heat pump water heaters, and highly efficient air filters.

Pacifica Municipal Code

Title Seven of the Municipal Code regulates Public Works with Chapter One regulating telecommunications and Chapter Three regulating underground utility districts.

City of Pacifica 2040 General Plan (General Plan)

The City of Pacifica 2040 General Plan (General Plan) includes the following goals and policies associated with utilities and service systems:

Community Design

Implementing Policy CD-I-20: Underground Utilities. Continue to require underground utilities in all new development.

Implementing Policy CI-I-22: Improvement for Existing Facilities. Maintain and upgrade local streets, sidewalks, utilities, and other City infrastructure in a manner that prevents deterioration and corrects existing deficiencies.

Implementing Policy SA-I-109: Utilities. Require companies providing public utilities in Pacifica to have plans for reestablishing service in the event of a major seismic event or other natural disaster.

Implementing Policy SA-I-109.I: Maintain Energy Facilities. Work with PG&E to encourage regular maintenance of electrical and gas facilities including undergrounding electrical transmission and distribution facilities when feasible to minimize utility-related disasters.

Conservation

Guiding Policy CO-G-5: Water Conservation. Work with the NCCWD to meet water conservation objectives as required by State law.

Implementing Policy CO-I-20: Incentives for Water Conservation. Encourage the NCCWD to continue and expand its water conservation incentive programs, including free water-efficient fixtures and rebates for water-efficient appliances.

Guiding Policy CO-G-6: Wastewater Treatment. Ensure the City maintains adequate capacity to handle wastewater, and continue to expand wastewater recycling.

Implementing Policy CO-I-11: Protect Water Quality through Best Management Practices. Continue to require the use of best management practices to reduce water impacts from construction and development.

Implementing Policy CO-I-22: Water Recycling. Continue to support implementation and expansion of NCCWD's water recycling project, involving new pipes and pumping stations, to allow treated wastewater from the Calera Creek Water Recycling Plants to be used for irrigation of landscaped areas.

Implementing Policy CO-I-23: Wastewater Treatment Capacity. Continue to monitor generation rates so decision-makers are aware of the impacts on the treatment plant on new development, and plan for additional capacity in advance of projected need.

Implementing Policy CO-I-24: Sewer System Connections. Require all new development to be connected to the City's sewer system.

Implementing Policy CO-I-25: Sanitary Sewer Discharge. Ensure that discharges of treated wastewater from the Calera Creek Wastewater Recycling Plant continue to comply with the Sanitary Sewer System Permit.

Guiding Policy CO-G-14: Renewable Energy. Support the use and development of renewable energy through City purchasing, and facilitation of local renewable energy generation.

Guiding Policy CO-G-15: Energy Conservation. Support efforts to reduce energy use by increasing energy efficiency in buildings and promoting awareness of energy use.

Guiding Policy CO-G-16: Waste Reduction. Seek to reduce overall solid waste by limiting packaging, controlling construction and demolition waste, and promoting composting and recycling.

Implementing Policy CO-I-60: Waste Collection. Periodically evaluate the City's waste collection contract to ensure that Pacifica residents and businesses receive high-quality and cost effective service.

Implementing Policy CO-I-61: Waste Reduction and Diversion. Seek to continually reduce Pacifica's output of solid waste and increase the proportion of waste diverted from landfills, setting targets and monitoring progress.

Implementing Policy CO-I-62: Energy Efficiency in Public Buildings. Prepare and implement a plan to increase energy efficiency in existing public buildings.

Implementing Policy CO-I-63: Wastewater and Water System Efficiency. Maximize the efficiency of City operated wastewater treatment, water treatment, pumping, and distribution equipment.

Impact Analysis

For the purposes of this EIR, a significant impact would occur if implementation of the Proposed Project would:

- Criterion 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;
- Criterion 2:** Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years;
- Criterion 3:** Result in a determination by the wastewater treatment provider which serves, or may serve, the project that it has adequate capacity to serve the projects projected demand in addition to the providers existing commitments;
- Criterion 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; or
- Criterion 5:** Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

METHODOLOGY AND ASSUMPTIONS

The analysis for this section addresses impacts on city infrastructure due to projected growth arising from the Proposed Project land use changes. Subsequent CEQA review at the project level may be required to determine whether significant environmental effects would result from the construction of water distribution lines, wastewater collection system components, storm drainage

conveyance pipes, and any onsite storage or pumping facilities on development sites. Project-level review will occur when proposed development plans are prepared.

Pacifica's projected water demand was calculated using information obtained from NCCWD's 2020 Urban Water Management Plan. Pacifica's share of the total was calculated based on per capita planning demand within NCCWD's service area for 2040.

Pacifica's projected wastewater flow was calculated using information obtained from the City of Pacifica's 2021 Collection System Master Plan Update. Future flows were based on a land use dataset provided by the City indicating potential vacant/undeveloped and nonresidential underutilized opportunity sites, along with an associated development density.

IMPACTS

Impact 3.12-1 Development under the Proposed Project would not require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. (Less than Significant with Mitigation Incorporated)

Water

The only water-related construction planned for the water district is the modernization of Pacifica's water pipes and storage reservoirs. NCCWD's current Capital Improvement Plan focuses on minimizing the risk to the water supply that could result from a major seismic event. NCCWD replaced three major water tanks in recent years, and has completed the installation of back-up generators at all 14 of its storage tanks. The District will add sensors allowing automatic shutdown of key tanks during a major earthquake, and install "jumper nodules" at joints in the pipe system. The transmission main that brings water to Pacifica from the regional system is located above the San Andreas Fault as it follows Skyline Boulevard in San Bruno. NCCWD is committing resources both to short-term pipe inspection and repair along the main line, and to a study of the feasibility of developing an alternative and reliable water source (NCCWD, 2008).

Projected water demand in Pacifica is analyzed in the North Coast County Water District's 2020 UWMP. According to data from the NCCWD, total water demand within the District was 847 million gallons (MG) per year (approximately 2.32 mgd) on average between 2016 and 2023. Demand forecasts for 2040 are 2.26 mgd (based on a NCCWD's population projection of 40,510) and 2.27 mgd in 2045, based on a population projection of 41,330. While implementation of the Proposed Project would result in a projected population higher than NCCWD's projected 2040 population, demand is estimated to be only slightly higher than existing conditions, at 2.57 mgd. Water supply in regular years is expected to be 3.87 mgd, similar to other years. Based on these calculations, there will be adequate water supply to provide for the population under Proposed Project buildout in a normal year. As such, implementation of the Proposed Project would not

require the construction or expansion of treatment facilities over and above that which is already planned to serve demand in the District service area through 2045.

Thus, aside from these modernization improvements, no new construction is planned for the water district. Since the District's existing water supplies were determined to be sufficient to accommodate the additional population under the Proposed Project, no new or expanded conveyance infrastructure beyond that which is already planned would be required to deliver water to the Planning Area through 2040. In addition, proposed General Plan Policy CO-I-68 reduces impact by requiring implementation of the Project to maximize water system efficiency. Therefore, the relocation or construction of new water facilities will not occur under the Proposed Project, which would avoid adverse environmental effects.

Wastewater

The city's wastewater collection system serves the entire population of Pacifica. In 2021, the City prepared a Collection System Master Plan Update that evaluates the capacity of the existing sewer system and identifies sewer improvements that are necessary to achieve the required capacity. The report is also intended to create a long-range Capital Improvement Program (CIP) for the wastewater collection system.

The collection and conveyance of wastewater generated by the buildout of the Proposed Project will use the existing sanitary and sewer system. The wastewater treatment plant operated by the City CCWRP has a dry weather capacity of 4.0 million gallons per day (mgd), a peak hourly dry weather capacity of 7.0 mgd, and a peak hourly wet weather capacity of 20 mgd (RWQCB, 2017).

Table 3.12-3 shows the estimated base wastewater flow (BWF) under future buildout conditions according to the Collection System Master Plan Update. In addition, **Table 3.12-4** shows the net new BWF under future buildout conditions of the Proposed Project using the BWF factor provided by the Collection System Master Plan Update. The net new BWF is 0.61743 mgd. When added to the existing conditions BWF from **Table 3.12-3**, the projected BWF at buildout of the Proposed Project and General Plan is 2.57 mgd. This is roughly equivalent to the estimated BWF projection of 2.56 mgd at buildout according to the Collection System Master Plan Update, thus demonstrating that this projection accounts for the increased wastewater flows associated with both the Proposed Project and General Plan.

Table 3.12-3: Estimated Base Wastewater Flow (BWF) Projections

	Estimated BWF (mgd)	Percent Increase from Existing Flow
Existing Conditions (2021)	1.96	-
Buildout ²	2.56	30.6%

1 mgd = million gallons per day

1. The City has identified a total of 318 opportunity sites as well as the Hengli Higgins Way Subdivision, which is planned to include approximately 60 very low-density residential lots.

2. Includes other parcels identified as vacant and potentially developable.

Source: Dyett & Bhatia, 2024.

Table 3.12-4: Estimated Base Wastewater Flow (BWF) Projections under the Proposed Project

Development Type	Unit	Net New Units at Buildout (2040)	BWF Factor (gpd/unit)	Net New BWF at Buildout (mgd)
Proposed Project				
Multi-Family Residential (MFR)	Dwelling Units	2,175	170	0.3698
Non-Residential (NR)	Square Feet	102,004	0.1	0.0102
Total	-	-	-	0.38
Existing 2040 General Plan				
Single Family Residential (SFR)	Dwelling Units	125	220	0.0275
Multi-Family Residential (MFR)	Dwelling Units	870	170	0.1479
Non-Residential (NR)	Square Feet	620,300	0.1	0.06203
Total	-	-	-	0.23743
Net Total (Proposed Project + General Plan)				0.61743

1 gpd = gallons per day

1 mgd = million gallons per day

Source: Dyett & Bhatia, 2024.

Because the dry weather capacity of the Plant is 7.0 mgd, and the estimated flow under the Proposed Project and General Plan buildout is only 2.57 mgd, there is adequate capacity to serve the buildout population. The Proposed Project buildout will not impact any existing sewers due to the projected growth of Pacifica over time. General Plan policies that will also continue to reduce impact include CO-G-6, CO-I-24, CO-I-25, CO-I-26, and CO-68 which ensures that the City maintains adequate wastewater treatment and sanitary sewer capacity while maximizing efficiency.

However, the City's Housing Element states that rainfall dependent infiltration/inflow (RDI&I) is a chronic issue that impacts the capacity of Pacifica's sewer pump stations. Additional infrastructure improvement projects would occur along Crespi Drive, Linda Mar Boulevard, Fremont Avenue, and Catalina Avenue to increase capacity of peak wet weather flows, as detailed in the Environmental Setting. It is also anticipated that two rehabilitation and replacement (R&R) projects in the Vallemar and Rockaway Beach communities which have been included in the City's adopted 2023-2028 Capital Improvement Plan will address this issue. The City commissioned an analysis to evaluate the effectiveness of these planned rehabilitation and replacement projects, and determined the current Rockaway Pump Station could support up to an additional 200 units in these neighborhoods. The City has commissioned an additional analysis and modeling study to better evaluate and understand the current capacity of the Rockaway Pump Station. Since the results are not yet known, it is not clear whether the Rockaway Pump Station will have adequate capacity to serve additional units over 200. Further, while the R&R projects discussed above are intended to address these issues, the timing of this projects is still not certain. Therefore, the impacts are potentially significant. Potential impacts would be mitigated by implementation of **MM UTIL-1** below.

With adherence to MM-UTIL-1, this impact is considered less than significant with mitigation incorporated regarding wastewater treatment conveyance infrastructure.

Stormwater

Pacifica's storm drainage system consists of a collection system and two pump stations. This drainage system acts to convey drainage to area creeks or the ocean. Two areas in the city, Linda Mar and lower Sharp Park, are too low to allow drainage to a creek or the ocean, and are served by pump stations to prevent street flooding. Overall, the City's system serves 178 miles of roads and 989 inlets (San Mateo County, 2008). The stormwater infrastructure in Pacifica is adequate to provide for the Proposed Project buildout population. In addition, in 2022 the City published its Storm Drainage Master Plan which identifies a series of projects to increase the efficiency and effectiveness of the city's existing storm drain system. Additionally, the Plan recommends the implementation of a storm drain maintenance and inspection program as a part of a long-term rehabilitation/replacement program.

In 2004, the City completed the Pacifica State Beach Improvement Project. This project has successfully redirected polluted water from first-flush release into the ocean to two constructed wetland treatment swales, and, together with other elements of the project, improved water quality. New development under the Proposed Project will incorporate best management practices from construction and development, meeting the requirements of the City's stormwater permit, Municipal Code, and General Plan policies. Such regulations are intended to reduce non-storm water discharge to the storm water system to the maximum extent practicable. The increasing incorporation of stormwater management in site planning will further reduce the need for development of new storm drainage infrastructure. As such, development under the Proposed Project would not require the construction of new storm water drainage facilities or expansion of existing facilities. Since there would be no facility relocation or construction, no adverse environmental effects would occur.

Power/Telecommunications

The availability of electricity, gas services, and telecommunications is not expected to become an issue during the planning horizon based on the growth projected under the Project, and its proposed land use pattern which would encourage development to concentrate on infill sites already served by infrastructure. However, electricity and natural gas use account for 40 percent of greenhouse gas emissions in Pacifica. Thus, while supply is not anticipated to be an issue in Pacifica, reducing demand for these resources will help reduce carbon emissions. Proposed General Plan policies that reduce impact include CO-G-16, CO-I-60, CO-I-61, CO-I-62, and CO-I-67 which require implementation of energy conservation measures, green building standards, solar orientation to promote energy efficiency, and encourage solar power generation. Therefore, implementation of the Proposed Project would not result in the need for relocation or construction of electric power, natural gas, or telecommunications facilities.

Mitigation Measures

MM-UTIL-1: Infiltration/Inflow (I/I) Reductions in Rockaway Area. Developers of any project served by the Rockaway Pump Station are required to have a study performed to determine the capacity of the pump station to serve proposed development, which study would be subject to review and approval by the City's Public Works Department. In the event that it is determined that the Rockaway Pump Station does not have sufficient capacity to serve the proposed development, the developer must pursue one or more of the following options, to the satisfaction of the Public Works Department, to either reduce I/I or pursue alternative methods of conveyance:

- Installation of systemwide upgrades to infrastructure for the purposes of eliminating sanitary sewer spills and reducing I/I.
- Rerouting of sewer flows such that the development does not negatively impact the Rockaway Pump Station.
- Installation of a new pump station facility.
- Installation of new infrastructure improvements to contribute to the necessary reduction of I/I.

Significance After Mitigation: Less than significant

Impact 3.12-2 Development under the Proposed Project would have sufficient water supplies available to serve the Planning Area and reasonably foreseeable future development during normal, dry and multiple dry years. (Less than Significant)

According to data from the NCCWD, total water demand within the District was 847 million gallons (MG) per year (approximately 2.32 mgd) on average between 2016 and 2023. Demand forecasts for 2040 are 2.26 mgd (based on a NCCWD's population projection of 40,510) and 2.27 mgd in 2045, based on a population projection of 41,330.

Table 3.12-6: Estimated Water Demand and Supply

	Population	Estimated Water Demand (mgd) ¹	Estimated Water Supply ² (mgd)	Percent Increase from Existing Demand
Existing Conditions (2020)	38,330	2.51	3.87	-
NCCWD Projected demand, 2035	39,600	2.27	3.87	-10%
NCCWD Projected demand, 2040	40,510	2.26	3.87	-11%
NCCWD Projected demand, 2045	41,330	2.27	3.87	-10%
General Plan Total at Buildout (2040)	41,050	2.27	3.87	-10%
General Plan Plus Proposed Project Total at Buildout (2040)	46,440	2.57 ³	3.87	+2.39%

1. mgd = million gallons per day

2. Water supply is purchased or imported water (NCCWD's ISG of 3.84), plus recycled water.

3. Estimated based on per capita demand under the General Plan 2040 buildout scenario. This per capita demand was then applied to the 2040 buildout population that accounts for the Proposed Project.

Source: Dyett & Bhatia, 2024, North Coast County Water District Urban Water Management Plan, 2020, BAWSCA, 2023.

Table 3.13-6 shows the estimated water demand based on the Pacifica population and the estimated demand for the NCCWD. While implementation of the Proposed Project would result in a projected population higher than NCCWD's projected 2040 population, demand is estimated to be only slightly higher than existing conditions, at 2.57 mgd. Water supply in regular years is expected to be 3.87 mgd, similar to other years. Based on these calculations, there will be adequate water supply to provide for the population under Proposed Project buildout in a normal year.

However, because NCCWD's water supply is dependent on precipitation and snowpack in the Sierra Nevada, which eventually flows into the Hetch Hetchy system, NCCWD's ability to meet customer demand will be chiefly dependent upon future weather conditions. According to the NCCWD Urban Water Management Plan, the available supplies to be sufficient to meet projected demands in normal year conditions; however, significant shortfalls are projected in dry year conditions, which if realized would require the District to enact its Water Shortage Contingency Plan. Numerous uncertainties exist in the assumptions that drive the projected dry year shortage estimates, and the District anticipates revising its water service reliability assessment within the next five years as some of these uncertainties are resolved.

In view of this uncertainty, it is in the City's best interest to plan for contingencies and reduce water use at all times. General Plan policies will ensure that new developments are designed with low-flush toilets and other water saving features. The NCCWD Urban Water Management Plan also includes a Water Supply Contingency Plan, a standalone document to be engaged in the case of a water shortage event, such as a drought or supply interruption, and defines specific policies and actions that will be implemented at various shortage level scenarios. For example, implementing customer water budgets and surcharges, or restricting landscape irrigation to specific days and/or

times. Consistent with DWR requirements, the WSCP includes six levels to address shortage conditions ranging from up to 10 percent to greater than 50 percent shortage. The City plans to continue cooperative efforts with NCCWD to promote water conservation to the public.

As implementation of the Proposed Project would not result in rapid or substantial population growth that would exceed NCCWD's current demand rates, and because General Plan policies concentrate on reducing water use and ensuring adequate supply, this impact is considered less than significant.

Mitigation Measures

None required.

Impact 3.12-3 Development under the Proposed Project would not 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. (Less than Significant)

The Calera Creek Water Recycling Plant (CCWRP) is a tertiary treatment plant brought online in 2000 to replace the old Wastewater Treatment Plant in West Sharp Park. The new plant uses ultraviolet disinfection, which allows effluent to be released to wetlands without residual chlorine. The plant has facilitated the creation and restoration of wetlands along Calera Creek, bringing year-round flow to a naturalized stream channel. When NCCWD's water recycling project is completed, the CCWRP will also be the source for a portion of Pacifica's landscape irrigation water.

Testing at the Calera Creek Water Recycling Plant indicates that discharges generally meet applicable water quality standards, although there have been some isolated instances of non-compliance. The Water Quality Control Plan for the San Francisco Bay Basin is the Regional Water Board's (RWQCB) master water quality control planning document, which states the water quality objectives for waters in the region. In addition, the RWQCB has implemented regulatory Orders for the CCWRP that guide the Plant to meet the standards of the RWQCB.

Based on the estimated wastewater flow under Proposed Project buildout (as analyzed under Impact 3.12-1), there are adequate wastewater treatment facilities in the city. It is also anticipated that two R&R projects in the Vallemar and Rockaway Beach communities which have been included in the City's adopted 2023-2028 Capital Improvement Plan will address the RDI&I chronic issue. The City also plans to undertake additional infrastructure improvement projects along Crespi Drive, Linda Mar Boulevard, Fremont Avenue, and Catalina Avenue to increase capacity of peak wet weather flows, as detailed in the Environmental Setting. Additional General Plan policies ensure compliance with stormwater discharge permits. One such policy includes CO-I-10 which ensures compliance with stormwater discharge regulations from new and existing development. Therefore, the Proposed Project will not result in exceedance of wastewater treatment requirements of the RWQCB.

Mitigation Measures

None required.

Impact 3.12-4 Development under the Proposed Project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. (Less than Significant)

A significant impact could occur if implementation of the Proposed Project could generate waste that could exceed capacity of local infrastructure. As indicated above, Pacifica's latest waste generation rates of 2.8 pounds per capita per day, and 20.3 pounds per day for employment uses.

Individually, the Proposed Project is expected to result in 5,400 more people and 250 more jobs. Using the latest rates, this represents an increase of 10 tons per day, or 3,649 tons a year. The annual rate of 10 tons per day represents just 0.6 percent of the current residual capacity of 1,649 tons/day at Ox Mountain Landfill. In addition, some of the solid waste from the City of Pacifica is transported to other landfills in the Bay Area, and the majority of the waste generated in the city is diverted from landfill disposal through recycling and composting. This estimate conservatively assumes that all of the generated waste is landfilled.

The Integrated Waste Management Act of 1989 requires that all jurisdictions meet a 50 percent waste reduction requirement. Since 2007, CalRecycle has been using a new system to measure diversion rates. This new system uses a per capita disposal threshold as one of several "factors" in determining a jurisdiction's compliance with diversion requirements. Under buildout of the Proposed Project, the amount of solid waste generated will likely increase due to population growth. However, due to the amount of growth projected with the Proposed Project, and as long as the waste generated by each person does not increase, the City should have no trouble meeting the pound per person target set by CalRecycle each year. In addition, to reduce residential and commercial waste streams within the city, the General Plan includes policies to reduce waste through reduction, reuse, recycling, and public education (Implementing Policies CO-I-60 and CO-I-61).

In consideration of these policies, although the Proposed Project may generate additional amounts of solid waste due to population growth, the overall impact is less than significant.

Mitigation Measures

None required.

Impact 3.12-5 Development under the Proposed Project would not conflict with federal, state, and local management and reduction statutes and regulations related to solid waste. (Less than Significant)

Based on the historic integrated waste management authority diversion rates for solid waste in Pacifica, the City has seen diversion rates below both its population disposal targets as well as its

employment disposal targets. The disposal targets are expressed as Pacifica's 50 percent diversion equivalent, which are based on previous disposal and employee data reported. The target is represented in per pounds per person per day, if Pacifica were at exactly 50 percent diversion or 50 percent disposal (CalRecycle, 2021). The City's population disposal target is 3.5 pounds per person per day, and the employment disposal target is 33.2 pounds per person per day. Based on integrated waste management diversion trends for Pacifica, if the city's population reaches its Proposed Project buildout population, diversion rates would still be able to remain below this target. In addition, General Plan policies that reduce the impact include CO-I-65 and CO-I-66 which ensures high-quality and cost-effective waste collection services while seeking to continuously reduce and divert solid waste from landfills. Therefore, this impact is less than significant.

Mitigation Measures

None required.

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3.13 Wildfire

This section describes the environmental and regulatory setting for wildfires. It also describes events related to wildfires that have already occurred in the Planning Area and that could occur during implementation of the Proposed Project. A wildland fire is a fire in which the primary fuel is natural vegetation and can consume thousands of acres of vegetation, timber and agricultural lands, as well as developed properties located in or adjacent to susceptible areas. Wildfires can be caused by human actions as well as natural events, such as lightning or high winds.

There were five responses to the Notice of Preparation (NOP) regarding topics covered in this section. Commenters expressed concern about delayed evacuation in the event of a wildfire and new developments' susceptibility to wildfire risk. Another commenter detailed that wildfire risk can be mitigated by appropriate clearing of vegetation and should be a necessary requirement for developing these sites. The City of Pacifica Emergency Preparedness & Safety Commission also submitted a letter that requests vehicular evacuation routes be considered and evaluated. These comments are addressed in the following Impact Analysis.

Environmental Setting

WILDFIRE HAZARDS

Wildland fires are fires that start in a wooded or undeveloped area. Their potential for damage is dependent on the extent and type of vegetation, known as surface fuels, as well as weather and wind conditions. Wildland fires occur infrequently but typically cause more damage than urban fires. In California, most wildfire damage occurs in wildland urban interface areas, where homes and woodland vegetation are directly adjacent. The majority of wildfires are started by human activity, such as campfires, fireworks, faulty electrical facilities, and residential and agricultural burning, but wildfires can also be incited by natural causes like lightning strikes.

About two-thirds of Pacifica is undeveloped, and nearly half is protected open space. This undeveloped land is mainly on the rugged ridges that form the city's eastern and southern edge and descend down to the ocean between Pacifica's valley communities. Coastal scrub is the predominant vegetation type, interspersed with annual grassland. Significant areas of eucalyptus forest and mixed woodland are present in eastern Sharp Park and on Cattle Hill and San Pedro Mountain.

The California Department of Forestry and Fire Protection (CAL FIRE) has designated Fire Hazard Severity Zones (FHSZs) throughout the state based on factors such as fuel, terrain, and weather.

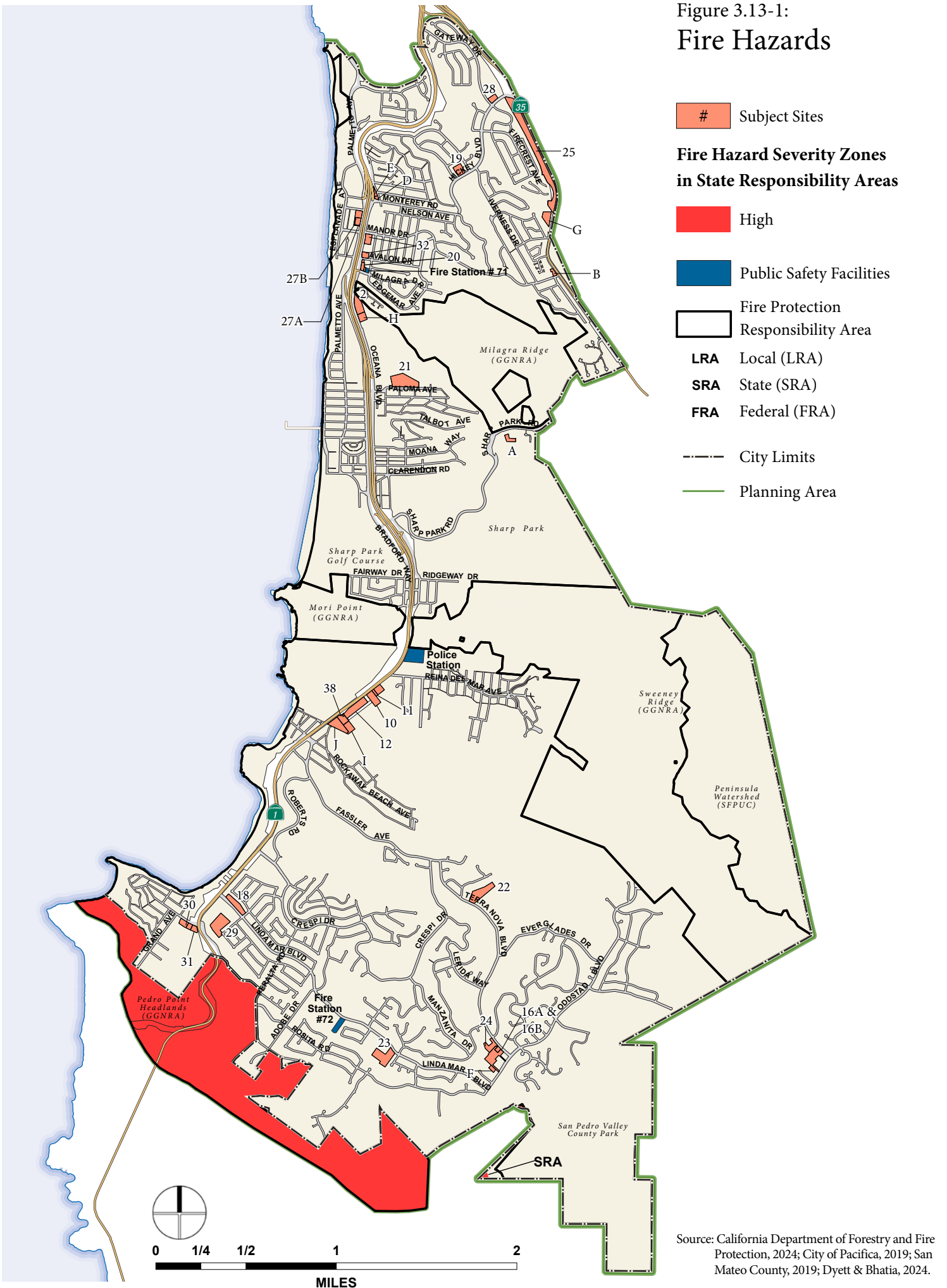
FHSZ maps evaluate physical conditions that create a likelihood that an area will burn over a 30- to 50-year period. Areas are classified by varying degrees of fire hazard severity (i.e., moderate, high, and very high), referring to the ability of a fire in any given area to cause damage. As shown on **Figure 3.13-1**, outside of the city limits, approximately 493 acres along the southwestern perimeter within the Sphere of Influence are designated as High FHSZs (HFHSZs). Most of the land within the HFHSZs is an urban reserve or park, and land adjacent to these areas that is within city limits is low- and very-low density residential development. Per the 2021 MJ-LHMP, Pacifica (within city limits) had no population or structures within very high wildland fire severity zones (City of Pacifica, 2021). Nevertheless, these fire severity zones are on the periphery of developed areas in Pacifica and could present a fire risk to development within the city. To address this risk, the City cooperates with CAL FIRE and the North County Fire Authority (NCFA) through cooperative fire protection agreements. Pacifica is also bounded by VHFHSZs in unincorporated San Mateo County to the south throughout McNee Ranch State Park and High FHSZs to the east towards San Bruno.

Additionally, CAL FIRE designates land as either a Federal, State, or Local Responsibility Area (FRA, SRA, and LRA, respectively), based on population density, land use, and land ownership. All of the FHSZs within the SOI are designated State Responsibility Areas (SRA), where the State of California is financially responsible for the prevention and suppression of wildfires, while the NCFA has primary responsibility for Local Responsibility Areas (LRA) within the city limit. Lands in Pacifica owned by the federal government and the County—GGNRA lands—are designated as a Federal Responsibility Area (FRA).

Wildland Urban Interface (WUI) Zones

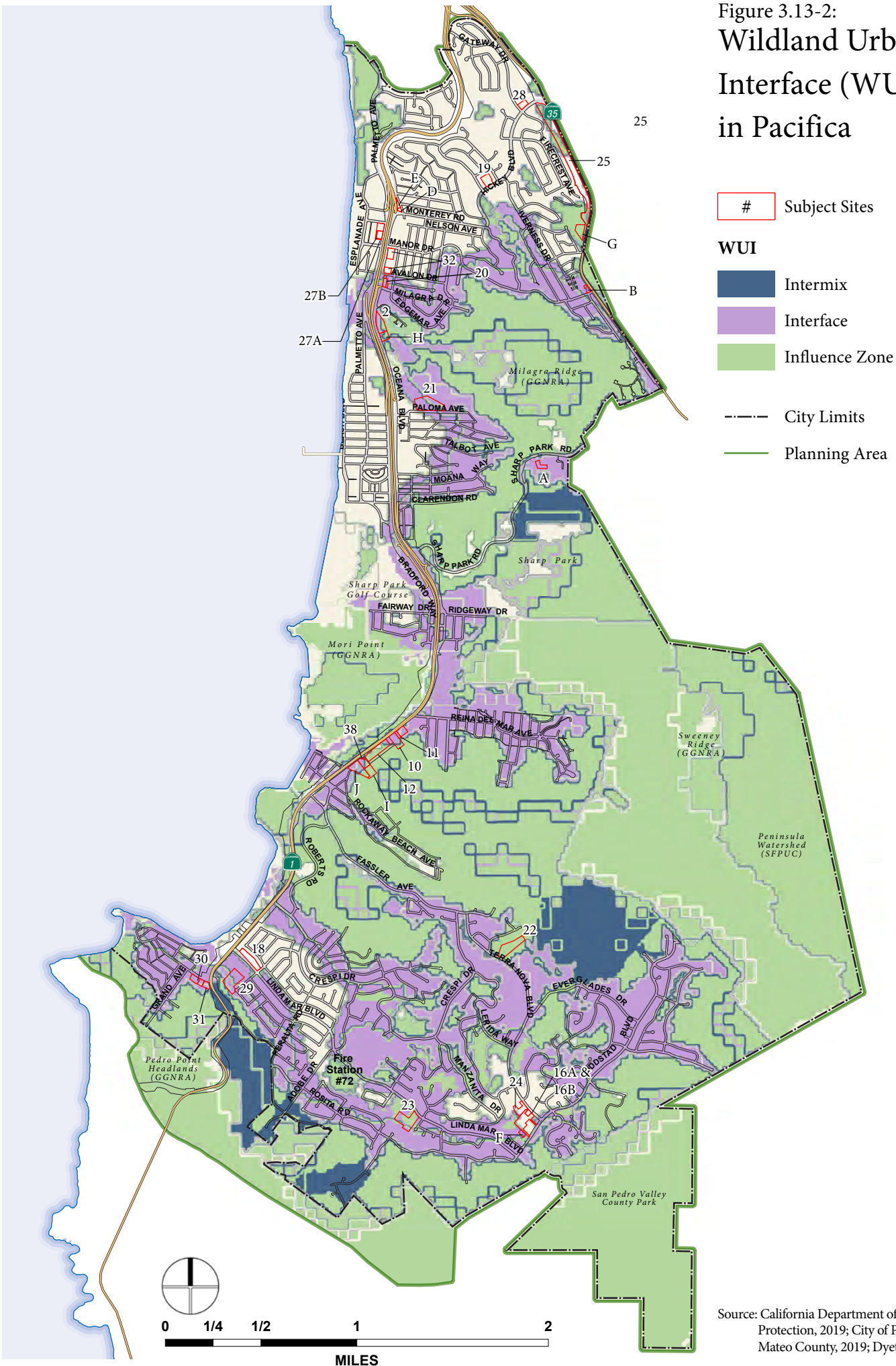
The Wildland Urban Interface (WUI) is the transition zone between areas of native vegetation and developed areas. Approximately 2,160 acres in Pacifica falls within the wildland urban interface (WUI) where residences (i.e., homes and structures) are adjacent to or intermixed with open space and wildland vegetation (CAL FIRE, 2019). **Figure 3.13-2** shows the WUI areas in Pacifica; the undeveloped land on rugged ridges in the southern portion of the city, as well as eastern Sharp Park and land adjacent to Milagra Ridge fall within the WUI area. The term “WUI” is not a designation of potential wildfire severity but a defined description of an area where urban development meets undeveloped lands at risk of wildfires. Because of the mix and density of structures with natural fuels in close proximity to each other, combined with more limited access and egress routes, fire management is more complex in WUI environments.

Figure 3.13-1:
Fire Hazards



Source: California Department of Forestry and Fire Protection, 2024; City of Pacifica, 2019; San Mateo County, 2019; Dyett & Bhatia, 2024.

Figure 3.13-2:
Wildland Urban
Interface (WUI)
in Pacifica



Source: California Department of Forestry and Fire Protection, 2019; City of Pacifica, 2019; San Mateo County, 2019; Dyett & Bhatia, 2024.

Slope and Aspect

According to CAL FIRE, sloping land increases susceptibility to wildfire because fire typically burns faster up steep slopes and they may hinder firefighting efforts (CAL FIRE, 2007b). Following severe wildfires, sloping land is also more susceptible to landslide or flooding from increased runoff during substantial precipitation events. Aspect is the direction that a slope faces, and it determines how much radiated heat the slope will receive from the sun. Slopes facing south to southwest will receive the most solar radiation; thus, they are warmer and the vegetation drier than on slopes facing a northerly to northeasterly direction, increasing the potential for wildfire ignition and spread (Westerling, 2018).

The topography of San Mateo County is extremely variable. The coastline of San Mateo County includes steep upland areas that are susceptible to slope failures. Within the planning boundary, steep slopes on Mori Point, Sweeney Ridge, Cattle Hill, Gypsy Hill, and Montara Mountain are identified as likely sites of slope failures, as are small portions of areas in or near development in the Pedro Point and Fairmont neighborhoods and along the west side of Skyline Boulevard. These slope changes can make fighting fires extremely difficult.

History of Wildfire

Wildfires are a natural part of most vegetated ecosystems that feature dry seasons; in California and San Mateo County, fires historically burned on a regular cycle from prehistoric times until the mid-twentieth century, and controlled burns were a land management technique practiced by indigenous peoples throughout the state. While modern fire suppression techniques have reduced the amount of acreage burned annually, they have also resulted in a surplus of fuel loads, which, coupled with development in wildland-urban interface (WUI) areas greatly increases the risk of large, very destructive fires seen in recent years.

Between 2000 and 2013, San Mateo County experienced 297 wildfires, of which 77 were attributed to undetermined causes, 64 to equipment use, 37 to vehicles, and 21 to utility lines. However, the severity of these fires was not extreme, as only two of San Mateo County's fires between 1950 and 2012 were declared state or federal emergencies. The most recent wildfire in Pacifica was a 2015 wildfire that burned 2.5 acres of trees and brush within the city limit. The August 2020 CZU Lightning Complex in Santa Cruz and San Mateo Counties was caused by a reported 12,000 bolts of lightning. A Federal Disaster was declared for this fire (Declaration DR-4558) was made for the period of August 16-September 26, 2020." (Wildfires; CZU Lightning Complex), August 16 – September 26, 2020. Based on past occurrences and the geography, weather patterns, and vegetation in the region, it is highly likely that wildfires will continue to occur in San Mateo County.

WILDFIRE PREPAREDNESS

Service and Response

Service providers, including fire services, are described in detail in Chapter 3.10: Public Services and Recreation. A brief summary of service and response as it relates to wildfire preparedness is as follows: the primary agency for fires in Pacifica is the North County Fire Authority (NCFA). The NCFA is a Joint Powers Authority comprised of the cities Brisbane, Daly City, and Pacifica, and

provides a full range of services including emergency and non-emergency response, code enforcement, plan review and construction inspection, fire investigations, and public education. The Fire Authority also conducts a crucial Vegetation Management Program, which promotes compliance with vegetation standards to reduce the threat of fire in the urban/wildland interface. Two of the Authority's 8 stations are in Pacifica—Fire Station 71, at 616 Edgemar Avenue, and Fire Station 72, at 1100 Linda Mar Boulevard. These locations are shown on **Figure 3.10-1**.

NCFA has established the following service ratio and response time standards:

- Response time standards for fire service: Four-minute travel time to 90 percent of calls for fire service, and eight-minute travel time for all apparatus on-scene for fire calls for service.
- Response time standard for Emergency Medical Services (EMS): Under seven-minute travel time (6:59) for first response to 90 percent of calls.

As described in the 2021 update of Pacifica's Local Hazard Mitigation Plan (LHMP), Pacifica's long and narrow geography and its reliance on Highway 1 as the single north-south access route is a challenge for fire response. A 2008 study determined that the Vallemar, West and East Fairway Park, Rockaway Beach, and Rockaway neighborhoods in central Pacifica are beyond four-minute travel distance from northern San Mateo County fire stations, corresponding with the standard response time for first-due fire apparatus. The full assignment response time standard cannot be met in Pacifica from Vallemar south (Emergency Services Consulting, 2008).

Population growth will increase existing deficiencies in service delivery. The Fire Authority considers the city's geography to be the limiting factor for delivery of fire service. According to NCFA, a third, mid-point station in Pacifica with a truck and engine company has been discussed for some time. The area that currently does not meet first-response time standards currently has a low density of development, and so it has fewer persons and structures threatened by fire. However, a new station would be needed if the central part of Pacifica were to experience substantial new development.

REGULATORY SETTING

Federal

The Disaster Mitigation Act of 2000

The Disaster Mitigation Act of 2000 requires a state-level 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 also established new requirements for local mitigation plans.

National Fire Plan

The National Fire Plan was developed in August 2000, following a historic wildfire season. Its intent is to establish plans for active response to severe wildfires and their impacts on communities while

ensuring sufficient firefighting capacity. The plan addresses firefighting, rehabilitation, hazardous fuels reduction, community assistance, and accountability.

State

California Office of Emergency Services (OES)

Under the California Emergency Services Act, the State developed an emergency response plan to coordinate emergency services provided by all governmental agencies. The plan is administered by the California Office of Emergency Services (OES). OES coordinates the responses of other agencies, including EPA, the Federal Emergency Management Agency (FEMA), the California Highway Patrol (CHP), regional water quality control boards, air quality management districts, and county disaster response offices. Local emergency response teams, including fire, police, and sheriff's departments, provide most of the services to protect public health.

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 for the State to receive Federal funding. The Disaster Mitigation Act of 2000 requires a state mitigation plan as a condition of disaster assistance.

California Public Resources Code – State Responsibility Area

The California Public Resources Code (PRC) requires the designation of State Responsibility Areas (SRAs), which are identified based on cover, beneficial water uses, probable erosion damage, and fire risks and hazards. The financial responsibility of preventing and suppressing fires in an SRA is primarily the responsibility of the state. Fire protection in areas outside SRAs are the responsibilities of local or federal jurisdictions and are referred to as local responsibility areas and federal responsibility areas, respectively.

California Public Resources Code Sections 4201–4204

This portion of the PRC, most recently amended by AB 9 in 2021, requires the State Fire Marshal to classify Fire Hazard Severity Zones within SRAs. Lands within SRAs are classified in accordance with the severity of fire hazard present to identify measures to be used to retard the rate of spreading and reduce the potential intensity of uncontrolled fires that threaten to destroy resources, life, or property.

Very High Fire Hazard Severity Zones

Government Code Section 51178 requires CAL FIRE to identify Very High Fire Hazard Severity Zones (FHSZs) in the state. Very High FHSZs shall be based on fuel loading, slope, fire weather, and other relevant factors including areas where Santa Ana, Mono, and Diablo winds have been identified by CAL FIRE as a major cause of wildfire spread. Government Code Section 51179 requires a local agency to designate, by ordinance, very high Fire Hazard Severity Zones in its jurisdiction. As shown on **Figure 3.13-1**, there are no areas within the city limits that CAL FIRE has designated as a Very High FHSZ.

California Board of Forestry

The Board of Forestry maintains fire safe road regulations, as part of Title 14 of the California Code of Regulations (CCR). This includes requirements for road width, surface treatments, grade, radius, turnarounds, turnouts, structures, driveways, and gate entrances. These regulations are intended to ensure safe access for emergency wildland fire equipment and civilian evacuation.

California Fire and Building Codes (2022)

The California Fire Code is Chapter 9 of CCR Title 24. It establishes the minimum requirements consistent with nationally recognized good practices to safeguard public health, safety, and general welfare from the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structure, and premises, and to provide safety and assistance to firefighters and emergency responders during emergency operations. It is the primary means for authorizing and enforcing procedures and mechanisms to ensure the safe handling and storage of any substance that may pose a threat to public health and safety. The California Fire Code regulates the use, handling, and storage requirements for hazardous materials at fixed facilities. The California Fire Code and the California Building Code (CBC) use a hazard classification system to determine what protective measures are required to protect fire and life safety. These measures may include construction standards, separations from property lines and specialized equipment. To ensure that these safety measures are met, the California Fire Code employs a permit system based on hazard classification. 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 California.

More specifically, the Fire Code is included in Title 24 of the CCR. Title 24, part 9, Chapter 7 addresses fire-resistances-rated construction; CBC (Part 2), Chapter 7A addresses materials and construction methods for exterior wildfire exposure; Fire Code Chapter 8 addresses fire related Interior finishes; Fire Code Chapter 9 addresses fire protection systems; and Fire Code Chapter 10 addresses fire related means of egress, including fire apparatus access road width requirements. Fire Code Section 4906 also contains existing regulations for vegetation and fuel management to maintain clearances around structures. These requirements establish minimum standards to protect buildings located in Fire Hazard Severity Zones (FHSZs) within SRAs and Wildland-Urban Interface (WUI) Fire Areas. This code includes provisions for ignition-resistant construction standards for new buildings.

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 CCR Title 24, Part 2, known as the 2007 CBC. These codes include provisions for ignition-resistant construction standards in the WUI.

- Interface zones are areas with dense housing adjacent to vegetation that can burn and meeting the following criteria:
- Housing density class 2 (one house per 20 acres to one house per 5 acres), 3 (more than one house per 5 acres to one house per acre), or 4 (more than one house per acre)

- In moderate, high, or very high Fire Hazard Severity Zone
- Not dominated by wildland vegetation (i.e., lifeform not herbaceous, hardwood, conifer, or shrub)
- Spatially contiguous groups of 30-meter cells¹ that are 10 acres and larger

Intermix zones are housing development interspersed in an area dominated by wildland vegetation and must meet the following criteria:

- Not interface
- Housing density class 2
- Housing density class 3 or 4, dominated by wildland vegetation
- In moderate, high, or very high Fire Hazard Severity Zone
- Improved parcels only
- Spatially contiguous groups of 30-meter cells 25 acres and larger

Influence zones have wildfire-susceptible vegetation up to 1.5 miles from an interface zone or intermix zone (CAL FIRE, 2019b).

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 revise and update its locally-specific Fire Management Plan. These plans assess the fire situation within each of the 21 CAL FIRE units and six contract counties. These plans address wildfire protection areas, initial attack success, assets and infrastructure at risk, pre-fire management strategies, and accountability within their geographical boundaries.

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.

The "California Emergency Services Act," in Section 8568 of the California Government Code, 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 or County Administrator. The provisions of the act are further

¹ Note that "30-meter cells" refers to raster data, and indicates data is presented as 30-meter by 30-meter squares.

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. The SEMS incorporates the functions and principles of the Incident Command System (ICS), the Master Mutual Aid Agreement, 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. OES divides the state into several mutual aid regions. The City of Pacifica is located in Mutual Aid Region II, which includes Del Norte, Humboldt, Mendocino, Sonoma, Lake, Napa, Marin, Solano, Contra Costa, San Francisco, San Mateo, Alameda, Santa Clara, Santa Cruz, San Benito, and Monterey Counties.

Government Code Sections 65302 and 65302.5, Senate Bill 1241 (Kehoe) of 2012

Senate Bill (SB) 1241 requires cities and counties to address fire risk in SRAs and Very High FHSZs in the safety element of their general plans. The bill also amended CEQA to direct amendments to the CEQA Guidelines Appendix G environmental checklist to include questions related to fire hazard impacts for projects located in or near lands classified as SRAs and Very High FHSZs. In adopting these Guidelines amendments, the Governor's Office of Planning and Research recognized that generally, low-density, leapfrog development may create higher wildfire risks than high-density, infill development.²

California Public Utilities Commission General Order 166

General Order 166 Standard 1.E requires that investor-owned utilities (IOU) develop a Fire Prevention Plan which describes measures that the electric utility will implement to mitigate the threat of power-line fires generally. Additionally, this standard requires that IOUs outline a plan to mitigate power line fires when wind conditions exceed the structural design standards of the line during a Red Flag Warning in a high fire threat area. Fire Prevention Plans created by IOUs are required to identify specific parts of the utility's service territory where the conditions described above may occur simultaneously. Standard 11 requires that utilities report annually to the California Public Utilities Commission (CPUC) regarding compliance with General Order 166. In compliance with Standard 1.E of this General Order, Pacific Gas and Electric Company (PG&E) adopted a 2023-2025 Wildfire Mitigation Plan dated July 5, 2024. PG&E developed a High Fire Risk Area (HFRA) map that designates parts of Pacifica as Tier 2 and Tier 3 High Fire Threat Districts (HFTD). Tier 2 and Tier 3 HFTDs are intended to identify areas where stricter fire-safety regulations are to be applied from wildfires associated with overhead utility power lines and overhead utility power-line facilities.

² "Leapfrog development" describes the construction of new development at a distance from existing developed areas, with undeveloped land between the existing and new development.

California Coastal Act

In partnership with coastal cities and counties, The Coastal Commission plans and regulates the use of land and water in the coastal zone. Development activities, which are broadly defined by the Coastal Act to include (among others) construction of buildings, divisions of land, and activities that change the intensity of use of land or public access to coastal waters, generally require a coastal permit from either the Coastal Commission or the local government. The City of Pacifica adopts the following key policies derived from the Coastal Act policies associated with wildfire:

PRC 30253. New development shall: (1) minimize risks to life and property in areas of high geologic, flood, and fire hazard; and (2) assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

Regional

San Mateo – Santa Cruz Community Wildfire Protection Plan

The 2018 San Mateo and Santa Cruz Community Wildfire Protection Plan identifies the risks and hazards associated with wildland fires in the wildland urban interface (WUI) areas of San Mateo and Santa Cruz Counties. The plan also identifies recommendations aimed at preventing and reducing both infrastructure and ecosystem damage associated with wildland fires, and documents suggested actions intended to reduce the risk to people, property and the environment. Fuel reduction projects identified in an approved CWPP receive priority for federal funds.

San Mateo County 2021 Multijurisdictional Local Hazard Mitigation Plan (LHMP)

The Local Hazard Mitigation Plan (LHMP) assesses hazard vulnerabilities and identifies mitigation actions that jurisdictions will pursue in order to reduce the level of injury, property damage, and community disruption that might otherwise result from such events. The LHMP addresses natural and human-caused hazards, including flooding, drought, wildfire, landslides, severe weather, terrorism, cyber threats, pandemic, and the impact of climate change on hazards, as well as other hazards. Adoption of the Plan helps the County and its partners remain eligible for various types of pre- and post-disaster community assistance, such as grants, from the Federal Emergency Management Agency (FEMA) and the State government.

County of San Mateo Emergency Operations Plan (EOP)

The 2015 County of San Mateo Emergency Operations Plan (EOP) establishes policies and procedures and assigns responsibilities to ensure the effective management of emergency operations within the San Mateo County Operational Area (SMOA). It provides information on the county emergency management structure of how and when the Emergency Operations Center (EOC) staff is activated.

Local

Pacifica 6th Cycle Housing Element

Pacifica's Housing Element includes the following programs to address infrastructure to accommodate future housing needs:

HE-I-13: Infrastructure Capacity Improvements. Ensure adequate utilities, transportation and other infrastructure to accommodate future housing needs and address any infrastructure constraints to make the production of housing more likely. Specifically, this program is designed to address constraints described in Appendix G including general plan consistency, multi-family housing, and infrastructure constraints, including those associated with the Coast Highway, water, and wastewater.

Specifically, the program includes projects in the City's Five-Year Capital Improvement Program to eliminate infrastructure capacity constraints by 2027, and commits the City to exploring feasibility of expanding transportation services through improvements to public transit routes, capital investments in sidewalk and bike lane projects, and other supportive actions.

Pacifica 2040 General Plan (General Plan)

The Pacifica 2040 General Plan (General Plan) includes the following goals and policies associated with wildfire:

Guiding Policy SA-G-8: Fire Prevention. Protect Pacifica residents and businesses from potential wildland fire hazards.

Implementing Policy SA-I-91: Response Time. Support efforts by NCFA to meet its response time standards throughout the City.

Implementing Policy SA-I-92: Adequate Peak Load Water Supply. Work with the North Coast County Water District to maintain adequate water supply for firefighting, including capacity for peak load under a reasonable worst case wild-land fire scenario, to be determined by the NCFA.

Implementing Policy SA-I-93: Water Storage Locations. In evaluating sites for new water storage facilities, place a priority on locations least subject to impacts from seismic activity and landsliding.

Implementing Policy SA-I-94: Development Review. Review development proposals to ensure that they incorporate appropriate fire-mitigation measures, including adequate provisions for evacuation and access by emergency responders, and vegetation clearances that do not impact ESHAs or wetlands.

Implementing Policy SA-I-95: Plan Review in Fire-Prone Areas. Continue to request the North County Fire Authority participation in plan review of new buildings in potentially fire-prone areas.

Implementing Policy SA-I-96: Fire Prevention Inspections. Continue to require a fire prevention inspection of every permitted business and multi-family development covered by the North County Fire Authority.

Implementing Policy SA-I-97: Fire Prevention Education. Continue educating the public about local fire hazard prevention programs. Work cooperatively with the North County Fire Authority to promote public awareness of fire safety and emergency life support.

Implementing Policy SA-I-98: Vegetation Management. Promote and support the North County Fire Authority's Vegetation Management Program to reduce urban/wildland interface fire hazards through public education and fuel reduction projects.

Implementing Policy SA-I-99: Multi-Jurisdictional Approach. Participate in State or regional efforts to develop a clear legislative and regulatory framework to manage the wildland-urban interface, including implementation of the MJ-LHMP.

Implementing Policy SA-I-100: Rockaway Quarry Service. Ensure that any new development at the Rockaway Quarry site is adequately served by public infrastructure, including fire and police services.

Implementing Policy LU-I-2: Land Divisions in the Coastal Zone. Continue to require coastal development permits for all land divisions within the Coastal Zone. Land divisions in the Coastal Zone shall be:

- Designed to minimize impacts to public access, recreation, and coastal resources.
- Designed to minimize site disturbance, landform alteration, and the removal of native vegetation for development or fire safety.

Implementing Policy OC-I-11: Parks Landscaping. Promote landscapes with native vegetation, which requires little maintenance, little water, makes good wildlife habitat, and is fire resistant, in landscaping of City parks.

Implementing Policy CO-I-30: Fuel Modification. Ensure that new development is sited and designed to minimize the need for fuel modification and vegetation clearance in order to avoid or minimize the disturbance or destruction of habitat and existing hydrology while still providing for fire safety as necessitated by the North County Fire Authority's Vegetation Management Program. Prohibit new development that would require fuel modification within ESHAs.

Pacifica Municipal Code

Pacifica Municipal Code, Title 9, Chapter 2 "Emergency Services" establishes a Director Emergency Services and Emergency Services Council for the purpose of preparing and carrying out plans for the protection of persons and property within the city in the event of an emergency. This PMC provision empowers the City Manager as the Director of Emergency Services to perform various

functions to plan for and respond to emergencies in the city, including but not limited to fire emergencies.

Local Hazard Mitigation Plan

AB 2140 requires local governments to adopt a federally approved Hazard Mitigation Plan (HMP), and for HMPs to be considered when developing a safety element and vice versa.

Pacifica's HMP is an annex of San Mateo County's Multijurisdictional Local Hazard Mitigation Plan (MJ-LHMP), most recently updated in 2021. Per the 2021 MJ-LHMP, Pacifica had no population or structures within very high wildland severity zones. At this time, CAL FIRE does not provide mapping data for high or moderate fire risk zones in LRA. The plan identifies the city's hazards and provides strategies for preventing hazards and minimizing damage. The plan ranks wildfire as a medium risk concern, under geologic and hydrologic hazards, and identifies several mitigation actions for wildland fires in Pacifica. These include updating the City's Emergency Operations Plan; pursuing opportunities to preserve and protect critical transportation infrastructure; and developing and delivering business programs and public outreach programs to promote resiliency and community preparedness.

All Hazards and Evacuation Plans

The Pacifica All Hazards & Evacuation Plans, updated in 2019, provides steps that should be considered and taken in case of evacuation. It grants authority and responsibilities to centralized emergency management and divides the City of Pacifica into 14 evacuation zones, each of which has its own evacuation operations plan, detailing evacuation routes, critical sites, traffic concerns, and refuge areas.

Impact Analysis

SIGNIFICANCE CRITERIA

For the purposes of this EIR, a significant impact would occur if the Proposed Project would:

- Criterion 1:** Substantially impair an adopted emergency response plan or emergency evacuation plan;
- Criterion 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;
- Criterion 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; or

Criterion 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.

ASSUMPTIONS AND METHODOLOGY

The impact analysis considered General Plan policies, wildfire conditions within the City of Pacifica, and applicable regulations and guidelines. The Proposed Project would facilitate development and growth in the City of Pacifica. Subsequent CEQA review at the project level may be required to determine whether significant environmental effects would result from growth that may create additional demand for emergency services and critical infrastructure. Project-level review will occur when proposed development plans are prepared.

Consideration is given to potential increases in development in WUI zones, development in proximity to the Very High and High FHSZs, new impervious surface area, erosion associated with future development-related construction activities, hazards associated with wildfire, as well as General Plan policies intended to minimize the impacts of growth on fire services and emergency evacuation access.

IMPACTS

Impact 3.13-1 Implementation of the Proposed Project would not substantially impair an adopted emergency response plan or emergency evacuation plan. (Less than Significant)

As noted in the Environmental Settings section, neither Pacifica's city limits nor Sphere of Influence (SOI) contain any Very High FHSZs. Only a portion of Pacifica's SOI is designated as a High FHSZ. Land immediately adjacent to these areas that is within city limits is designated as Transitional Open Space Residential (TOSR) or other designations to ensure very low densities of residential development commensurate with the degree of fire hazard.

Even so, analysis in the 2021 MJLHMP and the General Plan Safety Element identifies areas of the city that have constrained emergency access. Reliance on Highway 1 as a north-south connection causes challenges for timely fire response, and the Vallemar, West and East Fairway Park, Rockaway Beach, and Rockaway neighborhoods in central Pacifica are beyond four-minute travel distance from northern San Mateo County fire stations. As such, a mid-point station in Pacifica with a truck and engine company has been proposed as a potential solution. Further, implementation of the Proposed Project and increases in regional travel passing through Pacifica would increase the amount of vehicular traffic in and around Pacifica and may therefore increase the number of potential emergency access conflicts in the event of a disaster, which could result in a potentially significant impact.

However, potential improvements to the roadway network under the General Plan, such as the Manor overcrossing project highlighted in Implementing Policy CI-I-9, would contribute to mitigating the impacts of additional traffic on emergency response times. Furthermore, traffic signal preemption devices on emergency vehicles, as well as emergency sirens, will improve

emergency response times in accordance with Policy SA-G-9 even in instances of intersection congestion during peak commute periods.

Close consultation with Caltrans and the San Mateo County Transportation Authority will help to improve congestion (policies CI-G-7 and CI-G-9) and will ensure that congestion management solutions are implemented with any potential congestion increases. Other General Plan policies improve mobility connections between communities and increase evacuation capacity, such as policies CI-I-1, CI-I-2, CI-I-3, and CI-I-4. The General Plan also provides for improved emergency access through policies that provide additional access routes and require new streets and developments to meet adopted emergency access standards (CI-I-25, SA-I-94, SA-I-103, and SA-I-104). Housing Element program HE-I-13 also supports expansion of transportation services. Given the existing framework of adopted plans addressing emergency response combined with the beneficial effects of General Plan policies, implementation of the Proposed Project will ensure that inadequate emergency access does not occur and will result in a less-than-significant impact.

Further, emergency access for individual developments pursuant to the Proposed Project will also be assessed at a project level through the development review process as projects are proposed, consistent with the provisions of the Municipal Code. Project level review required by the City includes site access review for emergency vehicles and traffic control plans as needed that account for emergency vehicles.

Development under the Proposed Project would also be required to adhere to the City's General Plan which includes policies that complement other existing, adopted plans addressing emergency response and emergency evacuation, including the 2021 Multijurisdictional Local Hazard Mitigation Plan (MJLHMP), the Pacifica All Hazards & Evacuation Plans, and the City of Pacifica Emergency Operations Plan. Such policies improve emergency response and coordination, such as protecting critical transportation infrastructure, develop outreach programs to prepare businesses and residents for disaster, support the retrofit and relocation of structures in hazard-prone areas, and support regional inter-agency coordination for hazard mitigation.

The 2021 MJLHMP annex for Pacifica describes important vulnerabilities related to coastal erosion and transportation/accessibility concerns related to landslide along Highway 1. The plan identifies several hazard mitigation action items that will improve emergency access in Pacifica. Such actions include updating the City's Emergency Operations Plan; taking action to preserve and protect critical transportation infrastructure; considering climate change in infrastructure planning; evaluating potential wildfire risk and mitigation strategies; and developing and delivering business programs and public outreach programs to promote resiliency and community preparedness. The Pacifica All Hazards and Evacuation Plan grants authority and responsibilities to centralized emergency management and divides the City of Pacifica into 14 evacuation zones, each of which has its own evacuation operations plan, detailing evacuation routes, critical sites, traffic concerns, and refuge areas. This Plan includes specific routes in areas of constrained emergency access. The City's Emergency Preparedness and Safety Commission is responsible for disaster preparedness training in Pacifica and maintains the Emergency Operations Plan, which ensures an effective and coordinated response to disasters within the city. The City also has a Community Emergency Response Team (CERT) that supplements first-responder police and fire personnel with civilian volunteers to assist with emergency evacuation facilitation in accordance with the City's existing plans.

Therefore, compliance with the provisions of the Municipal Code and continued implementation of the 2021 Multijurisdictional Local Hazard Mitigation Plan, the Pacifica All Hazards & Evacuation Plans, and the City of Pacifica Emergency Operations Plan in combination with General Plan policies would ensure that inadequate emergency access does not occur from the Proposed Project, and that it would not substantially impair an adopted emergency response plan or emergency evacuation plan. As such, implementation of the Proposed Project would result in a less-than-significant impact.

Mitigation Measures

None required.

Impact 3.13-2 Implementation of the Proposed Project would not exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. (Less than Significant)

About two-thirds of Pacifica is undeveloped, and nearly half is protected open space. This undeveloped land is mainly on the rugged ridges that form the city's western edge and descend to the ocean between Pacifica's valley communities. Coastal scrub is the predominant vegetation type, interspersed with annual grassland. Significant areas of eucalyptus forest and mixed woodland are present in eastern Sharp Park and on Cattle Hill and San Pedro Mountain. As described above, there are WUI areas throughout Pacifica which allows residents to enjoy close contact with open ridges and woodlands, and in addition brings residents in close proximity to the risk of Wildland fires.

As noted in the Attorney General's report, *Best Practices for Analyzing and Mitigating Wildfire Impacts of Development Projects Under the California Environmental Quality Act*, fire spread and structure loss is more likely to occur in low- to intermediate-intensity developments in high fire risk areas. The Proposed Project would support a land use pattern with higher-density and infill developments where appropriate, including mixed-use development at existing commercial shopping centers. No sites are contained within VHFHSZ and other areas of elevated wildfire risk. As such the location and type of development would generally be less likely to foment fire spread and structure loss. However, Proposed Project's sites 30 and 31 on San Pedro Ave are closest to the High FHSZ in the City's SOI. Given the extent to which FHSZs exist around Pacifica, buildout of these sites could increase the risk of loss and damage due to wildfire.

To further address this risk exposure from additional residential development near this High FHSZ, State and federal regulations, and City of Pacifica development standards play an important role in limiting potential fire hazards. All new construction under the Proposed Project would be subject to the California Fire Code, which include safety measures to minimize the threat of fire, including ignition-resistant construction with exterior walls of noncombustible or ignition resistant material from the surface of the ground to the roof system and sealing any gaps around doors, windows, eaves, and vents to prevent intrusion by flame or embers. Construction would also be required to meet CBC requirements, including CCR Title 24, Part 2, which includes specific requirements related to exterior wildfire exposure. The Board of Forestry, via CCR Title 14, sets forth the minimum development standards for emergency access, fuel modification, setback, signage, and

water supply, which help prevent loss of structures or life by reducing wildfire hazards. The codes and regulations would reduce the risk of loss, injury, or death from wildfire for new developments under the Proposed Project.

In addition, the City cooperates with CDF and the North County Fire Authority (NCFA) through cooperative fire protection agreements. The NCFA practices fire prevention activities, including its Vegetation Management Program. Additionally, the MJLHMP Annex for Pacifica also includes actions that would reduce the risk of loss or damage due to wildfire in and adjacent to fire-prone areas, such as updating its Emergency Operations Plan (Action PAC-8); continuing public education outreach to neighborhoods (Action PAC-14); and Evacuating potential wildfire risk and mitigation strategy (Action PAC-18) in partnership with North County Fire Authority. The City's General Plan also seeks to reduce fire risk through a variety of methods, including development review and consistent inspection (policies SA-I-94 and SA_I-96), public awareness programming (policy SA-I-97), vegetation management policies related to development (policy SA-I-98), plan review in fire-prone areas (policy SA-I-95), and coordination with North County Fire Authority and other agencies (SA-I-91; SA-I-99; SA-I-102). Taken together, these State and local provisions provide a framework for proactively managing and reducing risk associated with wildfire in the Planning Area and the Proposed Project sites.

Smoke and air pollution, specifically particulate matter, from air pollution can be a health hazard, especially for sensitive populations such as children, the elderly, and people with respiratory illnesses. Pacifica lies within the jurisdiction of the Bay Area Air Quality Management District (BAAQMD), and policies in the General Plan promote continued compliance with BAAQMD air quality standards and guidelines. BAAQMD has developed a comprehensive Wildfire Response Program, which contains public resources designed to help the public prepare for and protect their health during wildfire events. Additionally, BAAQMD maintains regulations on wood burning in order to prevent wildfires and reduce air pollution from particulate matter.

The General Plan includes policies to provide fire prevention and emergency response services that are proportionate to demand from new development, which will minimize fire risks and protect people and structures. Public preparedness measures and emergency communications, as well as cooperation with regional agencies like the BAAQMD, minimize risk from wildfire-induced air pollution. All new developments, such as those under the Proposed Project, must consider fire protection systems and equipment, defensible space, and vegetation management consistent with requirements in the CBC, NCFA guidelines, and the Pacifica Municipal Code. Continued compliance with existing programs and standards as well as General Plan policies would reduce potential fire hazards under the Proposed Project to a less than significant level.

Mitigation Measures

None required.

Impact 3.13-3 Implementation of the Proposed Project would not 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. (Less than Significant)

As noted above, implementation of the Proposed Project would support a land use pattern with higher-density and infill developments where appropriate, including mixed-use development at existing commercial shopping centers. As such, development under the Proposed Project would occur in already developed areas served by existing roadway and utility infrastructure and generally removed from areas of elevated wildfire risk. As stated in the City's current General Plan Housing Element, all sites identified for housing development are already served by existing roads, utilities, and infrastructure; infrastructure does not pose a constraint on development for the majority of the sites listed in the inventory. However, the Housing Element also states that additional through lanes on Coast Highway may be needed to facilitate evacuation. Since Coast Highway is already built out, it is not anticipated the additional through lanes would exacerbate fire risk.

Even so, in the event that additional utility infrastructure or roads are needed under the Proposed Project, compliance with existing State regulations, including Title 14 of the California Code of Regulations and the California Fire and Building Codes, would help reduce wildfire risks from such infrastructure construction. Additional General Plan policies to help reduce infrastructure-related wildfire risk include policies related to vegetation management, water supply for fire suppression, and individual development and plan review in fire-prone areas to ensure that proper mitigation is incorporated (policies SA-I-98, SA-I-92, SA-I-94, and SA-I-95). Implementation of these policies would reduce the potential for wildfire ignition from the operation of construction equipment or vehicles traveling on roadways in the area. Moreover, any construction activity for new development and corresponding infrastructure would require additional environmental review and compliance with City standards and best management practices (BMPs), including the regulations and Proposed Project policies described under Impacts 3.13-1 and 3.13-2.

Compliance with existing regulations and policies would ensure that installation or maintenance of infrastructure associated with the Proposed Project would not exacerbate fire risk, therefore this impact is less than significant.

Mitigation Measures

None required.

Impact 3.13-4 Implementation of the Proposed Project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. (Less than Significant)

Wildfires can impact the natural processes of a watershed by altering soil properties and removing stabilizing vegetation, leaving burned slopes prone to erosion and gullying. As described above, no sites for development under the Proposed Project are contained within Very High FHSZs or other

areas of elevated wildfire risk. As such, the potential exposure of people and structures to post-fire landslides and flooding would not increase significantly due to implementation of the Proposed Project.

As covered in Chapter 3.7: *Hydrology and Water Quality* of this EIR, potential flooding could occur for a number of reasons, including increased stormwater flow, the impediment or redirection of flood flows, or the placement of structures in floodplains. Wildfires can cause flooding by inducing landslides, which can lead to higher concentrations of silt in local watersheds, or by stripping soil of its moisture, thus increasing the imperviousness of the ground and therefore stormwater velocity. However, all future development would be required to comply with applicable federal, state, regional, and local policies and regulations, including Best Management Practices (BMPs), site-specific stormwater management plans, and land use restrictions in hazardous areas such as hillsides and floodplains. Through compliance with these measures, impacts related to flooding and drainage changes were found to be less than significant.

Risk of landslides is covered in Chapter 3.6: *Geology, Soils, and Seismicity* of this EIR. Pacifica is located within a seismically active region, and is surrounded by Sweeney Ridge in the east, Montara Mountain to the south, and the Pacific Ocean's rocky bluffs to the west. While most of the Planning Area is in an area of low landslide susceptibility, there are some sites identified for development that experience moderate landslide risk. Slope failure can occur naturally through rainfall or seismic activity, or through earthwork and grading related activities. Wildfires cause slope failure by burning stabilizing vegetation and drying out soil, which can change its properties and therefore lead erosion, especially in clay soils. Construction of new structures in the vicinity of relatively steep slopes could provide additional loading causing landslides or slope failure from unstable soils or geologic units. As detailed in Impacts 3.6-1 through 3.6-3, potential hazards of landslides would be addressed largely through the integration of geotechnical information in the planning and design process for projects to determine the local soil suitability for specific projects in accordance with standard industry practices and state-provided requirements, such as CBC requirements which are used to minimize the risk associated with these hazards. Geotechnical investigations would be required to thoroughly evaluate site-specific geotechnical characteristics of subsurface soils and bedrock to assess potential hazards and recommend site preparation and design measures to address any hazards which may be present. These measures are enforced through compliance with the CBC to avoid or reduce hazards relating to unstable soils and slope failure. Additionally, the General Plan prohibits development in areas of mostly landslides or slopes steeper than 35 percent unless detailed site investigations ensure that risks can be reduced to acceptable levels. Proposed development in hillside areas would be held to more stringent site-specific regulations, including geotechnical and soil studies in order to prevent erosion. Adherence to these regulations ensures that the potential for adverse landslide and slope failure impacts due to implementation of the Proposed Project is considered less than significant.

While the Planning Area could be subject to risks associated with downstream flooding or landslides due to post-fire instability, future development would be required to adhere to all applicable regulations focused on both flooding and seismic safety, in addition to the fire safety regulations described under previous impacts in this chapter. Moreover, the Proposed Project does not expand potential development into areas at high risk of landslide and flooding and largely supports infill development in already urbanized areas. As such, adherence to California Building Code standards and review of all new structures and land uses in the Planning Area by the NCEA

would ensure that risks from downslope or downstream flooding or landslides, because of runoff, post-fire slope instability, or drainage changes would be less than significant, and no mitigation would be required.

Mitigation Measures

None required.

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3.14 Effects Found Not to be Significant

CEQA Guidelines Section 15082 allows lead agencies to narrow the scope of the EIR based on the scoping process. A Notice of Preparation (NOP) of an EIR for the Proposed Project was prepared and circulated for public review between May 3, 2024, and June 3, 2024. The NOP identified certain impacts for which there is no likelihood of a significant impact due to the location and characteristics of the Planning Area. This chapter provides a brief description of these effects found not to be significant, based, in part, on the NOP evaluation, NOP comments, and/or more detailed analysis conducted as part of the EIR preparation process. There were no NOP comments related to the topics covered in this section.

Agriculture and Forestry Resources

A significant impact would occur if implementation of the Proposed Project would result in one or more of the following:

- Criterion 1:** Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use;
- Criterion 2:** Conflict with existing zoning for agricultural use, or a Williamson Act contract;
- Criterion 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));
- Criterion 4:** Result in the loss of forest land or conversion of forest land to non-forest use; or
- Criterion 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.

Agricultural uses in total currently constitute 5 percent of the Planning Area, at 361 acres. About 260 acres of this are within city limits, at Millwood Ranch, Park Pacifica Stables, and properties directly north of Sharp Park and along Linda Mar Boulevard. About 104 acres are outside city limits, at Shamrock Ranch between San Pedro Creek and Highway 1. Most land in this category involves

horse boarding and trail riding and has a rural character. However, a significant portion of the Pacifica Planning Area is forested, including Eucalyptus, Coastal Mixed Hardwood/Oak Woodland, Riparian Mixed Hardwood, and Monterey Cypress.

Even so, the Proposed Project does not involve any changes to existing agricultural or forestry resources or policies affecting agricultural or forestry activities. There is no Important Farmland in the city based on latest (2018) Farmland Mapping and Monitoring Program data, and no parcels under Williamson Contract. In addition, none of the parcels proposed for rezoning would conflict with existing zoning for agriculture or forest land. The City's General Plan Conservation Element also includes policies to ensure the conservation of native forestation and continuation of agricultural and compatible uses. The Proposed Project would not create any changes to agricultural or forest land, and therefore would have no impact on any agriculture and/or forest resources.

Hazards and Hazardous Materials

A significant impact would occur if implementation of the Proposed Project would result in one or more of the following:

- Criterion 1:** Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Criterion 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;
- Criterion 3:** Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- Criterion 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;
- Criterion 5:** 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 uses airport, and would result in a safety hazard or excessive noise for people residing or working in the project area;
- Criterion 6:** Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- Criterion 7:** Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

According to the California Department of Toxic Substances Control's EnviroStor database and the State Water Resources Control Board's GeoTracker database, there are no hazardous materials sites located at or near the Proposed Project sites to be rezoned in Pacifica. Further, the construction and operation of housing and mixed uses generally does not involve the release -- accidental or otherwise -- of hazardous materials that would create a significant hazard to the public, nor would it involve emitting or handling acutely hazardous materials or wastes in the vicinity of schools. Overall, compliance with existing federal, State, and local regulations regarding hazards and hazardous materials would result in a less than significant impact.

In addition, the Proposed Project would not interfere with any airport use plan or otherwise create an airport-related safety hazard and impacts would be less than significant. Regarding interference with an adopted emergency response plan, the Safety Element of the General Plan provides policies that address conformance with local emergency response programs and continued cooperation with emergency response service providers. As such, impacts would be less than significant. See also Impact 3.11-4 from Chapter 3.11: *Transportation* regarding emergency access. For analysis on wildfire hazards, see Chapter 3.13: *Wildfire*.

Mineral Resources

A significant impact would occur if implementation of the Proposed Project would result in one or more of the following:

- Criterion 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; or**
- Criterion 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.**

Mineral resources in the City of Pacifica are limited primarily to limestone deposits. According to the current General Plan, there are no longer any operational mineral extraction sites in the city or any locally important mineral resource recovery sites. There are limestone deposits found in the southern portion of the city, underlying development, which are not mined. General Plan policies would require the protection or environmentally sensitive extraction of significant mineral resources upon discovery. Thus, the Proposed Project would not result in the loss or availability of a known mineral resource that would be of value to the region and the residents or the State.

4 Alternatives Analysis

The Proposed Project is described in Chapter 2 and analyzed in Chapters 3.1 through 3.14 of this EIR with a discussion of potentially significant impacts and recommended mitigation measures to avoid those impacts. The California Environmental Quality Act (CEQA) Guidelines requires a description and comparative analysis of a range of alternatives to the Proposed Project that could feasibly attain the objectives of the Proposed Project, while avoiding or substantially lessening potential impacts. CEQA Guidelines also require that the environmentally superior alternative be designated. If the alternative with the least environmental impact is the No Project Alternative, then the EIR must also designate the next most environmentally superior alternative.

The following discussion is intended to inform the public and decision makers of the feasible alternatives that would avoid or substantially lessen significant effects of the Proposed Project, and to compare such alternatives to the Proposed Project. Section 15126.6 of the CEQA Guidelines states that:

An EIR shall describe a range of reasonable alternatives to the project, or the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation.

CEQA Guidelines Section 15126.6(e) requires consideration of a “No Project Alternative” in every EIR. In the case of the Proposed Project, the No Project Alternative is a scenario in which implementation of the existing Pacifica General Plan 2040 would continue, excluding the implementation of the Proposed Project’s General Plan Amendments and Rezoning Program and Objective Development Standards. The following discussion includes an evaluation of the No Project Alternative.

4.1 Objectives of the Project

The Proposed Project will create the regulatory framework to accommodate the Regional Housing Needs Allocation (RHNA) sites inventory and promote development of multi-family housing. In addition, the Proposed Project addresses land use constraints to make the production of housing more likely. It reflects the priority given in the General Plan and Housing Element to focus development in infill locations, including existing commercial shopping centers. At the outset of the General Plan update process, the following specific objectives were established for the Project:

1. Address land use constraints to make the production of housing more likely;
2. Affirmatively further fair housing;
3. Facilitate production of affordable housing and remove constraints to housing development, which limits housing choices of households who have lower incomes and disproportionate housing needs;
4. Facilitate development of publicly owned sites, which the City will prioritize for development of housing that meets special needs;
5. Maintain consistency with the General Plan and strategically add capacity for housing in areas with existing access to services and transit;
6. Reflect the priority given in the General Plan and Housing Element to focus redevelopment in existing commercial shopping centers;
7. Ensure compliance with State housing law(s), including demonstration of capacity to meet Pacifica's RHNA allocation; and
8. Reflect community priorities that value infill development, coastal views, and scenic vistas.

4.2 Alternatives Considered but Not Evaluated in Detail in this EIR

This section is provided consistent with CEQA Guidelines which state that the EIR needs to examine in detail only a reasonable range of alternatives that the lead agency determines could feasibly attain most of the basic objectives of the project. Further, the EIR should identify any alternatives that were considered by the lead agency but were rejected and briefly explain the reasons underlying the lead agency's determination. The factors used to eliminate alternatives from detailed consideration in the EIR include the alternative's failure to meet most of the basic project objectives or inability to avoid significant environmental effects (CEQA Guidelines 15126.6(c)).

Prior to and during the development of alternative plans, community members and stakeholders were invited to provide ideas in a number of ways, including public workshops, Planning Commission and City Council meetings, and interviews with stakeholders. Feedback obtained during these outreach efforts helped City staff conceptualize and prioritize land uses in the alternative plans, and bracket the range of choices that have the broadest support from the community. The alternatives described in this EIR include the substantial proposals (Alternative 1: No Project Alternative and Alternative 2: High Density Shopping Centers) considered by the City of Pacifica during the alternatives stage of the planning process. The third conceptual Reduced Development Alternative includes many of the same components and sites for development as the Proposed Project, however, some of its sites identified for development were determined to be infeasible.

REDUCED DEVELOPMENT ALTERNATIVE

Similar to the Proposed Project, the Reduced Development Alternatives focuses infill development in existing commercial shopping centers and other infill locations for the development of multi-family housing. Unlike the Proposed Project, the Reduced Development Alternative does not rezone sites 10, 11, 12, 18, 38, 19A, 16B, 27A, 27B, I, and J to allow housing development in order to meet RHNA capacity. It does propose five additional sites for rezoning on Skyline Blvd, Oceana Blvd, and Coast Hwy. Even so, there would be fewer sites for development which would allow an additional 1,612 housing units from implementation of the Alternative, compared to the Proposed Project's 2,175 housing units.

While the Alternative includes many of the same components and sites for development as the Proposed Project, some of its sites identified for development were determined to be infeasible. As such, the Alternative could no longer be used to meet certain RHNA categories based on specific requirements and would result in more significant environmental impacts. Therefore, analysis of this Alternative is not carried forward since it does not meet the Project objectives, nor does it further reduce the environmental impacts of the Proposed Project.

LOWER DENSITY ALTERNATIVE

Similar to the Proposed Project, the Lower Density Alternative focuses infill development in existing commercial shopping centers and other infill locations for the development of multi-family housing. Unlike the Proposed Project, the Lower Density Alternative would rezone sites to only permit low-density multi-family housing. While the Alternative includes many of the same components and sites for development as the Proposed Project, it could no longer be used to meet certain RHNA categories based on specific requirements and would result in more significant environmental impacts. Therefore, analysis of this Alternative is not carried forward since it does not meet the Project objectives, nor does it further reduce the environmental impacts of the Proposed Project.

4.3 Alternatives Analyzed In This EIR

ALTERNATIVE I: NO PROJECT ALTERNATIVE

Consistent with Section 15126.6(e)(2) of the CEQA Guidelines, the No Project Alternative represents what would be reasonably expected to occur in the foreseeable future if the Proposed Project were not implemented. Under this scenario, implementation of the existing Pacifica General Plan 2040 would continue, excluding the implementation of Program HE-1-1 which is Proposed Project's General Plan Amendments and Rezoning Program and Objective Development Standards. Under this Alternative, there would be no changes to the current zoning and General Plan land use designations (see **Figure 4-1**) in order for the City to accommodate its share of regional housing. However, development would still occur at many of the Proposed Project sites identified for development under the No Project Alternative. Since the sites are not being rezoned, they would be developed at densities that the current Zoning Code permits which is much lower than the rezoned densities under the Proposed Project.

The No Project Alternative is infeasible, as it would not meet the project objective of achieving the RHNA and would not be consistent with State law. However, the alternatives analysis will still include and assess the No Project Alternative as required by CEQA.

ALTERNATIVE 2: HIGH DENSITY SHOPPING CENTERS ALTERNATIVE

In order to reduce the Proposed Project's significant and unavoidable impact on vehicle miles traveled (VMT), the High Density Shopping Centers Alternative was designed. This Alternative aims to focus housing within Pacifica's existing commercial centers and promote a more intense mixed-use development pattern. The Alternative would modify objective development standards to increase density and heights on parcels located in the Linda Mar, Fairmont, Brentwood, Pacifica Manor, and Park Mall shopping centers, and decrease the amount of development on largely vacant sites, including the Caltrans right-of-way to the northeast, and the area between Reina Del Mar Ave and Rockaway Beach Ave.

Compared to the Proposed Project, Alternative 2 would increase densities and heights at sites 28, 29, 32, 16A, 16B, and 27B (see **Figure 4-2**). Densities would be increased up to 80 dwelling units per acre and heights of up to 75 feet for MU- designation and 70 feet for R- designation. Alternative 2 would also reduce densities and heights at sites 2, 10, 11, 12, 21, 25, G, H, I, J. Those sites currently designated as MU-60 or R-60 would be reduced to MU-50 or R-50. Those sites currently designated as MU-40 or R-40 zones would be reduced to MU-30 or R-30. Alternative 2 would still contain approximately the same amount of residential development as the Proposed Project, but less commercial development.

Alternative 1: No Project

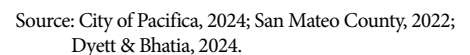
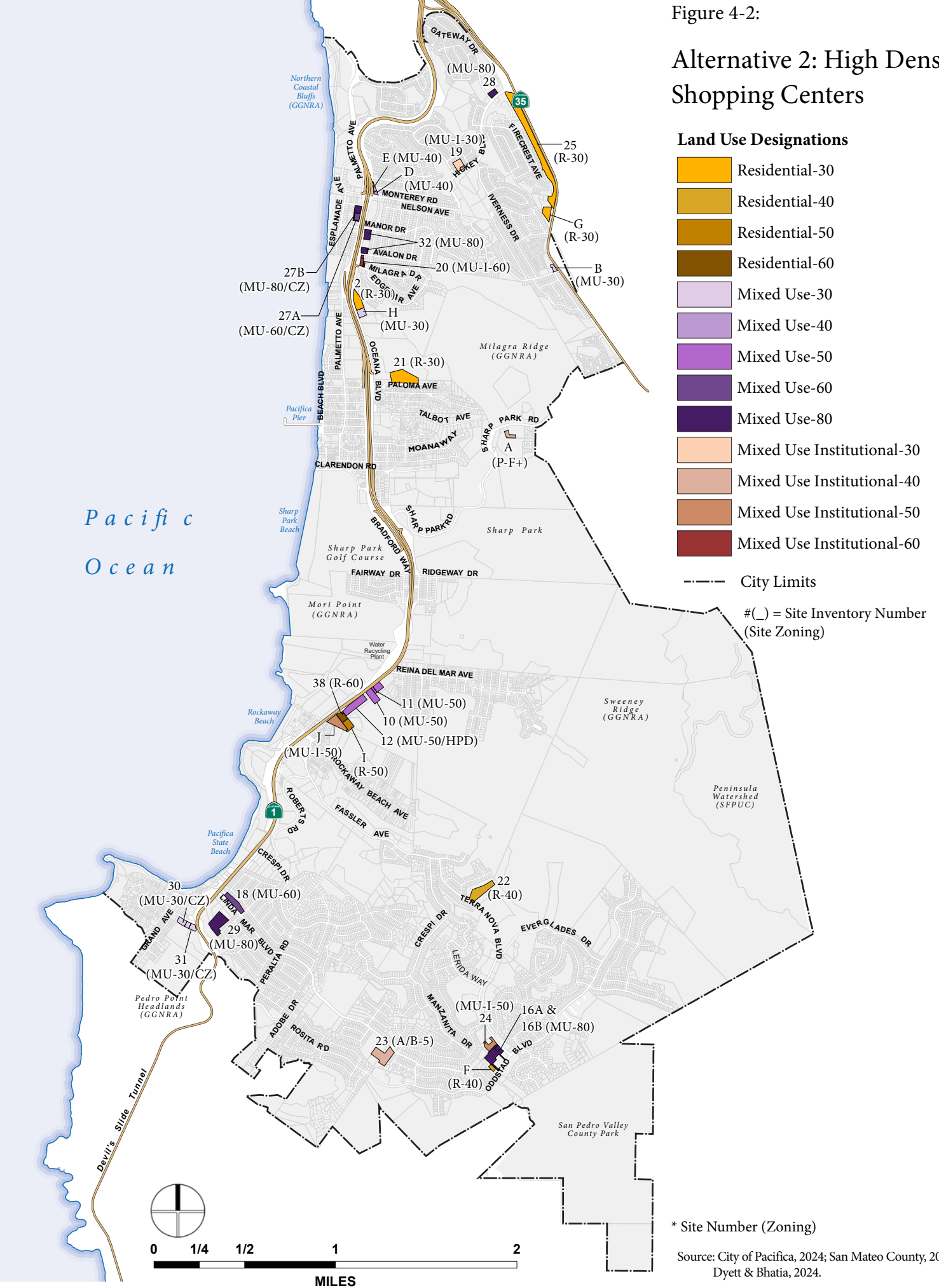


Figure 4-2:
Alternative 2: High Density Shopping Centers



* Site Number (Zoning)

Source: City of Pacifica, 2024; San Mateo County, 2022; Dyett & Bhatia, 2024.

4.4 Impact Analysis

This section provides a qualitative analysis of the potential environmental impacts of Alternative 1 and Alternative 2 relative to existing conditions and compares its performance with that of the Proposed Project. The discussions are arranged by resource topic and address the same significance criteria used to evaluate the Proposed Project in Chapter 3 of this EIR.

AESTHETICS

Alternative 1: No Project Alternative

The No Project Alternative would maintain all land use and zoning designations from the City of Pacifica General Plan 2040. Development under the No Project Alternative would still adhere to General Plan policies that provide long-term protections for scenic vistas in Pacifica while also creating opportunities for development in already-developed areas of the city; these policies include the continuation of the Hillside Preservation District program and Design Guidelines and Review for development projects (including Guiding Policies CD-G-5 and CD-G-6; and Implementing Policies CD-I-4; I-7; I-11; I-12; I-13; I-14; I-15; I-16; and I-17). Further, there would be less development under this Alternative that could potentially impact scenic vistas compared to the Proposed Project. Therefore, the No Project's impacts on scenic resource would be less than significant, with lesser impacts compared to the Proposed Project.

Similar to the Proposed Project, the No Project Alternative is not expected to substantially damage scenic resources visible from scenic highways, and this potential impact would be less than significant. There is no difference between the No Project Alternative and the Proposed Project.

The No Project Alternative would adhere to General Plan policies that provide guidelines for street, community design, and public realm improvements, which are intended to improve the existing visual character and quality of Pacifica. Therefore, the Alternative would not substantially degrade the visual character or quality of the city, resulting in a less than significant impact that is roughly equivalent to the Proposed Project.

Because the No Project Alternative would result in less development, impacts resulting from light and glare may be slightly less than the Proposed Project. However, both would be subject to the same General Plan policies that minimize impacts. As such, the impact would be less than significant, and the difference in impact between the No Project and Proposed Project is negligible.

Alternative 2: High Density Shopping Centers Alternative

Compared to the Proposed Project, Alternative 2 promotes a more intense mixed-use development pattern with increased densities and heights and certain sites. Even so, development would still be required to adhere to General Plan policies that provide long-term protections for scenic vistas in Pacifica. As such, impacts would still be less than significant, but greater than that of the Proposed Project.

There are no State scenic highways in the Planning area, so there would be no impact on resources within a State scenic highway. There is no difference in impacts between the No Project and Proposed Project.

Similar to the Proposed Project, the Alternative 2 is not expected to substantially damage scenic resources visible from scenic highways, this potential impact would be less than significant. There is no difference between the Alternative 2 and the Proposed Project.

Alternative 2 would adhere to General Plan policies that provide guidelines for street, community design, and public realm improvements, which are intended to improve the existing visual character and quality of Pacifica. Therefore, the Alternative would not substantially degrade the visual character or quality of the city, resulting in a less than significant impact that is roughly equivalent to the Proposed Project.

Because Alternative 2 would result in increased densities at some sites compared to the Proposed Project, impacts resulting from light and glare may be slightly greater than the Proposed Project. However, both would be subject to the same General Plan policies that minimize light impacts. As such, the impact would be less than significant, and the difference in impact between the No Project and Proposed Project is negligible.

AIR QUALITY

Alternative 1: No Project Alternative

As with the Proposed Project, it is likely that the No Project Alternative would incorporate applicable control measures of the 2017 Clean Air Plan and would not disrupt or hinder implementation of any of these control measures. Impacts would be less than significant, and the difference in impacts between the No Project Alternative and the Proposed Project are negligible.

Impacts under the No Project Alternative related to air quality during construction would be similar to those of the Proposed Project but reduced because the overall amount of development proposed would be reduced. This would result in a shorter duration for construction activities. Thus, impacts would be less than significant, and the No Project Alternative would have less of a potential impact than the Proposed Project.

Similar to the Proposed Project, it is assumed that individual developments would implement similarly applicable mitigation measures presented in Chapter 3.3 of the EIR as necessary to reduce air quality impacts under the No Project Alternative. Future projects that cannot meet construction screening criteria must prepare a detailed construction air quality impact assessment to incorporate measures to reduce construction emission impacts to levels below the BAAQMD's construction thresholds of significance for criteria air pollutants and TACs. As such, construction TAC impacts would be less than significant, and the differences in impact between the No Project Alternative and Proposed Project are negligible.

During operations, emissions under the No Project Alternative from area and building energy sources would be similar to those of the Proposed Project but reduced because the number of housing units and nonresidential development would be reduced. It is also assumed that similar mitigation would be incorporated that would require projects to implement health reduction measures in order to mitigate any potential air quality impacts on sensitive receptors. Air quality impacts under the No Project Alternative would result in a less than significant impact, and potential impacts would be less than the Proposed Project.

Similar to the Proposed Project, compliance with BAAQMD Regulation 7, Municipal Code, and Sharp Park Specific Plan policies would discourage siting sensitive receptors in proximity to odor sources and maintain performance standards for new industrial development, thus ensuring that odor impacts are minimized and less than significant. Potential impacts would be similar to the Proposed Project.

Alternative 2: High Density Shopping Centers Alternative

As with the Proposed Project, it is likely that the Alternative 2 would still incorporate applicable control measures of the 2017 Clean Air Plan and would not disrupt or hinder implementation of any of these control measures. As such, the impact would be less than significant, and differences in impact between Alternative 2 and the Proposed Project are negligible.

Impacts under Alternative 2 related to air quality during construction would be similar to those of the Proposed Project because the overall amount of development proposed would be roughly similar. This would result in a similar duration for construction activities. As such, the impact would be less than significant, and differences in impact between Alternative 2 and the Proposed Project are negligible.

Similar to the Proposed Project, it is assumed that individual developments would implement similarly applicable mitigation measures presented in Chapter 3.3 of the EIR as necessary to reduce air quality impacts under Alternative 2. Future projects that cannot meet construction screening criteria must prepare a detailed construction air quality impact assessment to incorporate measures to reduce construction emission impacts to levels below the BAAQMD's construction thresholds of significance for criteria air pollutants and TACs. As such, construction TAC impacts would be less than significant, and the differences in impact between Alternative 2 and Proposed Project are negligible.

During operations, emissions under Alternative 2 from area and building energy sources would be similar to those of the Proposed Project because the number of housing units would be roughly equivalent, only with less nonresidential development. It is also assumed that similar mitigation would be incorporated that would require projects to implement health reduction measures in order to mitigate any potential air quality impacts on sensitive receptors. Air quality impacts under Alternative 2 would result in a less than significant impact, and potential impacts would be similar to the Proposed Project.

Similar to the Proposed Project, compliance with BAAQMD Regulation 7, Municipal Code, and Sharp Park Specific Plan policies would discourage siting sensitive receptors in proximity to odor sources and maintain performance standards for new industrial development, thus ensuring that odor impacts would be minimized and less than significant. Potential impacts would be similar to the Proposed Project.

BIOLOGICAL RESOURCES

Alternative 1: No Project Alternative

Impacts under the No Project Alternative related to biological resources would be similar to those of the Proposed Project because they both largely support a land use pattern of infill development

where appropriate, rather than greenfield development. Similar to the Proposed Project, the No Project Alternative contains several General Plan policies related to protection of biological habitat and resources and maintenance of existing waterways. Through compliance with these and other local, state, and federal requirements, impacts related to special species, riparian habitats and sensitive natural communities, federally protected wetlands, migratory corridors, and potential conflicts with local policies or ordinances protecting biological resources would be less than significant. Since development would occur at many of the same sites as the Proposed Project but at lower densities, any differences in impact compared to the Proposed Project would be negligible.

Alternative 2: High Density Shopping Centers Alternative

Impacts under the Alternative 2 related to biological resources would be similar to those of the Proposed Project because they still include the same sites for development, just at differing densities. Similar to the Proposed Project, Alternative 2 would adhere to several General Plan policies related to protection of biological habitat and resources and maintenance of existing waterways. Through compliance with these and other local, state, and federal requirements, impacts related to special species, riparian habitats and sensitive natural communities, federally protected wetlands, migratory corridors, and potential conflicts with local policies or ordinances protecting biological resources would be less than significant. Any differences in impact compared to the Proposed Project would be negligible.

CULTURAL AND TRIBAL CULTURAL RESOURCES

Alternative 1: No Project Alternative

Impacts under the No Project Alternative related to cultural and tribal cultural resources would be similar to those of the Proposed Project because they both largely support a land use pattern of infill development where appropriate, rather than greenfield development. The No Project Alternative would be required to comply with local and state requirements that mitigate impacts to cultural and historic resources, as well as existing General Plan policies that require consultation with the Northwest Information Center, site testing by a qualified archaeologist in sensitive areas or areas with archeological significance, halting construction if cultural resources are encountered unexpectedly, and preparing and maintaining an inventory of historic structures. It is also assumed that individual developments under the Alternative would be required to adhere to similar mitigation measures to conduct cultural resource awareness training for construction personnel as the Proposed Project. Compliance with these policies, like the Proposed Project, would reduce impacts to historic, cultural, and tribal resources to less than significant. Because the extent of development of greenfield areas is similar to the Proposed Project, differences in impact would be negligible.

Alternative 2: High Density Shopping Centers Alternative

Growth areas in Alternative 2 would still be at the same sites as the Proposed Project, with greater densities at some sites and few densities at others. As such, impacts under the Alternative would be similar to the Proposed Project. Alternative 2 would be required to comply with local and state requirements that mitigate impacts to cultural and historic resources, as well as existing General Plan policies that require consultation with the Northwest Information Center, site testing by a

qualified archaeologist in sensitive areas or areas with archeological significance, halting construction if cultural resources are encountered unexpectedly, and preparing and maintaining an inventory of historic structures. It is also assumed that individual developments under the Alternative would be required to adhere to similar mitigation measures to conduct cultural resource awareness training for construction personnel as the Proposed Project. Compliance with these policies, like the Proposed Project, would reduce impacts to historic, cultural, and tribal resources to less than significant; differences in impact would be negligible compared to the Proposed Project.

ENERGY AND GREENHOUSE GAS EMISSIONS

Alternative 1: No Project Alternative

Given the overall lower amount of development, it is likely that energy usage would be lower under the No Project Alternative compared to the Proposed Project. However, the No Project Alternative would promote a land-use strategy that is lower density, which would result in reduced energy efficiency overall for Planning Area residents and operations as compared to the Proposed Project. Even so, the No Project Alternative would still adhere to General Plan policies that support sustainability through energy efficiency, water conservation, waste reduction, and promotion of alternative transportation. Development under the Proposed Project would be required to comply with State and local renewable energy and energy efficiency plans. As such, energy impacts would be less than significant, and slightly lower compared to the Proposed Project due to the lower amount of development.

Under the No Project Alternative, development in the Planning Area would proceed as envisioned under the City's current General Plan without the Proposed Project. Demolition and construction activities, as well as new operational sources of GHG emissions, would still occur throughout the Planning Area. However, given the reduced amount of development compared to the Proposed Project, this Alternative would thus be expected to have a shorter duration for construction activities. Similarly, operation of land uses supported by the Alternative would generate direct and indirect GHG emissions. However, given there is significantly less development under this Alternative, GHG emissions would be reduced, but not necessarily on a per capita basis. However, it is conservatively assumed that additional reductions are still needed in order to meet the State's 2045 carbon neutrality target. As such, impacts would conservatively be significant and unavoidable, though slightly less than the Proposed Project.

Alternative 2: High Density Shopping Centers Alternative

Given there are similar overall levels of development, it is likely that energy usage would be similar under Alternative 2 compared to the Proposed Project. However, the Alternative plans to focus housing within Pacifica's existing commercial centers and promote a more intense mixed-use development pattern. As such, the Alternative may have slightly greater energy efficiency overall for Planning Area residents and operations as compared to the Proposed Project. Overall impacts would be less than significant. Compared to the Proposed Project, Alternative 2 would have a slightly lesser degree of energy-related impacts.

Under the Alternative 2, demolition and construction activities, as well as new operational sources of GHG emissions, would still occur throughout the Planning Area. Similarly, operation of land

uses supported by the Alternative would generate direct and indirect GHG emissions. However, given the Alternative promotes a more intense mixed-use development pattern and thus creates more opportunities for alternative modes of travel, GHG emissions would likely be reduced on a per capita basis. However, it is conservatively assumed that additional reductions are needed in order to meet the CAP's 2050 and State's 2045 targets. Without further State action, it is unlikely that local efforts alone would be sufficient to meet carbon neutrality by 2045. As such, impacts would conservatively be significant and unavoidable, though slightly less than the Proposed Project.

GEOLOGY, SOILS, AND SEISMICITY

Alternative 1: No Project Alternative

As with the Proposed Project, development under the No Project Alternative would still occur in areas of potential geologic or seismic hazards. However, the No Project Alternative would have reduced development nearer to an Alquist Priolo Zone which would further reduce impacts. In addition, the Alternative would have to adhere to applicable State and local regulations pertaining to these hazards. The California Building Code (CBC) requires that structures near a known fault complete site-specific geotechnical reports evaluating the known fault and the structural integrity of the proposed building, as well as consider mitigation measures in structural design. The Code also contains the latest seismic safety requirements to resist ground shaking through modern construction techniques, which are periodically updated to reflect the most recent seismic research. Existing regulations in the City's Hillside Preservation District also resist landslides through requiring modern construction design and slope stabilization techniques. In addition, General Plan policies SA-G-1, SA-I-1 require site-specific evaluation of geotechnical hazards in currently undeveloped areas in order to determine appropriate levels of development, as well as compliance with the existing code (SA-I-4). Given State and local regulations and policy requirements, the potential for adverse geological impacts due to the implementation of the No Project Alternative is considered less than significant and slightly less than the Proposed Project due to its reduced development.

The No Project Alternative would also adhere to General Plan Policy CO-I-24 which requires the use of the existing wastewater collection system. The General Plan policies listed CO-I-68 and CO-I-70 will ensure that new development analyzes and avoids potential impacts to historic, archaeological, and paleontological resources by requiring pre-construction surveys, a records review before construction, and if warranted, implementing appropriate measures to reduce or avoid impacts. As such, impacts would be less than significant, and comparable to the Proposed Project.

Alternative 2: High Density Shopping Centers Alternative

As with the Proposed Project, development under the Alternative 2 would occur in roughly the same sites as the Proposed Project and in areas of potential geologic or seismic hazards. However, the Alternative would have less development nearer to an Alquist Priolo Zone which would further reduce impacts. In addition, the Alternative would have to adhere to applicable State and local regulations pertaining to these hazards. The California Building Code (CBC) requires that structures near a known fault complete site-specific geotechnical reports evaluating the known fault and the structural integrity of the proposed building, as well as consider mitigation measures in

structural design. The Code also contains the latest seismic safety requirements to resist ground shaking through modern construction techniques, which are periodically updated to reflect the most recent seismic research. Existing regulations in the City's Hillside Preservation District also resist landslides through requiring modern construction design and slope stabilization techniques. In addition, General Plan policies SA-G-1, SA-1-1 require site-specific evaluation of geotechnical hazards in currently undeveloped areas in order to determine appropriate levels of development, as well as compliance with the existing code (SA-I-4). Given State and local regulations and policy requirements, the potential for adverse geological impacts due to the implementation of Alternative 2 is considered less than significant and slightly less than the Proposed Project due to its reduced seismic hazard impacts.

Alternative 2 would also adhere to General Plan Policy CO-I-24 which requires the use of the existing wastewater collection system. The General Plan policies listed CO-I-68 and CO-I-70 will ensure that new development analyzes and avoids potential impacts to historic, archaeological, and paleontological resources by requiring pre-construction surveys, a records review before construction, and if warranted, implementing appropriate measures to reduce or avoid impacts. As such, impacts would be less than significant, and comparable to the Proposed Project.

HYDROLOGY AND WATER QUALITY

Alternative 1: No Project Alternative

Alternative 1 would have reduced development compared to the Proposed Project and development would still be required to comply with the City, San Francisco Bay RWQCB, SMCWPPP, and NPDES regulations. Stormwater runoff would be treated using BMPs, as required. Should any developments occur in an area within the 100-year flood zone, they would be required to meet local, state and federal flood control design requirements. Therefore, at the program level, development associated with the Alternative would not violate any water quality standards or exacerbate hydrological hazards. Therefore, this impact would be less than significant under the Alternative with similar impacts to the Proposed Project. However, potential flood impacts would be reduced with less potential development in proximity to floodplains under the No Project Alternative.

New development under the Alternative could result in an increase in impervious surfaces such that a reduction in the amount of stormwater that infiltrates into underlying groundwater would occur. However, as with the Proposed Project, development would be required to adhere to local City design standards, state requirements such as Provision C.3 site control features, the regional Basin Plan, and General Plan policies. As a result, stormwater flows generated from new development associated with the Alternative would remain unchanged or decrease following implementation of required source control measures. The impact would be less than significant and equivalent to the Proposed Project.

Alternative 2: High Density Shopping Centers Alternative

Alternative 2 would have a similar amount of development as the Proposed Project and associated development would still be required to comply with the City, San Francisco Bay RWQCB, SMCWPPP, and NPDES regulations. Stormwater runoff would be treated using BMPs, as required.

Should any developments occur in an area within the 100-year flood zone, they would be required to meet local, state and federal flood control design requirements. Therefore, at the program level, development associated with the Alternative would not violate any water quality standards or exacerbate hydrological hazards and impacts would be less than significant. However, flooding impacts would be slightly increased for this Alternative because there would be increased density and heights in the Linda Mar shopping center which is near the floodplain.

New development under the Alternative could result in an increase in impervious surfaces such that a reduction in the amount of stormwater that infiltrates into underlying groundwater would occur. However, as with the Proposed Project, development would be required to adhere to local City design standards, state requirements such as Provision C.3 site control features, the regional Basin Plan, and General Plan policies. As a result, stormwater flows generated from new development associated with the Alternative would remain unchanged or decrease following implementation of required source control measures. The impact would be less than significant and equivalent to the Proposed Project.

LAND USE, POPULATION AND HOUSING

Alternative 1: No Project Alternative

The No Project Alternative would not divide an established community. Future development under the Alternative would need to comply with the City of Pacifica General Plan, which contains policy requirements pertaining to community development patterns that must be implemented in each of Pacifica's neighborhoods. Existing policies direct development to be oriented toward transit and pedestrian- or bicycle-oriented connectivity within neighborhoods. Rather, by allowing for compact and concentrated development in already-urbanized neighborhoods, increasing opportunities for housing and economic development, and improving linkages, the General Plan provides improved connections to and continuity with surrounding neighborhoods. There would be no impact, similar to the Proposed Project.

The No Project Alternative involves implementation of the Pacifica General Plan which contains a suite of policies pertaining to Plan Bay Area 2050 principles. Further, the No Project Alternative would not conflict with the Zoning Code or Local Coastal Program. There would be no impact, and impacts would be similar to the Proposed Project.

Implementation of the No Project Alternative would still allow development under the current General Plan. As such, the resulting increase in population, housing units, and jobs would not be considered substantial unplanned growth as it would be consistent with regional planning projections, and it would occur incrementally. Further, the General Plan generally involves infill development within the city limit and does not propose the extension of roads or infrastructure into undeveloped areas. Therefore, the Alternative would result in a less than significant impact associated with population growth, similar to the Proposed Project.

Under the No Project Alternative, none of the Housing Element sites have existing housing, and buildout would result in a substantially higher amount of new housing of different types and price points than exists now. As such, direct displacement impacts would be less than significant, similar to the Proposed Project. In addition, Pacifica's Housing Element contains provisions to protect

against the indirect displacement of housing units and people in Pacifica. This impact would be less than significant, similar to the Proposed Project.

Alternative 2: High Density Shopping Centers Alternative

Similar to the Proposed Project, Alternative 2 would not divide an established community. Implementation of the Proposed Project would facilitate residential development required to meet the City's RHNA allocation, consisting primarily of infill housing on previously developed lots within the city limit. Rather, by allowing for compact and concentrated development in already-urbanized neighborhoods, increasing opportunities for housing and economic development, and improving linkages, the Alternative 2 provides improved connections to and continuity with surrounding neighborhoods. Conformance with the General Plan would discourage development that would result in a division within an established community and would reduce potential impacts. There would be no impact, similar to the Proposed Project.

Alternative 2 involves implementation of a more intense mixed-use development pattern which further aligns with Plan Bay Area 2050 principles. Further, the Alternative 2 would not conflict with the Zoning Code or Local Coastal Program. There would be no impact, and impacts would be similar to the Proposed Project.

The implementation of Alternative 2 would facilitate construction of new housing to meet the City of Pacifica RHNA obligations. As such, the resulting increase in population, housing units, and jobs would not be considered substantial unplanned growth as it would be consistent with regional planning projections, and it would occur incrementally. Further, Alternative 2 generally involves infill development within the city limit and does not propose the extension of roads or infrastructure into undeveloped areas. Therefore, the Alternative would result in a less than significant impact associated with population growth, similar to the Proposed Project.

Under Alternative 2, none of the Housing Element sites have existing housing, and buildout would result in a substantially higher amount of new housing of different types and price points than exists now. As such, direct displacement impacts would be less than significant, similar to the Proposed Project. In addition, Pacifica's Housing Element contains provisions to protect against the indirect displacement of housing units and people in Pacifica. This impact would be less than significant, similar to the Proposed Project.

NOISE

Alternative 1: No Project Alternative

Compared to the Proposed Project, the No Project Alternative would result in less development overall. While some degree of construction would still occur, construction-related noise impacts would be temporary and subject to Municipal Code standards. Construction that complies with the time-of-day restrictions for construction activities would result in less than significant noise impacts with regard to the generation of noise in excess of thresholds.

Under the No Project Alternative, total traffic within the Planning Area would decrease compared to the Proposed Project. In addition, the California Building Code and General Plan policies require that projects incorporate buffering and other noise design features that reduce noise to less than

significant levels. As such, adherence to such policies would ensure that operational noise impacts are less than significant, with lesser impacts than the Proposed Project due to the reduced amount of development.

To protect future and existing sensitive land uses from excessive groundborne vibration during construction activities, the General Plan includes policies that require best available control technology to minimize noise and vibration and continues to limit the hours for construction and demolition work to minimize the impacts of noise and vibration on surrounding uses. Vibration impacts are less than significant, with lesser impacts than the Proposed Project due to the reduced amount of development.

WSFO's Aircraft Noise Abatement Office maintains a noise abatement program that integrates parts of the approved Noise Compatibility Plan; City and County of San Francisco resolutions; stated goals of the San Francisco International Airport/Community Roundtable; and air traffic control requirements. This program, together with existing General Plan policies will reduce potential impacts from airport noise under the No Project Alternative, similar to the Proposed Project.

Alternative 2: High Density Shopping Centers Alternative

Compared to the Proposed Project, the Alternative 2 would result in roughly the same amount of development overall. Construction-related noise impacts would be temporary and subject to Municipal Code standards. Construction that complies with the time-of-day restrictions for construction activities would result in less than significant noise impacts with regard to the generation of noise in excess of thresholds.

Under Alternative 2, total traffic within the Planning Area would be roughly the same compared to the Proposed Project. In addition, the California Building Code and General Plan policies require that projects incorporate buffering and other noise design features that reduce noise to less than significant levels. It is assumed that sites within "clearly unacceptable" noise contours will also be subject to mitigation measures that requires specific acoustical noise analysis. As such, adherence to such policies would ensure that operational noise impacts would be less than significant, with equivalent impacts as the Proposed Project.

To protect future and existing sensitive land uses from excessive groundborne vibration during construction activities, the General Plan includes policies that require best available control technology to minimize noise and vibration and continues to limit the hours for construction and demolition work to minimize the impacts of noise and vibration on surrounding uses. Vibration impacts would be less than significant, and similar to the Proposed Project.

SFO's Aircraft Noise Abatement Office maintains a noise abatement program that integrates parts of the approved Noise Compatibility Plan; City and County of San Francisco resolutions; stated goals of the San Francisco International Airport/Community Roundtable; and air traffic control requirements. This program, together with existing General Plan policies would reduce potential impacts from airport noise under Alternative 2, similar to the Proposed Project.

PUBLIC SERVICES AND RECREATION

Alternative 1: No Project Alternative

Buildout of the No Project Alternative would accommodate fewer residents, housing units, and non-residential developments compared to the Proposed Project. Therefore, this Alternative would generate reduced demand for fire, police, school, and library services compared to the Proposed Project. Impacts would be less than significant and reduced compared to the Proposed Project. In addition, General Plan policies require new park development accompanying population growth accommodate additional park demand at a level consistent with current usage. Therefore, impacts related to parks are less than significant, and magnitude of impacts are less than the Proposed Project, given the lower population under this Alternative.

Alternative 2: High Density Shopping Centers Alternative

Buildout of Alternative 2 would accommodate roughly the same amount of housing units and population with slightly less non-residential development compared to the Proposed Project. Therefore, this Alternative would generate roughly equivalent demand for fire, police, school, and library services compared to the Proposed Project. Impacts would be less than significant, as detailed under Chapter 3.10 for the Proposed Project. In addition, General Plan policies require new park development accompanying population growth to accommodate additional park demand at a level consistent with current usage. Therefore, impacts related to parks would be less than significant, and magnitude of impacts are equivalent to the Proposed Project, given the similar buildout under this Alternative.

TRANSPORTATION

Alternative 1: No Project Alternative

The No Project Alternative would result in similar impacts on transportation compared to the Proposed Project. This Alternative would accommodate significantly fewer residents and non-residential development in the Planning Area. Since the Alternative would have lower development densities than the Proposed Project, it would result in slightly higher VMT efficiency metrics (i.e., VMT per capita) compared to the Proposed Project as shown in Table 3.11-5. Although the goals and policies that would reduce VMT in the General Plan and other planning documents would be implemented under the No Project Alternative, this alternative would not include the Proposed Project's higher density land use strategy designed to reduce vehicular mode of travel. Thus, similar to the Proposed Project, the impact on VMT would conservatively remain significant and unavoidable under the No Project Alternative, and impacts would be slighter greater compared to the Proposed Project.

The No Project Alternative impact on consistency with circulation system plans would remain less than significant, similar to the Proposed Project, because other planning documents, such as the General Plan and Congestion Management Plan would continue to be applicable under the No Project Alternative. Impacts would be similar as compared to the Proposed Project. Similarly, the impacts on transportation hazards, and emergency access would remain less than significant because the Planning Area would continue to be consistent with applicable codes and policies. Impacts would be similar to the Proposed Project.

Alternative 2: High Density Shopping Centers Alternative

Alternative 2 would result in similar impacts on transportation compared to the Proposed Project. However, this Alternative aims to focus housing within Pacifica's existing commercial centers and promote a more intense mixed-use development pattern. Since the Alternative would have greater development densities in mixed-use areas than the Proposed Project, it would result in slightly lower VMT efficiency metrics (i.e., VMT per capita) compared to the Proposed Project. In addition, the goals and policies that would reduce VMT in the General Plan and other planning documents would be implemented under Alternative 2. However, similar to the Proposed Project, the impact on VMT would conservatively remain significant and unavoidable under Alternative 2, but impacts would be reduced compared to the Proposed Project.

The Alternative 2 impact on consistency with circulation system plans would remain less than significant, similar to the Proposed Project, because other planning documents, such as the General Plan and Congestion Management Plan would continue to be applicable under this the Alternative. Impacts would be similar as compared to the Proposed Project. Similarly, the impacts on transportation hazards, and emergency access would remain less than significant because the Planning Area would continue to be consistent with applicable codes and policies. Impacts would be similar to the Proposed Project.

UTILITIES AND SERVICE SYSTEMS

Alternative 1: No Project Alternative

Buildout of No Project Alternative would accommodate fewer residents, housing units, and non-residential developments compared to the Proposed Project. Therefore, this Alternative would generate reduced demand for water, wastewater, solid waste, stormwater, and power/telecommunications facilities in addition to reduced demand for water supply. In addition, General Plan policies concentrate on reducing water use and ensuring adequate supply. As detailed in Chapter 3.12, impacts on utilities and service systems are less than significant for the Proposed Project. Impacts related to utilities and service systems would continue to be less than significant under the No Project Alternative, and magnitude of impacts are less than the Proposed Project, given the lower population under this Alternative.

Alternative 2: High Density Shopping Centers Alternative

Buildout of Alternative 2 would accommodate roughly the same number of residents and housing units as the Proposed Project with less non-residential development. Therefore, this Alternative would generate roughly equivalent demand for water, wastewater, solid waste, stormwater, and power/telecommunications facilities in addition to equivalent demand for water supply. In addition, General Plan policies concentrate on reducing water use and ensuring adequate supply. The proposed land use pattern for Alternative 2 would also encourage development to concentrate on infill sites already served by infrastructure. As detailed in Chapter 3.12, impacts on utilities and service systems would be less than significant for the Proposed Project. Impacts related to utilities and service systems would be less than significant under Alternative 2, and the magnitude of impacts are similar to the Proposed Project, given the roughly equivalent buildout numbers.

WILDFIRE

Alternative 1: No Project Alternative

Like the Proposed Project, the No Project Alternative would add additional housing and non-residential uses that could potentially impact the capacity of evacuation routes. However, compliance with the provisions of the Municipal Code and continued implementation of the 2021 Multijurisdictional Local Hazard Mitigation Plan, the Pacifica All Hazards & Evacuation Plans, and the City of Pacifica Emergency Operations Plan in combination with General Plan policies would ensure that inadequate emergency access does not occur from the Alternative, and that it would not substantially impair an adopted emergency response plan or emergency evacuation plan. As such, implementation of the Alternative would result in a less-than-significant impact, with similar impacts to the Proposed Project.

Similar to the Proposed Project, the Alternative would support a land use pattern with infill developments where appropriate which helps mitigate fire risk, though at lower densities compared to the Proposed Project. However, given the extent of which FHSZs exist around Pacifica, buildout could increase the risk of loss and damage due to wildfire. Given there is less development under the No Project Alternative, there would be less potential exposure to the risks from developing near FHSZs. To further address this risk exposure from additional development, State and federal regulations, and City of Pacifica development standards play an important role in limiting potential fire hazards. The General Plan includes policies to provide fire prevention and emergency response services that are proportionate to demand from new development, which will minimize fire risks and protect people and structures. All new developments, such as those under the Alternative, must consider fire protection systems and equipment, defensible space, and vegetation management consistent with requirements in the CBC, NCFA guidelines, and the Pacifica Municipal Code. As such, impacts from wildfire risks would be less than significant, and slightly less than the Proposed Project given there is less development to be exposed to such risks.

Alternative 2: High Density Shopping Centers Alternative

Like the Proposed Project, Alternative 2 would add additional housing and non-residential uses that could potentially impact the capacity of evacuation routes. However, compliance with the provisions of the Municipal Code and continued implementation of the 2021 Multijurisdictional Local Hazard Mitigation Plan, the Pacifica All Hazards & Evacuation Plans, and the City of Pacifica Emergency Operations Plan in combination with General Plan policies would ensure that inadequate emergency access does not occur from the Alternative, and that it would not substantially impair an adopted emergency response plan or emergency evacuation plan. As such, implementation of the Alternative would result in a less-than-significant impact, with similar impacts to the Proposed Project.

Similar to the Proposed Project, the Alternative would support a land use pattern with higher-density and infill developments where appropriate which helps mitigate fire risk. Buildout would be roughly the same as the Proposed Project. However, given the extent of which FHSZs exist around Pacifica, buildout could increase the risk of loss and damage due to wildfire. To further address this risk exposure from additional development, State and federal regulations, and City of Pacifica development standards play an important role in limiting potential fire hazards. The General Plan includes policies to provide fire prevention and emergency response services that are

proportionate to demand from new development, which will minimize fire risks and protect people and structures. All new developments, such as those under the Alternative, must consider fire protection systems and equipment, defensible space, and vegetation management consistent with requirements in the CBC, NCFA guidelines, and the Pacifica Municipal Code. As such, impacts from wildfire risks would be less than significant, and roughly equivalent to the Proposed Project.

4.5 Environmentally Superior Alternative

CEQA Guidelines (Section 15126.6) require the identification of an environmentally superior alternative among the alternatives analyzed.

Table 4-1: Summary of Impacts for Alternatives: summarizes the alternatives' overall environmental impacts for each topic presented in Section 4.3. For the Proposed Project, three impacts were expected to be significant and unavoidable, 12 impacts were expected to be less than significant with mitigation incorporated, and 41 impacts were expected to be less than significant.

For the No Project Alternative, three impacts were expected to be significant and unavoidable, 10 impacts were expected to be less than significant with mitigation incorporated, and 43 impacts were expected to be less than significant. However, impacts were marginally reduced for aesthetics, air quality, energy and greenhouse gas emissions, geology, flooding, noise, public services, utilities, and wildfire.

Like the Proposed Project, for Alternative 2, three impacts were expected to be significant and unavoidable, 12 impacts were expected to be less than significant with mitigation incorporated, and 41 impacts were expected to be less than significant. However, impacts were marginally reduced for the significant and unavoidable impacts of greenhouse gas emissions and VMT as well as energy and geology impacts. Even so, the Alternative would also marginally increase the impacts to aesthetics and flooding.

The No Project Alternative reduces the greatest number of environmental impacts. Since the CEQA guidelines require another environmentally superior alternative other than the No Project Alternative to be identified, the High Density Shopping Center Alternative would be the environmentally superior alternative. However, the Alternative does not meet the Project's objective of reflecting community priorities that value coastal views and scenic vistas.

Table 4-1: Summary of Impacts for Alternatives

Impact	Level of Significance		
	Proposed Project	Alternative 1: No Project	Alternative 2: High Density Shopping Center
3.1 Aesthetics and Visual Resources			
3.1-1 Scenic Vistas	LTS	LTS, -	LTS, +
3.1-2 State Scenic Highways	LTS	LTS, =	LTS, =
3.1-3 Public Views	LTS	LTS, =	LTS, =
3.1-4 Light and Glare	LTS	LTS, =	LTS, =
3.2 Air Quality			
3.2-1 Air Quality Plan	LTS	LTS, =	LTS, =
3.2-2 Increase in Criteria Pollutant	LTSM	LTSM, -	LTSM, =
3.2-3 Sensitive Receptors	LTSM	LTSM, -	LTSM, =
3.2-4 Odors	LTS	LTS, =	LTS, =
3.3 Biological Resources			
3.3-1 Special-Status Species	LTSM	LTSM, =	LTSM, =
3.3-2 Sensitive Habitat	LTSM	LTSM, =	LTSM, =
3.3-3 Wetlands	LTSM	LTSM, =	LTSM, =
3.3-4 Wildlife Corridors	LTS	LTS, =	LTS, =
3.3-5 Policies and Ordinances	LTSM	LTSM, =	LTSM, =
3.3-6 HCPs	LTSM	LTSM, =	LTSM, =
3.4 Cultural, Tribal, and Historic Resources			
3.4-1 Historic Resources	LTS	LTS, =	LTS, =
3.4-2 Archaeological Resources	LTSM	LTSM, =	LTSM, =
3.4-3 Human Remains	LTSM	LTSM, =	LTSM, =
3.4-4 Tribal Cultural Resources	LTSM	LTSM, =	LTSM, =
3.5 Energy and Greenhouse Gas Emissions			
3.5-1 Generate GHG Emissions	SU	SU, -	SU, -
3.5-2 Conflict with an Applicable Plan, Policy, or Regulation	SU	SU, -	SU, -
3.5-3 Wasteful, Inefficient, and Unnecessary Energy	LTS	LTS, -	LTS, -
3.5-4 Conflict with Renewable Energy or Energy Efficiency	LTS	LTS, -	LTS, -
3.6 Geology, Soils, and Seismicity			
3.6-1 Seismic Hazards	LTS	LTS, -	LTS, -
3.6-2 Soil Erosion	LTS	LTS, -	LTS, =
3.6-3 Unstable Soils	LTS	LTS, -	LTS, =

Table 4-I: Summary of Impacts for Alternatives

<i>Impact</i>	<i>Level of Significance</i>		
	<i>Proposed Project</i>	<i>Alternative 1: No Project</i>	<i>Alternative 2: High Density Shopping Center</i>
3.6-4 Expansive Soils	LTS	LTS, -	LTS, =
3.6-5 Septic Systems	NI	NI, =	NI, =
3.6-6 Paleontological Resources	LTS	LTS, =	LTS, =
3.7 Hydrology and Water Quality			
3.7-1 Water Quality Standards	LTS	LTS, =	LTS, =
3.7-2 Groundwater Supplies	LTS	LTS, =	LTS, =
3.7-3 Drainage Pattern	LTS	LTS, =	LTS, =
3.7-4 Flood, Tsunami, Seiche Hazard	LTS	LTS, -	LTS, +
3.7-5 Water Quality Control Plan	LTS	LTS, =	LTS, =
3.8 Land Use, Population, and Housing			
3.8-1 Divide Community	NI	NI, =	NI, =
3.8-2 Conflict with Any Land Use Plan	NI	NI, =	NI, =
3.8-3 Growth Inducement	LTS	LTS, =	LTS, =
3.8-4 Displacement	LTS	LTS, =	LTS, =
3.9 Noise and Vibration			
3.9-1 Noise Standards	LTSM	LTS, -	LTSM, =
3.9-2 Vibration	LTS	LTS, -	LTS, =
3.9-3 Airports	LTS	LTS, =	LTS, =
3.10 Public Services and Recreation			
3.10-1 Fire, Police, Schools, Parks, or Other Public Facilities	LTS	LTS, -	LTS, =
3.10-2 Use of Neighborhood, Regional or Recreational Facilities	LTS	LTS, -	LTS, =
3.10-3 Construction or Expansion	LTS	LTS, -	LTS, =
3.11 Transportation			
3.11-1 Circulation System Plan	LTS	LTS, =	LTS, =
3.11-2 VMT	SU	SU, +	SU, -
3.11-3 Traffic Hazards	LTS	LTS, =	LTS, =
3.11-4 Emergency Access	LTS	LTS, =	LTS, =
3.12 Utilities and Service Systems			
3.12-1 Relocation or Expansion of Utilities	LTSM	LTS, -	LTSM, =
3.12-2 Water Supply	LTS	LTS, -	LTS, =
3.12-3 Wastewater Treatment	LTS	LTS, -	LTS, =

Table 4-1: Summary of Impacts for Alternatives

<i>Impact</i>	<i>Level of Significance</i>		
	<i>Proposed Project</i>	<i>Alternative 1: No Project</i>	<i>Alternative 2: High Density Shopping Center</i>
3.12-4 Solid Waste Reduction Goals	LTS	LTS, -	LTS, =
3.12-5 Conflict with Solid Waste Regulations	LTS	LTS, =	LTS, =
3.14 Wildfire			
3.14-1 Emergency Response/Evacuation	LTS	LTS, =	LTS, =
3.14-2 Wildfire Risks	LTS	LTS, -	LTS, =
3.14-3 Infrastructure	LTS	LTS, =	LTS, =
3.14-4 Flooding or Landslides	LTS	LTS, =	LTS, =
Notes:			
NI: No Impact			
LTS: Less than Significant			
LTSM: Less than Significant with Mitigation			
SU: Significant and Unavoidable			
+/-/= : Impact of the alternative is greater than, less than, or similar to the impact of the Proposed Project			

5 CEQA Required Conclusions

This section presents a summary of the impacts of the Proposed Project in several subject areas specifically required by CEQA, including growth-inducing impacts, cumulative impacts, significant and unavoidable impacts, and significant irreversible environmental changes. These findings are based, in part, on the analysis provided in Chapter 3: Environmental Settings and Impacts.

5.1 Growth-Inducing Impacts

CEQA Guidelines require that an EIR “discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly” (CEQA Guidelines Section 15126.2(e)). This analysis must also consider the removal of obstacles to population growth, such as improvements in the regional transportation system.

Growth-inducing impacts, such as those associated with job increases that might affect housing and retail demand in surrounding jurisdictions over an extended time period, are difficult to assess with precision, since future economic and population trends may be influenced by unforeseeable events such as business development cycles and natural disasters. Moreover, long-term changes in economic and population growth are often regional in scope; they are not influenced solely by changes or policies related to a single city or development project, particularly in a highly urbanized region such as the San Francisco Bay Area. Business trends are influenced by economic conditions throughout the state and country, as well as around the world.

Another consideration is that the creation of growth-inducing potential does not automatically lead to growth. Growth occurs through capital investment in new economic opportunities by the private or public sector. These investment patterns reflect, in turn, the desires of investors to mobilize and allocate their resources to development in particular localities and regions. These factors, combined with the regulatory authority of local governments, mediate the growth-inducing potential or pressure created by a Proposed Project. Despite these limitations on the analysis, it is still possible to qualitatively assess the general potential growth-inducing impacts of the Proposed Project.

PROJECTED GROWTH

The Proposed Project is intended to result in the development of up to 2,175 housing units, primarily comprised of redevelopment of existing underutilized shopping centers, institutional uses, and City-owned land. In many cases, the existing land use is preserved. As indicated in the Housing Element, all sites identified for housing development are already served by utilities and infrastructure. Thus, the Project would not involve extending infrastructure, utilities, or public

services outside of the established urban service area; on the contrary, it would concentrate new development within the existing service area for utilities and public services. Policies in the adopted Housing Element require inclusion of projects in the City's Five-Year Capital Improvement Program, and in other long-term improvement plans, to eliminate infrastructure capacity constraints (including, if necessary, replacement and rehabilitation (R&R) projects in the Vallemar and Rockaway Beach neighborhoods) that may limit housing production, by December 2027. Further, development would happen incrementally over the course of eight years, from 2023-2031, which would minimize project growth impacts, including in the context of implementation of the 2040 General Plan buildout.

Population

As described in section 3.10: Land Use, Population, and Housing, the 2024 population within the City of Pacifica is estimated to be 37,062. With the additional population growth of 5,400 people under the Proposed Project, it would represent a 15 percent increase from the existing population. In combination with other cumulative growth under the 2040 General Plan, the Planning Area would accommodate a total population of approximately 46,450 people by 2040, representing a 25.3 percent increase from the existing population. This population growth comes from an increase in housing units from 14,787 to 17,685, shown in Table 5-1 below.

Table 5-1: Planning Area Population, Housing, and Growth Projections, 2024-2040

	<i>Existing (2024) ¹</i>	<i>Total at Buildout (2040) ²</i>
Housing Units	14,787	17,685
Population	37,062	46,450
Employed Residents	20,636	25,858
Jobs	5,840	7,560
Jobs-Employed Residents Ratio	0.28	0.29

¹ C/CAG2040 Travel Demand Model estimates are used for 2020 estimates of jobs by sector. These values are not available for 2024, though nonresidential growth in Pacifica has been minimal and is not expected to be significantly different from this total. Housing units are from the 2024 DOF Population and Housing Estimates, Table E-5.

² Assumes similar proportion of employed residents per population to 2040, based on latest 5-year ACS estimates. Housing Units, population, and jobs taken from Table 2-2 in the Project Description.

Source: City of Pacifica, 2022; DOF, 2024; C/CAG2040; ACS, 2018-2022; Dyett & Bhatia, 2024.

Although the population within the Planning Area is projected to increase substantially, the Proposed Project is consistent with the overarching regional growth goals identified in Plan Bay Area, the integrated land use/transportation plan for the nine-county San Francisco Bay Area region. To reduce greenhouse gas emissions, Plan Bay Area 2050 promotes compact mixed-use infill development within walkable/bikeable neighborhoods that are close to public transit, jobs,

schools, shopping, parks, recreation, and other amenities. To ensure consistency, the Proposed Project generally involves infill development on underutilized commercial sites, City-owned sites, and institutional uses.

The Proposed Project is also consistent with the City of Pacifica General Plan's goals of encouraging clustered infill development to preserve natural surroundings. By guiding the majority of the city's growth and development within the Planning Area, infill and clustered development would be prioritized, and public space areas would be preserved and enhanced; by nature, the Project would therefore reduce potential for uncontrolled growth and associated impacts.

Increase in Regional Housing Demand

In the urbanized context of the Bay Area, housing and employment demand are somewhat fluid across municipalities. As the employment base in the Bay Area continues to increase, more people may be drawn to live in Pacifica even if they work in other nearby cities, or vice versa. As a result, housing demand may continue to increase in Pacifica and San Mateo County. ABAG's Regional Housing Needs Assessment (RHNA) attempts to balance regional housing demand across Bay Area cities, and all municipalities are required to provide a "fair share" of housing. According to the Final 2023–2031 RHNA, ABAG has determined that Pacifica's fair share of regional housing need for the 2023 to 2031 period would be 1,892 units. To ensure that housing is available to meet the needs of future residents under the Proposed Project, the City adopted its Housing Element to assess its supply of housing and provide policies and programs to ensure that the community continues to meet its fair share of regional housing needs.

Jobs/Housing Ratio

Jobs-housing balance, or more precisely, jobs to employed residents balance, can influence travel demand and commute patterns. A ratio of 1.0 means that the number of jobs equals number of employed residents, whereas a ratio greater than 1.0 indicates a net in-commute and less than 1.0 indicates a net out-commute. Theoretically, a balanced jobs-to-housing ratio would reduce the need for people to commute in or out of the area for work. In reality, the match of education, skills, and interests is not always accommodated within the boundaries of one community, and regional interdependencies almost always result in at least some inter-city commuting.

As described in Table 5-1 above, implementation of the Proposed Project is expected to add capacity for an additional 250 jobs beyond those anticipated in the 2040 General Plan. Based on the latest available data from DOF and the Census, the existing jobs-employed residents ratio was 0.28. On top of growth anticipated in the 2040 General Plan, implementation of the Proposed Project slightly increases the jobs-employed residents ratio to 0.29. This modest jobs growth is not expected to induce substantial new unplanned residential growth in areas surrounding the Planning Area.

Public Facilities and Services

Public services for the Planning Area, including police, fire protection, schools, and parks and recreation, are currently provided by the Pacifica Police Department (PPD); North County Fire Authority (NCFA); the Pacifica and Jefferson Union High school districts (PSD and JUHSD,

respectively); City of Pacifica Parks, Beaches, and Recreation; and the City of Pacifica Department of Public Works, respectively. Development under the Proposed Project would be required to comply with all applicable codes for fire safety and emergency access.

As stated in Section 3.12, Public Services and Recreation, of this EIR, student potential for new development under the Proposed Project was calculated using the applicable student generation rates to project buildout. Thus, implementation of the Proposed Project could result in an additional 590 students attending schools in the Planning Area over the planning period. School districts have also indicated that existing facilities are sufficient to meet future needs.

Further, development under the Proposed Project would also be required to comply with SB 50, which mandates statutory school facilities fees for residential developments. Compliance with SB 50 would financially offset impacts on school district capacity and would provide funding for potential future school facility development needs associated with the Proposed Project-related population increase.

As future buildout occurs under the Proposed Project, the City will evaluate operations and deployment of services to efficiently use resources, ensure sufficient staffing to serve all new development and associated population growth in the Planning Area, and monitor the need for new facilities or additional equipment needed to provide adequate public services to future and existing residents.

DIRECT AND INDIRECT GROWTH

As described above, the Proposed Project facilitates growth in the Planning Area, and this direct growth is analyzed throughout this EIR. Impacts from direct growth on infrastructure such as public services and utilities, the transportation system, and natural resources are identified, based on the buildout of the Proposed Project. In general, future development under the Proposed Project would be subject to additional site-specific environmental review under CEQA, with tiering and streamlining opportunities as provided for under State law.

Indirect growth can result from the construction of infrastructure, such as the extension of utilities or the construction of new roadways connecting urban centers to green field areas. In such cases, this extension of infrastructure to serve one property can facilitate the subsequent development of other intervening properties, effectively inducing additional growth indirectly. However, given that proposed development would occur within the city limits, and largely within existing underutilized shopping centers, vacant land in existing neighborhoods, or within institutional or City-owned uses, the potential for this type of indirect growth is minimal.

5.2 Cumulative Impacts

CEQA requires that an EIR examine cumulative impacts. As discussed in CEQA Guidelines Section 15130(a)(1), a cumulative impact “consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts.” Furthermore, the analysis of cumulative impacts need not provide the level of detail required of the analysis of impacts from the project itself, but shall “reflect the severity of the impacts and their likelihood of occurrence.” (CEQA Guidelines Section 15130(b)).

In order to assess cumulative impacts, an EIR must analyze either a list of past, present, and probable future projects or a summary of projections contained in an adopted general plan or related planning document. The cumulative impact analysis in this Draft EIR relies on the projections approach because the Project has a long-term perspective. Unless so stated, the potential for cumulative contributions is projected to the horizon year of 2040, consistent with the City of Pacifica General Plan. The geographic context for cumulative impacts is generally the Planning Area for the City of Pacifica General Plan (the City of Pacifica city limit and sphere of influence, “Planning Area”) and immediately surrounding lands but can be a much larger area for resource categories such as greenhouse gas emissions and transportation.

Several analyses presented in Chapter 3: Environmental Settings and Impacts represent cumulative analyses of issues through the Proposed Project horizon year of 2040 because they combine the anticipated effects of the Proposed Project with anticipated effects of regional growth and development. By their nature, the air quality, greenhouse gas emissions and climate change, transportation, and noise analyses presented in Chapter 3 represent a cumulative analysis, because the effects specific to the Proposed Project cannot reasonably be differentiated from the broader effects of regional growth and development. Thus, analyses for these topics reflect not just growth in the Planning Area, but growth elsewhere in the region as well. The cumulative conclusions are summarized there, and where applicable, significant unavoidable impacts are listed in Section 5.3, Significant and Unavoidable Impacts. Other cumulative impacts are identified below.

AESTHETICS

The cumulative geographic context for aesthetics is the Planning Area as well as view corridors, view sheds, or scenic resources in the immediate vicinity and visible from the Planning Area.

The City’s General Plan recognizes that scenic vistas along the panoramic coastline and views to the ocean, beaches, and hillsides are an integral part of Pacifica’s character and must be preserved for the future. Of primary importance are views of the ocean, landforms, and special coastal communities from public roadways, trails, and vista points. A significant cumulative impact would result if development facilitated in the Planning Area in combination with other development in the vicinity blocked these views. While some of the Housing Element sites include new objective design standards that increase heights, these sites would not impact existing scenic resources, including views to the ocean. All other development in the Planning Area would occur within the city limits and would be regulated by the City of Pacifica General Plan and Zoning Code requirements for heights, including requirements for the Hillside Preservation Zone and Coastal

Zone Combining District, where applicable. Therefore, foreseeable developments in these areas are not likely to result in structures tall enough to block scenic views and vistas.

Implementation of the Proposed Project in combination with other development in the vicinity would introduce new sources of light within the cumulative geographic context, including light spillover from buildings, outdoor security lights, lighted signs, streetlights, and vehicle headlights, in addition to glare produced by reflective surfaces and unshielded equipment. A significant impact would occur if these new sources of light had an adverse impact on day and nighttime views in the area. Future development within the Planning Area would be within a developed area that already has sources of light and glare. All new development would be required to comply with City of Pacifica's regulations, including the proposed ODS and other Zoning standards. Given that the Proposed Project would not substantially increase the amount of nighttime lighting or glare in the already built environment, and that all development in the area would be regulated by design standards and code restrictions, the cumulative impact of the Proposed Project on light and glare would be less than significant.

Highway 1 and Sharp Park Road in Pacifica have been identified by the State and County as eligible for scenic highway status. Local Scenic roadway designation requires a corridor study, a program to enhance the scenic qualities, and adoption of the scenic roadway designation and its protection plan. Such a plan has not been adopted for either roadway in Pacifica. Compliance with General Plan policies related to viewshed protection and minimization of visual impacts to views from scenic routes also reduce impacts. Therefore, the Proposed Project would not have a cumulative impact on the destruction of resources along a scenic highway.

Development under the Proposed Project would be consistent with applicable policies and standards for new development as well as regulations governing scenic quality in the already developed area, including the Zoning Ordinance and General Plan. Objective design standards for Housing Element sites also specify standards that create compatibility with existing surrounding neighborhoods, including height requirements and setbacks. Impacts from the Proposed Project, in conjunction with other plans and projects in the region, that could conflict with existing zoning or other regulations which govern scenic quality are not cumulative in nature.

BIOLOGICAL RESOURCES

Development associated with the Proposed Project through the horizon year of 2040 could contribute to the loss of natural lands in the Planning Area, with potential effects on special-status species, sensitive natural communities, federally protected wetlands, wildlife and fish movement corridors, and invasive species.

As described in section 3.3, the Planning Area contains a wide variety of natural and biological resources, including trees, hillsides, ridgelines, creeks, shoreline, and seasonal wetlands. The City's location provides a natural habitat for flora and fauna, including some endangered and threatened plant and wildlife species, while the riparian corridors along the creeks provide habitat and movement corridors for wildlife. Policies in the General Plan require notifications of lake/streambed alterations, and wetland delineations to avoid freshwater seasonal wetlands.

Thus, future development within the Planning Area has the potential to have significant impacts on biological resources. In particular, there are several special-status species known to occur throughout the Planning Area that could be impacted by housing development. As discussed in Impacts 3.3-1 through 3.3-4, policies in the General Plan require various biological surveys and protective measures, including those related to specific special-status species, sensitive habitats, and wetlands, reduce potential impacts to less than significant.

Development in the Planning Area would also be required to comply with the City's Tree Ordinance, which requires development of a tree protection plan if heritage trees are identified. Additionally, development resulting from the Proposed Project, as well as future development projects that could occur within the Planning Area or in the vicinity of the Planning Area, would be subject to the requirements of biological resource protection laws, including FESA, CESA, MBTA, and the California Fish and Game Code, as well as protection policies and provisions in the City's General Plan and Municipal Code.

Compliance with federal, state, and local regulations ensure the Proposed Project's contribution to cumulative biological resources impacts would be less than cumulatively considerable.

CULTURAL AND TRIBAL CULTURAL RESOURCES

The cumulative geographic context for cultural, historic, and tribal cultural resources is the City of Pacifica. If the Proposed Project, in combination with other past, present, and reasonably foreseeable projects in Pacifica, would result in the loss of or adverse changes to multiple historic or cultural resources a significant cumulative impact could result. However, as described in Section 3.4 of this Draft EIR, the City of Pacifica General Plan and the Historic Preservation Ordinance provide a framework for the preservation of cultural and historic resources. At the time development or redevelopment projects are proposed, any project-level CEQA document would need to identify potential impacts on known or potential historic sites and structures. Such project-level review in combination with the Mitigation Measure CUL-1, which requires that all proposed development within the Planning Area undergo additional investigation to determine the project-level impact on the built environment's historical resources, would ensure that the Proposed Project's incremental contribution to this impact would not be cumulatively considerable.

There are known prehistoric and historic archaeological resources in and around the City of Pacifica. The Planning Area has a high potential for encountering deposits associated with known resources or as-yet undocumented resources. Anticipated development projects under the Proposed Project may involve grading, excavation, or other ground-disturbing activities, which could have a cumulative impact on unknown archaeological resources. Any adverse effects to archaeological resources shall be mitigated as specified by PRC Section 21083.2. Thus, compliance with mitigation measures and General Plan policies, as well as applicable local, State, and federal laws, would ensure that the Proposed Project's contribution to this impact would not be cumulatively considerable.

All development projects allowed under the Proposed Project would be required to comply with State laws pertaining to the discovery of human remains and disposition of Native American burials; therefore, the Proposed Project would result in a less than cumulatively considerable contribution to impacts related to human burials.

There are known Native American tribal cultural resources within the Planning Area, and development projects allowed under the Proposed Project may result in the identification of unrecorded tribal cultural resources given the historic occupation of the area. Future projects that would not otherwise qualify for an exemption under CEQA would be required to comply with the provisions of AB 52 to incorporate tribal consultation into the CEQA process. Therefore, the Proposed Project's contribution to this impact would not be cumulatively considerable.

ENERGY

Construction and operation of the Proposed Project would result in the consumption of energy resources. However, as discussed in Impact 3.5-1, implementation of the Proposed Project would result in direct and indirect energy conservation, such as encouraging green building techniques, water conservation, and waste reduction, would promote greater energy efficiency in municipal and community operations and development. Furthermore, the Proposed Project contains a land-use strategy that actively promotes infill mixed-use development where appropriate, which would result in greater energy efficiency overall for Planning Area residents and operations.

In addition, development under the Proposed Project would be subject to increasingly robust regulations to meet the State's renewable energy mandates and would be required to comply with Title 24 standards and CALGreen requirements. As discussed in Impact 3.5-3 and 3.5-4, the Proposed Project would thus support and reflect the increasingly stringent State and local goals and regulations that seek to increase energy efficiency, reduce energy consumption, and prioritize renewable energy – reinforcing that the Proposed Project would not result in cumulatively considerable impact with respect to wasteful, inefficient, or unnecessary consumption of energy resources.

GEOLOGY, SOILS, AND SEISMICITY

The cumulative geographic context for geology and soils consists of sites within the Planning Area and nearby properties in the immediate vicinity. Although regional geographies can be similar, in general, geology and soils impacts do not typically combine such that a larger geographic context would be involved. Depending on subsurface conditions, slopes, and other factors, each cumulative project would require different levels of grading, cut-and-fill, and excavation. In addition, each cumulative project would be required to comply with the General Plan, Municipal Code, and California Building Standards Code requirements. The standards presented in these documents require that a site-specific geotechnical investigation be prepared which would include design recommendations to reduce each cumulative project's impacts. Similar seismic safety standards would apply to the cumulative projects. For these reasons, project building under the Proposed Project, in combination with other past, present, and reasonably foreseeable future projects, would not result in a significant cumulative impact on geology and soils. Therefore, cumulative impacts to geology, soils, and seismicity are less than significant.

All significant paleontological resources are unique and nonrenewable resources. Unlike archaeological resources, which are site-specific, paleontological resources can occur throughout a sensitive geologic unit, regardless of location. Therefore, the geographic context for paleontological resources encompasses the complete extent of geologic units with high or undetermined

paleontological sensitivity that underlie the Planning Area. Although not anticipated, sub-surface construction activities, such as grading or trenching, could result in a significant impact to paleontological resources, if encountered. However, Public Resources Code Section 5097.5 specifies the procedures to be followed in the event of the unexpected discovery of paleontological resources. Therefore, a cumulative impact on paleontological resources in the geographic context exists.

As noted in Section 3.6, no known paleontological resources have been found in the Planning Area, and most of the geologic units in the Planning area composed primarily of Holocene-age alluvial materials, which are generally considered too young to contain paleontological resources. While the Proposed Project would not directly involve ground-disturbing activities that could damage or destroy unique paleontological resources, it would enable development that would involve ground disturbance. While the risk is lower, this future development, in combination with other foreseeable development in the identified geographic context, has the potential to encounter and damage or destroy previously unknown paleontological resources during both construction and operation. However, Public Resources Code Section 5097.5 specifies the procedures to be followed in the event of the unexpected discovery of paleontological resources. Therefore, the contribution of the Proposed Project to the cumulative impact on paleontological resources would not be cumulatively considerable.

HYDROLOGY AND WATER QUALITY

The context for surface hydrology and water quality is the San Francisco Bay Hydrologic Region. The context for groundwater hydrology are the nine watersheds shown in Section 3.7, Figure 3.7-1. Thus, overall, the cumulative geographic context for cumulative hydrology and water quality impacts is geographic and a function of whether impacts could affect surface water features/watersheds, the city's storm drainage system, or groundwater resources, each of which has its own physical boundary. Future development in the geographic context for hydrology and water quality would be required to comply with regulations and policies including NPDES Construction General Permit adopted by the SWRCB; San Francisco Bay RWQCB's NPDES permit and Waste Discharge Requirements for MS4 discharges; Sustainable Groundwater Management Act; and local municipal codes. For these reasons, under the Proposed Project, in combination with other past, present, and reasonably foreseeable future projects, would not result in a significant cumulative impact on hydrology and water quality.

Potential growth in the watershed would likely not degrade water quality as the Proposed Project primarily consists of infill development on underutilized commercial sites, institutional sites, and City-owned sites. Pacifica General Plan policies would also ensure that development protects and restores riparian habitat and ensure natural channel processes in the watershed. All new development is required to handle stormwater in a manner that ensures that flood flows will not increase or be redirected to other areas. Similar to the Proposed Project, all future development in the geographic context for hydrology and water quality would be required to comply with San Mateo County General Plan policies and local municipal codes related to protecting water resources. Therefore, the contribution of the Proposed Project to the cumulative impact on hydrology and water quality would not be cumulatively considerable.

LAND USE, POPULATION, AND HOUSING

The cumulative context for land use is the City of Pacifica. The cumulative geographic context for population and housing is the regional Bay Area. Projects that could have the effect of physically dividing an established community—such as a major new road, highway, or similar infrastructure—tend to have a singular rather than cumulative impact. However, a significant impact could occur if new development in the Planning Area in combination with foreseeable development in town physically divided an established community. The Proposed Project does not involve the construction of a linear feature or other barrier as described above and would not remove any means of access or impact mobility. Implementation of the Proposed Project would facilitate residential development required to meet the City's RHNA allocation, consisting primarily of infill development on underutilized commercial sites, institutional sites, and City owned sites. Therefore, the cumulative impact of the Proposed Project on the division of an existing community would be less than significant.

Impacts from plans and projects in the region that could conflict with existing plans, including the City of Pacifica General Plan, are not cumulative in nature. The Proposed Project is consistent with the General Plan's goals for the Planning Area and includes provisions to amend the Zoning Code in order to ensure consistency. Therefore, the contribution of the Proposed Project to the cumulative impact on land use and planning would not be cumulatively considerable.

PUBLIC SERVICES AND RECREATION

The geographic context for all police and park services is the City of Pacifica and the geographic context for fire services is the North County Fire Authority (NFCA) service area, which includes Brisbane, Pacifica, and Daly City. The geographic context for school services is the Pacifica School District and Jefferson Union High School District, which includes Daly City, Brisbane and Pacifica, the town of Colma, the CDP of Broadmoor and a section of San Bruno.

Implementation of the Proposed Project would involve construction of up to 2,175 housing units and accommodate up to 1,189 new residents throughout the city by 2040. The increased local population generated by implementation of the Proposed Project may increase the need for police services, and additional facilities may be necessary. In Pacifica, fire protection services are provided by the NFCA. The increased local projected population would likely result in a subsequent increase in fire and emergency medical service calls to the service area compared to existing conditions. Growth in central Pacifica will necessitate the need for an additional fire station, a potential significant impact.

While additional population may necessitate additional stations, it is likely that any new police or fire facility necessary to serve the Planning Area would be located and constructed in an urbanized and developed area to mitigate environmental impacts. Policies in the General Plan state that the City will assist NFCA in finding an appropriate location for a third station in central Pacifica, at an infill site either near the police station, or at the Quarry.

The environmental impacts related to traffic, noise, air quality, and GHG emissions during construction and operation of the Proposed Project, which includes public facilities, have been considered throughout the technical modeling provided in other chapters of this EIR. Future facilities would be subject to the policies associated with the Project that would address potential impacts of siting, construction, and operation of new facilities to the extent assessed in other sections of this EIR. Proposed policies include those requiring construction best management practices to limit land disturbance, development review to protect significant biological resources, reduce air pollution, promote water- and energy-efficient construction and landscaping, implementation of noise mitigation measures, and management of archaeological materials found during development. Future police and fire protection facilities will tie from this EIR to identify and mitigate site-specific impacts if and when design of those facilities is complete. Therefore, impacts would be less than significant.

Public schools are provided by school districts to areas within their jurisdictions. While districts may have cross jurisdictional boundaries, school services are still provided at the local, rather than regional, level. Project applicants for development under the Proposed Project would be required to comply with SB 50, which mandates statutory school facilities fees for residential and commercial developments. Compliance with SB 50 would financially offset impacts on the school district capacity. As indicated in Section 3.10, there is sufficient capacity at PSD and JUHSD to accommodate the increase of students associated with the Proposed Project. Therefore, this impact is not cumulatively considerable.

Currently, Pacifica maintains 242 acres of District Parks, Neighborhood Parks, Pocket Parks, Special Facilities, and School Playfields, resulting in a park ratio of 6.3 acres per 1,000 residents. This ratio is higher than the existing park standard of 5 acres per 1,000 residents. These existing park standards do not include any requirements for Special Facilities or School Playfields. With the projected population under the Proposed Project, the citywide park standard is expected to be 5.6 acres per 1,000 residents. This ratio remains higher than the existing park standard of 5 acres per 1,000 residents. Policies in the Pacifica General Plan require that the City develop new parks in a timely manner using in-lieu fees or land dedicated as part of new development, to ensure that citywide park and recreation space is available to the community at a ratio of 6.3 acres per 1,000 residents by 2040. Therefore, new park development accompanying population growth would be expected to accommodate additional park demand at a level consistent with current usage. Therefore, the contribution of the Proposed Project to the cumulative impact on public services and recreation would not be cumulatively considerable.

UTILITIES AND SERVICE SYSTEMS

Future development anticipated by the Proposed Project would generate additional demand for water and wastewater, stormwater, solid waste services, power, and telecommunications services. The geographic context for these services the City of Pacifica, and the cumulative context, the Proposed Project plus General Plan buildout to 2040 (with the exception of water supply, as described below).

Water to the Planning Area is supplied by the North Coast County Water District (NCCWD), which also supplies a small amount of water to part of San Bruno. All water comes from the San

Francisco Public Utilities Commission and the Hetch Hetchy System. Water service reliability is assessed during normal, single dry-year, and multiple dry-year hydrologic conditions.

Based on analysis of cumulative buildout to 2040, available supplies are sufficient to meet projected demands for Pacifica, including the Proposed Project in normal year conditions. The City of San Bruno's Housing Element IS/MND indicates sufficient capacity and projects the same amount of water purchased (0.05 MGD) from NCCWD into the future. However, significant shortfalls are projected in dry year conditions, which if realized would require the NCCWD to enact its Water Shortage Contingency Plan (SSCP) to reduce water demand and make up the supply deficit. The WSCP stages required to achieve the necessary demand reductions range from Stage 1 to Stage 3. The Proposed Project, if approved, would be subject to the same water use restrictions as other city water customers if the WSCP is implemented. Therefore, the Proposed Project's contribution to this potentially significant cumulative impact is less than cumulatively considerable.

The City operates a wastewater treatment plant, sewage lift stations, and stormwater pump stations, as well as the citywide system of sewer mains and lateral pipes that connect to homes and businesses. Wastewater flows through some 106 miles of main pipes to five sewer pump stations, and on to the Calera Creek Water Recycling Plant. The City's topography prevents gravity flow to the plant, and requires pump stations at Rockaway Beach, Linda Mar and Sharp Park (two), and Skyridge. As detailed in Section 3.14, Pacifica's sewer system capacity is adequate to accommodate buildout of the Proposed Project and the General Plan buildout, as the dry weather capacity of the Plan is 7.0 mgd and the estimated flow is only 2.57 mgd.

Additional infrastructure improvement projects would also occur along Crespi Drive, Linda Mar Boulevard, Fremont Avenue, and Catalina Avenue to increase capacity of peak wet weather flows. It is also anticipated that two rehabilitation and replacement (R&R) projects in the Vallemar and Rockaway Beach communities which have been included in the City's adopted 2023-2028 Capital Improvement Plan to improve wet weather flow capacity. However, as the timing and completion of these projects are unknown, impacts remain potentially significant but would be mitigated with implementation of MM UTIL-1. As such, the Proposed Project's contribution to this potentially significant cumulative impact is less than cumulatively considerable.

The city's existing storm drainage system collects and conveys surface water runoff from areas throughout the city and ultimately discharges the runoff into the Pacific Ocean. The increasing incorporation of stormwater management in site planning, including as part of the Proposed Project, will further reduce the need for development of new storm drainage infrastructure, and this potentially significant cumulative impact is less than cumulatively considerable.

Pacifica contracts with Recology of the Coast for waste and recycling collection and handling. Most landfill waste is taken to the Ox Mountain Landfill in Half Moon Bay, which has a current residual capacity of 1,649 tons/day. Cumulatively, the Proposed Project and General Plan are expected to result in an additional 9,388 people and 1,720 jobs from 2024 existing conditions to 2040 (shown in Table 3.10-1). Using the latest rates, this represents an increase of 40 tons per day, or 10,950 tons a year, a daily rate of two percent of the current residual capacity of 1,649 tons/day at Ox Mountain Landfill. In addition, some of the solid waste from the City of Pacifica is transported to other landfills in the Bay Area, and the majority of the waste generated in the city is diverted from landfill disposal through recycling and composting. This estimate conservatively assumes that all of the

generated waste is landfilled. Therefore, the Proposed Project's contribution to this potentially significant cumulative impact would not be cumulatively considerable.

Existing overhead and underground electrical lines extend throughout the Planning Area and were originally installed to serve the variety of existing land uses. Given that implementation of the Proposed Project would not significantly change the general types of land uses located within the Planning Area, the existing electricity infrastructure would be sufficient to serve new development. PG&E is expected to be able to meet overall demand for electricity and natural gas for all its customers, including San Mateo County, in the future. PG&E will continue to maintain and upgrade its electrical and natural gas distribution systems as needed based on future demand trends. For electricity, this includes local and regional distribution lines, undergrounding or poles where needed, and transformer stations. For natural gas, this includes local and regional pipelines and transmission stations. Therefore, the impact of the Proposed Project on power infrastructure would not be cumulatively considerable.

WILDFIRE

The cumulative geographic context for wildfire consists of sites within the Planning Area and nearby properties in the immediate vicinity. Neither Pacifica's city limits nor Sphere of Influence (SOI) contain any Very High FHSZs. Only a portion of Pacifica's SOI is designated as a High FHSZ. Land immediately adjacent to these areas that is within city limits is designated as Transitional Open Space Residential (TOSR) or other designations to ensure very low densities of residential development commensurate with the degree of fire hazard.

The Proposed Project would generate an increase in daily trips as detailed in Chapter 3.13 of this EIR, which may have an impact on emergency access in the larger Planning Area. Development under the Proposed Project would also be required to adhere to the City's General Plan which includes policies that complement other existing, adopted plans addressing emergency response and emergency evacuation, including the 2021 Multijurisdictional Local Hazard Mitigation Plan (MJLHMP), the Pacifica All Hazards & Evacuation Plans, and the City of Pacifica Emergency Operations Plan. Further, development must adhere to City of Pacifica General Plan Safety Element update which will include policies associated with wildfire risk and evacuation. Thus, implementation of the Proposed Project would not impair an emergency response or emergency evacuation plan, and there would be a less than cumulatively considerable impact.

Further, while the projected population in the Planning Area would increase the number of people potentially exposed to impacts from wildfire, the Proposed Project would not induce substantial unplanned population growth in the Planning Area. New development would be subject to the California Fire Code, which includes safety measures to minimize the threat of fire. To further address this risk exposure from additional residential development near this High FHSZ, State and federal regulations, and City of Pacifica development standards play an important role in limiting potential fire hazards. All new construction under the Proposed Project would be subject to the California Fire Code, which include safety measures to minimize the threat of fire, including ignition-resistant construction with exterior walls of noncombustible or ignition resistant material from the surface of the ground to the roof system and sealing any gaps around doors, windows, eaves, and vents to prevent intrusion by flame or embers. Construction would also be required to

meet CBC requirements, including CCR Title 24, Part 2, which includes specific requirements related to exterior wildfire exposure. The Board of Forestry, via CCR Title 14, sets forth the minimum development standards for emergency access, fuel modification, setback, signage, and water supply, which help prevent loss of structures or life by reducing wildfire hazards. The codes and regulations would reduce the risk of loss, injury, or death from wildfire for new developments under the Proposed Project.

Therefore, compliance with local and state regulations and plans pertaining to wildfire would help reduce impacts regionally; the Proposed Project's contribution to wildfire risks is not considered cumulatively considerable.

5.3 Significant and Unavoidable Impacts

Significant unavoidable impacts are those that cannot be mitigated to a level that is less than significant. According to CEQA Guidelines 15126.2(b), an EIR must discuss any significant environmental impacts that cannot be avoided under full implementation of the proposed program, including those that can be mitigated, but not to a less-than-significant level. The analysis in Chapter 3 determined that the Proposed Project would result in significant impacts related to transportation and greenhouse gas emissions, and that, even with implementation of mitigation measures, would remain significant and unavoidable. These impacts are summarized below:

TRANSPORTATION

Goals and policies in the Proposed Project are designed to reduce VMT in the Planning Area by identifying sites for infill development on underutilized commercial sites, institutional sites, and City-owned sites. The Proposed Project and General Plan encourage housing opportunities in commercial districts and adequate residential access to pedestrian infrastructure, neighborhood services, and recreation facilities to further reduce VMT. Table 3.11-5 summarizes the VMT calculations for Pacifica under the 2015 Base Year, 2040 Preferred General Plan, and 2040 Proposed Project conditions. As expected with the addition of multifamily units and retail employment, the VMT per capita for Pacifica is expected to drop to 12.4 by 2040 under the Proposed Project scenario, which is below the threshold of significance. The Pacifica VMT per employee for the Proposed Project scenario also decreases relative to the Preferred General Plan scenario. However, the resulting VMT per employee under the 2040 Proposed Project scenario is 19.83, which falls above the threshold of significance. As outlined in Section 3.13, there are no feasible mitigation measures available to reduce VMT to a less-than-significant level. As such, the VMT impact would be significant and unavoidable.

GREENHOUSE GAS EMISSIONS

Implementation of the Proposed Project would reduce generation of GHG emissions by 40 percent compared to existing conditions. This reduction is on track to meet the State's 2030 goal, however, it is not on track to meet the State's 2045 goal nor Pacifica's 2050 CAP goal. Of 80 percent GHG emissions reductions targets by 2050.

On a local scale, implementation of the Proposed Project would generate GHG emissions that could have a significant impact on the environment and this impact would be potentially significant and mitigation measures would be required. While Mitigation measures MM-GHG-1 and MM-GHG-2 will reduce transportation- and energy-related GHG emissions, additional reductions are needed in order to meet the CAP's 2050 and State's 2045 targets. Without further State action, it is unlikely that local efforts alone would be sufficient to meet carbon neutrality by 2045 and thereby reduce the impact to a less-than-significant level. Moreover, CARB's 2022 Scoping Plan indicates that carbon sequestration from natural and working lands will not be enough to attain carbon neutrality, and doing so will require research, development, and implementation of additional measures. CARB maintains authority to adopt regulations as necessary to meet future GHG targets under SB 32, EO S-3-05, EO B-55-18, and AB 1279, but the specific path to carbon neutrality is unknown and dependent on development of technologies and programs that are not currently known or available; therefore, impacts related to generation of greenhouse gas emissions and consistency with the adopted 2014 CAP are significant and unavoidable.

5.4 Significant Irreversible Environmental Changes

CEQA Guidelines require an EIR to consider whether "uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely" (CEQA Guidelines Section 15126.2(d)). "Nonrenewable resources" refers to the physical features of the natural environment, such as land or waterways, and resources that are renewable only over long time spans, such as soil productivity. A resource commitment is considered irretrievable when the use or consumption of the resource is neither renewable nor recoverable for use by future generations. Irreversible changes and irretrievable commitments of non-renewable resources anticipated by the Proposed Project include the following issues. The Proposed Project would involve two types of resources: (1) general industrial resources including fuels and construction materials; and (2) project-specific resources such as land, biotic, and cultural resources at the building sites.

COMMITMENT/CONSUMPTION OF NON-RENEWABLE RESOURCES

Implementation of the Proposed Project could result in the long-term commitment of various resources to urban development. While the Proposed Project itself would not directly entitle or result in any new development, it is reasonably foreseeable that the Proposed Project, which acts as a blueprint for growth and development in the Planning Area over the next eight years, could result in significant irreversible impacts related to the commitment of non-renewable and/or slowly renewable natural and energy resources, such as:

- **Air Quality:** Increases in vehicle trips resulting from buildout of the Proposed Project would potentially contribute to long-term degradation of air quality and atmospheric conditions in the region. Technological improvements in automobiles, including the growth of the electric vehicle market share, may lower the rate of air quality degradation in the coming decades. Nonetheless, vehicle trips resulting from implementation of the Proposed Project could result in the irreversible consumption of nonrenewable energy

resources, primarily in the form of fossil fuels, natural gas, and gasoline for non-electric automobiles and long-term degradation of air quality.

- **Water Consumption:** To the extent that the Proposed Project would accommodate new population, it would increase the demand for water and place a greater burden on water supply. While additional residents and workers would use more water, the city is expected to have adequate water to meet demand in normal and wet years through 2040. Despite the change in demand resulting from the Proposed Project being marginal, the increase would represent an irreversible environmental change, as use of this resource would increase.
- **Energy Sources:** Residential developments use electricity, natural gas, and petroleum products for lighting, heating, and other indoor and outdoor power demands, while automobiles use both oil and gas. New development anticipated by the Proposed Project would result in increased energy use for the operation of new buildings and for transportation. This new development would therefore result in an overall increased use of both renewable and nonrenewable energy resources. To the extent that new development uses more nonrenewable energy sources, this would represent an irreversible environmental change.

CONSTRUCTION-RELATED COMMITMENTS

Irreversible environmental changes could also occur during the course of constructing development projects anticipated by the Proposed Project. New construction would result in the consumption of building materials (such as lumber, sand and gravel), natural gas, and electricity, water, and petroleum products to process, transport and build with these materials. Though it is possible for construction equipment to be fueled by renewable sources over the course of the Proposed Project buildout, the timing and availability of these energy sources is unknown. Construction equipment running on fossil fuels would be needed for excavation and the shipping of building materials. Due to the non-renewable or slowly renewable nature of these resources, this represents an irretrievable commitment of resources.

However, development allowed under the Proposed Project would not necessarily result in the inefficient or wasteful use of resources. Compliance with all applicable building codes would ensure that natural resources are conserved to the maximum extent feasible. It is possible that new technologies or systems will emerge, or become more cost-effective or user-friendly, to further reduce the reliance upon non-renewable natural resources. Nonetheless, future activities related to implementation of the Proposed Project could result in the irretrievable commitment of nonrenewable energy resources, primarily in the form of fossil fuels (including fuel oil), natural gas, and gasoline for automobiles and construction equipment.

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