City of Santa Cruz
Local Coastal Program

2021 Amendment

PUBLIC REVIEW DRAFT

November 2021

CITY OF SANTA CRUZ

LOCAL COASTAL PROGRAM

Land Use Plan – 2021 Amendment

PUBLIC REVIEW DRAFT

November 2021

Prepared By
CITY OF SANTA CRUZ PLANNING DEPARTMENT
DUDEK

November 2021

This page intentionally left blank.

TABLE OF CONTENTS

VI. Implementation

VII. Glossary

VIII. Figures and Maps

List of Tables

[THE FOLLOWING DOCUMENTS ARE AVAILABLE ON THE CITY'S WEBSITE]

Beach and South of Laurel Area Plan Design Guidelines

City-Wide Creeks and Wetlands Management Plan

West Cliff Drive Adaptation and Management Plan: A Public Works Plan

This page intentionally left blank.

I. INTRODUCTION

IN THIS SECTION:

- Coastal Act Background
- Coastal Commission Sea Level Rise Policy Guidance
- City of Santa Cruz Coastal Zone
- City of Santa Cruz Local Coastal Program (LCP)

Coastal Act Background

In 1972, California voters adopted Proposition 20, creating the California Coastal Act and the California Coastal Commission. The Coastal Act's basic goals are to:

> (1) Protect, maintain, and where feasible, enhance and restore the overall quality of the coastal zone environment and its natural and artificial resources.
>
> (2) Assure orderly, balanced utilization and conservation of coastal zone resources taking into account the social and economic needs of the people of the state.
>
> (3) Maximize public access to and along the coast and maximize public recreational opportunities in the coastal zone consistent with sound resources conservation principles and constitutionally protected rights of private property owners.
>
> (4) Assure priority for coastal-dependent and coastal-related development over other development on the coast.
>
> (5) Encourage state and local initiatives and cooperation in preparing procedures to implement coordinated planning and development for mutually beneficial uses, including educational uses, in the coastal zone.

The Coastal Commission was given the mandate of implementing Coastal Act policies by preparing a comprehensive plan for the California coastline and reviewing locally-approved projects within the coastal zone. In 1976, the Coastal Act was revised with specific provisions that coastal permit processing authority be transferred from the Coastal Commission to local governments upon the local jurisdiction's adoption of a Coastal Land Use Plan and Implementation Plan. A jurisdiction's Coastal Land Use Plan must contain planning policies and land use designations for the coastal zone that meet the requirements in the Coastal Act. The Coastal Implementation Plan must contain regulations and programs necessary to carry out the Coastal Land Use Plan. Taken together, they form the "Local Coastal Program" (LCP) for cities and counties with jurisdiction within the coastal

zone. The LCP must be certified by the California Coastal Commission (CCC), and any subsequent amendments to an LCP must also be approved by the CCC. The Coastal Act requires that the jurisdiction's LCP determine where and the extent to which various land uses and coastal activities are appropriate and necessary within the coastal zone and the jurisdiction shall process and issue coastal development permits (CDPs) accordingly.

California Coastal Commission Sea Level Rise Guidance

In 2015, the California Coastal Commission adopted the *California Coastal Commission Sea Level Rise Guidance* for use by local jurisdictions in updating LCPs and otherwise dealing with climate change and sea level rise within the coastal zone. The following descriptive text taken from that document describes the intent and use of the *Guidance.*

The California Coastal Act is one of the state's primary coastal management regulations for addressing land use, public access and recreation, and the protection of coast and ocean resources in the coastal zone. It is also the primary coastal hazards law governing development along the coast. Through use of the Coastal Act, the Coastal Commission and local governments have more than four decades of experience managing coastal development, including addressing the challenges presented by coastal hazards like storms, flooding, and erosion, as well as responses to these hazards such as armoring. However, sea level rise and the changing climate present management challenges of a new magnitude, with the potential to significantly threaten many coastal resources, including shoreline development, coastal beach access and recreation, habitats, agricultural lands, cultural resources, and scenic resources, all of which are subject to specific protections and regulations in the Coastal Act. Therefore, effective implementation of the Coastal Act and the protection of California's coast must address global sea level rise and the greater management challenges it will bring.

The *California Coastal Commission Sea Level Rise Guidance* focuses specifically on how to apply the Coastal Act to the challenges presented by sea level rise through Local Coastal Program (LCP) certifications and updates and Coastal Development Permit (CDP) decisions. It organizes current science, technical and other information and practices into a single resource to facilitate implementation of the Coastal Act by coastal managers at the state and local level. While the document is intended to guide LCP planning and development decisions to ensure effective coastal management actions, it is advisory and does not alter or supersede existing legal requirements, such as the policies of the Coastal Act and certified LCPs. However, one of the Commission's priority goals is to coordinate with local governments to complete and update LCPs in a manner that adequately addresses sea level rise and reflects the recommendations in this *Guidance*.

The City of Santa Cruz has utilized the *Guidance* provided by the Coastal Commission to address the impacts of sea level rise in this LCP update. The City recently completed work on the Resilient Coast Initiative, which studied the projected impacts of sea level rise on the Santa Cruz coast and developed a series of potential triggers and actions for the City to take in response to those impacts. That work, together with the recommendations in the *Guidance*, are summarized in

Chapter III-F - Beaches and Bluffs Adaptation, which contains policies and suggested actions to respond to sea level rise in the City's coastal zone.

City of Santa Cruz Coastal Zone

The City of Santa Cruz encompasses roughly 12.7 square miles, of which approximately 3.6 square miles are located within the coastal zone. The Monterey Bay, Pacific Ocean, and the coastline constitute the entire southern boundary of the City and are important natural features framing the City's urban setting. The coastline provides a clearly defined city boundary, giving continuity and a strong sense of orientation and identity to the area. See Figure I-1 for the City's regional location and the area of the City within the coastal zone[1].

City of Santa Cruz Local Coastal Program (LCP)

LCP Background and History

The City's LCP consists of a land use plan and implementing regulations. The LCP Land Use Plan consists of: text; policies, programs, and maps; Area Plan coastal policies and maps; and a Coastal Access Plan. The City's coastal policies, programs, and maps apply to all private and public projects located within the coastal zone. The Implementation Plan consists of ordinances and regulations used to implement the Land Use Plan, including sections of the City's Zoning Ordinance, General Plan, and Area Plans. These policies, programs, and maps provide the basis for coastal permit requirements, and changes to them constitute amendments to the Local Coastal Program.

The City's LCP Land Use Plan was initially certified in July 1981. The Implementation Plan was certified in April 1985, and the City assumed local coastal development permit jurisdiction that year.[2] The City's certified LCP was subsequently completely revised and included in the City's *1990-2005 General Plan and Local Coastal Program* document that was adopted by the City in October 1992, although the coastal elements (as further described below) were approved by the Coastal Commission in 1994 as an LCP amendment (LCP Major Amendment #2-93). Since 1994, numerous amendments to the City's certified LCP have been adopted by the City and approved by the California Coastal Commission.

In 2012, the City adopted the General Plan 2030, which did not include the LCP. The LCP was subsequently revised and updated to be consistent with the General Plan 2030 and to address environmental and other changes, including addressing climate change and sea level rise in a more comprehensive form.

Coastal elements for two areas were originally denied by the Coastal Commission and remained as "Areas of Deferred Certification:" 1) Neary Lagoon and 2) an area called "Westside Lands" that

[1] All figures are included in Chapter VIII of this document for ease of reference.

[2] Reported in California Coastal Commission Staff Report, March 2, 1994, regarding City of Santa Cruz LCP Major Amendment #2-93 and Land Use Plan Resubmittal for Westside Lands Area of Deferred Certification.

encompassed Antonelli Pond and the surrounding area, including what is now the University of California Santa Cruz (UCSC) Long Marine Laboratory and Research Campus. Land use designations for Neary Lagoon and the portion of the Westside Lands area owned by the Land Trust of Santa Cruz County, which includes Antonelli Pond and parcels to the north of it, were subsequently certified by the Coastal Commission prior to 1994. The property owned by UCSC was included in the Coastal Long Range Development Plan for the University campus, certified by the Coastal Commission in 2009. The only remaining area of "Deferred Certification" is the property known as the Swenson Property that is located west of Antonelli Pond.

In addition, a few areas within the City's coastal zone are addressed more specifically by area plans and resource management plans that had been adopted by the City at the time the 1990-2005 General Plan/LCP was prepared, and other similar plans adopted since 1994. These plans are summarized in Table I-1. While a number of these plans were not adopted as part of the LCP or approved by the Coastal Commission through LCP amendments, some of these plans' policies were included in the certified LCP in Volume II of the 1990 General Plan/LCP. An overview of City-adopted plans and their relationship to this LCP Update is provided in Chapter II of this document. The *City-Wide Creeks and Wetlands Management Plan*, adopted by the City Council in 2006 and approved as an LCP amendment by the California Coastal Commission in 2008, was prepared in response to specific LCP programs and applies to areas both within the coastal zone and outside of it.

Additionally, while some coastal areas are owned and/or managed by other agencies, such as the California Department of Parks and Recreation and the Santa Cruz Port District, development within these areas is still subject to the Coastal Act and certified LCPs. In accordance with Coastal Act section 30519 (California Public Resources Code), after a local coastal program has been certified and all implementing actions within the affected area have become effective, the development review authority shall be delegated to the local government implementing the local coastal program, except on appeal to the Coastal Commission. Thus, the City would be the entity to approve a coastal permit for any development within these areas. For the City to issue coastal permits, it must have a basis for action. Therefore, the State Department of Parks and Recreation's land use plans for Lighthouse Field, Natural Bridges, and Twin Lakes State Beaches were incorporated into the City's Local Coastal Program and are summarized with other area and specific plans in Chapter 5 "Area Plan Coastal Policies." The Santa Cruz Port District's Harbor Development Plan also was included in Chapter 5. The University of California Santa Cruz (UCSC) plan for Long Marine Lab was previously included in the 1994 GP/LCP Volume II Plan Summaries, but these facilities are now part of the University campus' Coastal Long Range Development Plan, approved by the Coastal Commission in 2009 and no longer included in the City's LCP.

TABLE I-1: Summary of Adopted Plans in the Coastal Zone

City Plan	Included in 1994 GP/LCP*	Adopted or Approved After 1994 GP/LCP	Notes
City-Adopted Area Plans			
1. Beach Area Plan	✓		
2. Beach and South of Laurel Comprehensive Area Plan		✓	
3. City-Wide Creeks and Wetlands Management Plan [portion in coastal zone]		✓	
4. Downtown Plan [portion in coastal zone]	✓		Updates to the Downtown Plan were approved after 1994, including a major update in 2017.
5. Moore Creek Access and Management Plan	✓		
6. Ocean Street Area Plan		✓	
7. Seabright Area Plan [portion in coastal zone]	✓		
8. Western Drive Master Plan [portion in coastal zone]	✓		
City-Adopted Management Plans			
9. Arana Gulch Master Plan		✓	
10. Jessie Street Marsh Management Plan		✓	
11. Moore Creek Interim Management Plan		✓	
12. Neary Lagoon Management Plan	✓		
13. San Lorenzo River Enhancement & Design Plan [portion in coastal zone]	✓		
14. San Lorenzo Urban River Plan [portion in coastal zone]		✓	Policies revised and updated with the Downtown Plan in 2017.
Santa Cruz Port District-Adopted Harbor Development Plan			
15. Santa Cruz Harbor Development Plan [CITY ALSO ADOPTED]	✓		
State-Adopted Area Plans			
16. Lighthouse Field State Beach Plan	✓		
17. Natural Bridges State Beach Plan	✓		
18. Twin Lakes State Beach Plan	✓		
19. UCSC Marine Science Campus Coastal Long-Range Development Plan (CLRDP) (2004) [Not adopted by City]	✓		
* Includes summaries and policies in Volume II: "Area and Specific Plan Policies"			

LCP Amendment and Organization

In June 2012, the City of Santa Cruz adopted its *General Plan 2030*. While the General Plan 2030 and related Area Plans guide land development throughout the City, including lands within the coastal zone, the Local Coastal Program takes precedence over these plans for lands located within the coastal zone. Where the LCP contains specific provisions applicable to land and water development, it is those provisions that govern development activities.

This document consolidates the 1990-2005 LCP Land Use Plan, as approved by the Coastal Commission in 1994 and with all subsequent amendments, into one document. The policy sections have been reorganized to follow the Coastal Act policy topics and have been revised, where appropriate, to reflect current conditions and the General Plan 2030 and to delete outdated text and/or policies or programs that have been implemented or are no longer relevant. The Implementation Plan chapter has also been updated to include cross references to all LCP implementing ordinances and regulations. Finally, a new section related to the City's adaptation response to climate change and sea level rise has been added.

The LCP amendment includes the following primary changes:

1. Policy/Program minor changes and edits;
2. New text and policies related to climate change and sea level rise adaptation;
3. Area Plan Policies – new Ocean Street Area Plan policies (previously revised policies and programs for the Beach Area Plan and San Lorenzo Urban River Plan are included in this document), and a City-wide Creeks and Management Plan
4. Land Use Map – New Mixed Use designations and floor area ratios for non-residential development and proposed land use designations for specified properties (see Chapter IV of this document); and
5. Implementation Table Update to clarify and reflect changes to implementing ordinances over approximately the past 15 years.

The City's LCP Land Use Plan, as amended with this document, is organized as follows:

I. Introduction

II. Community Setting

III. LCP Policies [Includes coastal policies from the 1990-2005 General Plan-Local Coastal Program document as amended since 1994 as well as changes included in this document with new Chapter III-F: Beaches and Bluffs Adaptation focused on the City's response to climate change and sea level rise.]

IV. Land Use Map and Designations [Includes land use designations and Land Use Map as amended in accordance with the City's adopted *General Plan 2030*]

V. Area Plan Coastal Policies [Includes coastal policies from the 1990-2005 General Plan-Local Coastal Program document as amended since 1994 as well as changes included in this document]

VI. Implementation [Includes cross reference to adopted ordinances and regulations that are LCP implementation regulations and provides an overview of the local coastal permit process, including appeals]

VII. Glossary

VIII. Figures and Maps

The following area plans are available and on the City's website:

- Beach and South of Laurel Area Plan Design Guidelines
- City-Wide Creeks and Wetlands Management Plan
- West Cliff Drive Adaptation and Management Plan: A Public Works Plan

This page left intentionally blank.

II. COMMUNITY SETTING

IN THIS SECTION:

- Regional Setting
- Monterey Bay National Marine Sanctuary
- Community Profile
- Overview of Adopted Plans

Regional Setting

The City of Santa Cruz, one of the oldest cities in California, was founded in 1791 and incorporated in 1866. It is located approximately 75 miles south of San Francisco in Santa Cruz County on the northern shore of Monterey Bay (see Figure I-1[1]).

The City occupies a picturesque location along the banks of the San Lorenzo River, between the Pacific Ocean and the Santa Cruz Mountains and is situated along four miles of coastline on Monterey Bay, which defines the City's entire southern boundary. Public and privately-owned land along the City's western, northern and eastern boundaries generally forms a greenbelt of open space that includes agricultural and grazing lands, natural areas, parks, and coastal recreation sites. These areas give definition to the City and serve as barriers to further expansion of urbanization. Views toward Monterey Bay and the Pacific Ocean provide orientation and a strong sense of City identity. In some places, the City's coastline slopes gently toward large beaches; in others, tall coastal cliffs drop off the edge sharply and stairways lead from the top of the bluff down to the rocky shoreline and beaches below. The City's beaches and its coastal bicycle, pedestrian, and automobile routes are extremely popular destinations for residents and visitors alike.

Monterey Bay National Marine Sanctuary

The City of Santa Cruz is situated along the Monterey Bay, which was designated a national marine sanctuary by the federal government in 1992. The Monterey Bay National Marine Sanctuary stretches from Cambria in San Luis Obispo County in the south to Marin County in the north, encompassing 276 miles of shoreline. The Sanctuary extends seaward an average of 30 miles from shore—covering more than 5,000 square miles of ocean. The Sanctuary—administered by the National Oceanic and Atmospheric Administration (NOAA)—was established to promote resource protection, research, education, and public use. It boasts one of the most diverse marine ecosystems in the world, including the nation's largest kelp forest and one of North America's

[1] All figures are included in Chapter VIII of this document for ease of reference.

largest underwater canyons. Figure II-1 illustrates the boundaries of the Monterey Bay National Marine Sanctuary.

Community Profile

The 2020 U.S. Census gives the population of the City of Santa Cruz as 62,956; however, this census was performed during the COVID-19 pandemic, when most of the student population of the University of California, Santa Cruz (UCSC) was "distance learning" from afar. The projected population of the City of Santa Cruz from the California Department of Finance (DOF) in May 2018 was 66,454. The Association of Monterey Bay Area Governments (AMBAG) population estimate for the City for 2020 is 64,424[2]. The City's 1990 population was 49,711 residents when the 1990-2005 Local Coastal Plan (with the former General Plan) was prepared. Overall, the population of the City has increased at an annual average growth rate of between 0.88% (based on the 2020 U.S. Census population) to 1.2% based on the 2018 population estimate by DOF since 1990.

Santa Cruz serves as the County government seat. Since its founding, the City has been the urban center of the County, providing employment as well as commercial, governmental, social, educational, and cultural services for the larger area. Tourism is a vital part of the City's makeup, and the City's beach areas support visitor accommodations and attractions such as the Santa Cruz Beach Boardwalk and the Monterey Bay National Marine Sanctuary Exploration Center. Promenades and hiking trails (including those along the Beach/Boardwalk, San Lorenzo River corridor, downtown, and West Cliff Drive) provide residents and visitors opportunities to enjoy unique natural and coastal areas.

Santa Cruz offers residents and visitors a wide range of parks, open space, beaches, trails, and recreational opportunities. The City has responsibility for management, maintenance, and operation of over 1,700 acres of parks, open space, and various community/recreational facilities. The City oversees development of new parks as well as improvements within City-owned parks, open space, and its community facilities. Table IIIB-1 in Chapter III-B summarizes citywide parks and recreational facilities, and indicates which parks are located within the coastal zone. The City's Municipal Wharf is a key visitor-serving element in the beach and coastal area, and the Santa Cruz Small Craft Harbor, the City's Main and Cowell Beaches, and three California state beach parks are also located within City limits. Most of the City's visitor-serving land uses are concentrated along Beach Street and Ocean Street, with the Santa Cruz Beach Boardwalk on Beach Street being a prominent coastal recreational facility. Visitor services, restaurants, and retail are also found along Pacific Avenue and elsewhere in the downtown, and along Mission Street, the City's northwestern gateway from California's coastal Highway 1. A variety of other visitor-serving accommodations and uses are located in the coastal zone. In addition, the University of California Santa Cruz (UCSC) campus maintains its Long Marine Lab Marine Science campus at the western edge of the City, which includes the Seymour Marine Discovery Center. The Monterey Bay National Marine Sanctuary Exploration Center is located within the Beach area in easy walking distance of the Municipal Wharf.

[2] Association of Monterey Bay Area Governments (AMBAG). Adopted November 18, 2020. "2022 Regional Growth Forecast."

Overview of Adopted Plans

In June 2012, the City adopted its *General Plan 2030*, which updated the City's former *General Plan and Local Coastal Program 1990-2005 (1990 Plan)* and created the *General Plan 2030* as a stand-alone document. As discussed in Chapter I, it was determined at that time that the Local Coastal Program (LCP) portion of the original merged *1990 Plan* should be a separate document compatible with the *2030 General Plan*. This LCP document fulfills that determination. In addition, over the past 30 years, the City has adopted other area and resource management plans that affect portions of the coastal zone as summarized on Table II-1. These "Area Plans" often provide a more focused review of and guidance for a specific area of the City than is provided in the *2030 General Plan*. Resource management plans have also been adopted for some of the City's open space properties.

Other jurisdictions have also adopted their own plans for some coastal areas within the City's coastal zone. A Harbor Development Plan was adopted by the Santa Cruz Port District and was initially included in the City's *1990-2005 General Plan and Local Coastal Program*, and the California Department of Parks and Recreation has prepared general plans for its developed parks and beaches. These State beaches and parks (e.g., Natural Bridges State Beach) are not under the City's direct jurisdiction, but the City maintains coastal permit regulatory authority over these agencies for the portion of these lands located in the coastal zone above the mean high tide line, pursuant to Section 30519 of the Coastal Act.

The Long Marine Laboratory campus, owned and managed by UCSC, is part of UCSC's 100-acre Coastal Science Campus that also includes Younger Lagoon Reserve, the Seymour Marine Discovery Center and Center for Ocean Health, the National Marine Fisheries, Southwest Fisheries Science Center, Fisheries Ecology Division, and a California Department of Fish and Wildlife laboratory. The property is subject to its own Coastal Long-Range Development Plan that was certified by the California Coastal Commission in January 2009 and is not under the City's jurisdiction.

The following section is a brief summary and overview of City-adopted plans, organized in two broad sections: 1) Area Plans, and 2) Resource Management Plans and Management Plans for City-Owned Properties. The geographic areas covered by these various plans are shown on Figure II-2 while Table II-1, below, summarizes adoption status and notes the section within this LCP document where the relevant coastal policies are contained. As discussed in Chapter I, while some of these plans were not adopted as part of the Local Coastal Program or originally approved by the Coastal Commission, some of the policies in these plans were included in in Volume II of the City's certified *1990 General Plan/LCP*. Chapter V of this document provides further clarification and includes the relevant coastal policies for the area plans identified in Table II-1.

Following the discussion of City-prepared and adopted area plans is a brief summary of relevant General Plans for State Beaches located within the coastal zone of the City of Santa Cruz, which are not directly planned, managed, or operated under the City's authority.

Area Plans

The City of Santa Cruz has adopted myriad area and sub-area plans during the past 50 years, most involving at least a portion of the City's coastal zone. These include:

- Beach Area Plan/Beach and South of Laurel Comprehensive Area (B/SOL)Plan
- Downtown Recovery Plan/Downtown Plan
- Moore Creek Corridor Access and Management Plan
- Ocean Street Area Plan
- Santa Cruz Harbor Development Plan
- Seabright Area Plan
- Western Drive Master Plan

As some of these plans are now up to 40 years old, and with the 2012 approval of the City's *2030 General Plan*, not all of these Area Plans remain relevant and other more recent planning work has amended or superseded their policies. However, a brief discussion of each Area Plan is included below to maintain continuity and provide historical context in this LCP.

BEACH AND SOUTH OF LAUREL COMPREHENSIVE AREA PLAN

The *Beach Area Plan*, originally adopted by the City in 1980, contained policies pertaining only to the Beach area. Later, broader coastal policies were identified and included in Volume II of the *1990-2005 General Plan/LCP*. In 2002, the Coastal Commission approved an LCP Land Use Amendment (STC-MAJ-1-01-B) that replaced the policies of the *Beach Area Plan* with new policies developed from recommendations and provisions of the *Beach and South of Laurel Comprehensive Area Plan (B/SOL Plan).* These coastal policies are included in Chapter V of this document.

The LCP Land Use Amendment approved by the Coastal Commission in 2002 also included the Design Guidelines that are part of the *B/SOL Plan*. The Guidelines address streetscapes and building entries; site planning; architecture; landscaping; screening, lighting and security; signage; and conservation districts, as well as specific guidelines for each of the four subareas covered by the *B/SOL Plan*. The *B/SOL Plan Design Guidelines* are included by reference in this LCP and are available on the Planning Department website.

TABLE II-1: Status of Adopted Plans within the City of Santa Cruz Coastal Zone

ADOPTED PLANS (Adoption Date)	Within Coastal Zone	California Coastal Commission Action (Date)	Where Addressed in 2021 LCP
Arana Gulch Master Plan (2006)	YES	Approved CDP to Implement Master Plan (10-8-13)	Not Included in LCP
Beach Area Plan superseded by: Beach and South of Laurel Comprehensive Area Plan (1998) Beach and South of Laurel Area Plan Design Guidelines (1998), updated 2007	YES	Approved LCP Amendment with new Beach Area policies, zone amendments, Design Guidelines (2002), approved 2007 update in 2008	Policies Included in Chapter V; Design Guidelines attached by reference
Beach Management Plan For Main and Cowell Beaches	YES	Approved LCP Amendment (1995) & Coastal Development Permit as amended (CDP 3-95-043 & 3-11-027)	Policy for implementation in Chapter III-B-Recreation Not Included in LCP
City-Wide Creeks and Wetlands Management Plan (2006)	Portion	Approved LCP Amendment (2008)	Plan Overview in Chapter III-D; Creeks Plan attached by reference
Downtown Recovery Plan (1991), amended 2017 as Downtown Plan [Adopted by Res. NS-20,084 as a specific plan/GP amendment, amended by Res. NS-29,328]	Lower Portion	Approved 2017 LCP Amendment (3-8-2018)	Only one policy on coastal access Not included in LCP
Moore Creek Corridor Access and Management Plan (1987) [Adopted by NS-17,849 as a GP amendment.]	YES	Coastal Policies identified in 1990-2005 General Plan/LCP	Policies in Chapter III-A Not Included in LCP
Moore Creek Interim Management Plan (2002)	YES		Not Included in LCP
Neary Lagoon Management Plan (1991/1992)	YES	Approved as fulfilling Conditions of CDP#3-89-54 & LCP Amendment 1-92 for re-designation of wastewater treatment site and development of Neary Lagoon Park	Not Included in LCP Policy for implementation in Chapter III-D-Land Resources
Ocean Street Area Plan (2014)	Lower Portion	Not Submitted to CCC	Coastal Policies in Chapter V
San Lorenzo Urban River Plan (2003) [Adopted by NS-26,849 as a GP/LCP amendment – supersedes San Lorenzo Design Plan and Enhancement Plan. Includes "Lower San Lorenzo River and Lagoon Management Plan" (2002) and "Jessie Street Marsh Management Plan" (1999) as Appendices]	Lower Portion	Approved LCP Amendment (5-12-04); updated with Downtown Plan updates in 2017	Plan Overview in Chapter III-D Policies in Chapter V
Santa Cruz Harbor Development Plan (1992) [Adopted November 1993; Incorporated into the City's LCP.]	YES	Approved as part of 1990-2005 General Plan/LCP	Policies in Chapter V
Seabright Area Plan (1981)	YES	Coastal Policies Identified in 1990-2005 General Plan/LCP	Policies in Chapter III-B-Recreation Not Included in LCP
Western Drive Master Plan (1979) [Adopted in concept]	Portions	Coastal Policies Identified in 1990-2005 General Plan/LCP	Relevant Coastal Policies in Chapter III-A-Access Not included in LCP
State Plans (Adoption Date) in Coastal Zone in alphabetical order ▪ Lighthouse Field State Beach General Plan (1984) ▪ Natural Bridges State Beach Plan (March 1992) ▪ Twin Lakes State Beach General Plan (Seabright Beach)(March 1992)	YES	Coastal Policies Identified in 1990-2005 General Plan/LCP	Policies in Chapter V
▪ UCSC Marine Science Campus Coastal Long-Range Development Plan (CLRDP) (2004)	YES	Approved CLRDP (January 2009)	Not Included in City LCP

This page intentionally left blank.

DOWNTOWN RECOVERY PLAN/DOWNTOWN PLAN

The *Downtown Recovery Plan* (DRP) was written to guide the rebuilding of Downtown Santa Cruz, which was devastated by the 1989 Loma Prieta earthquake. The Plan was adopted by the City Council in 1991 as a specific plan and an associated General Plan amendment. At the same time, the Council rescinded the "Downtown Area Plan" as an element of the Local Coastal Program with an LCP amendment, adding a policy directing the future preparation of a new area plan for the South-of-Laurel Street area. The DRP covers the area bounded by the San Lorenzo River to the east, Center Street to the west, Laurel Street to the south, and properties just north of Water Street to the north. Only the lower portion of the DRP (generally just south of Cathcart Street) is located within the coastal zone. The DRP Summary included in Volume II of the *1990-2005 General Plan/Local Coastal Plan* contained only one identified coastal policy related to coastal access. Chapter 4 of the DRP, Development Standards and Design Guidelines, was adopted by reference into the City's Zoning Ordinance Chapter 24.10, Part 24-Central Business District (CBD). Part 24-CBD is part of the LCP implementation regulations.

In 2017, the City Council approved amendments to the *Downtown Recovery Plan*, including modification of Additional Height Zones in the downtown, revision of the Chapter 4 development standards and guidelines, and provision of additional development standards relating to properties along Pacific Avenue and Front Street, with new emphasis on creating connections to the Riverwalk. This amended Plan was adopted as the *Downtown Plan*, in recognition that the City's downtown had successfully "recovered" following the Loma Prieta earthquake. A subsequent LCP amendment was approved by the Coastal Commission in March 2018, consisting of revisions to policies contained in the San Lorenzo Urban River Plan within the downtown and changes to Chapter 4 as part of the Implementation Plan.

MOORE CREEK CORRIDOR ACCESS AND MANAGEMENT PLAN

The Moore Creek corridor is located along the western boundary of the City, extending south from the UCSC main campus to Monterey Bay. An intermittent stream, Moore Creek includes two main branches (east and west) which flow through steep-sided canyons before joining together just north of Highway 1. To the south of Highway 1, the main creek stem flows through the artificially created Antonelli Pond and through Natural Bridges State Beach out to Monterey Bay. The Moore Creek corridor includes both private property and public lands as well as a mix of land uses.

The *Moore Creek Corridor Access and Management Plan* was adopted by the City Council in 1987. This Plan's coastal policies were included in the Moore Creek Corridor Plan Summary in Volume II of the *1990-2005 General Plan/Local Coastal Plan*. The 1987 *Moore Creek Plan* was prepared to bring together the policies from the City's General Plan at that time with recommendations from the *Western Drive Master Plan* (see discussion below) into a comprehensive document for the Moore Creek corridor. The *Plan* recommended policies and programs regarding key aspects of creek corridor management, including: public access; water quality; grading, erosion and sedimentation; vegetation; public service systems; management of Antonelli Pond; and site-specific management for areas such as the former "Westside Lands" area and UCSC on the western edge of the City. Coastal access policies are included in Chapter III-A of this document. Some of the topics addressed in the *Moore Creek Corridor Access and*

Management Plan, such as erosion and water quality, are addressed by other LCP policies in this document.

In 2002, the City approved the *Moore Creek Interim Management Plan,* which more specifically addresses ongoing management of the 246-acre Moore Creek Preserve area of the corridor as further described below in the section on Resource Management Plans.

OCEAN STREET AREA PLAN

The *Ocean Street Area Plan* was adopted by the City Council in January 2014. This area plan describes and illustrates a 20-year vision along Ocean Street through the year 2030, and includes policy guidance, development, design standards and guidelines, and implementation steps to help ensure high quality development along Ocean Street. The Plan includes the land use designations in the City's adopted *General Plan 2030* and additional policies and actions to supplement the broader policies contained in the *General Plan*. Most of the *Ocean Street Plan* area is located outside of the coastal zone. Only the lower segment of Ocean Street (generally south of Broadway) is within the coastal zone. Therefore, the *Ocean Street Area Plan* was not submitted to the Coastal Commission. However, relevant policies and programs for the coastal zone portion of the Plan Area are included in Chapter V of this document.

SANTA CRUZ HARBOR DEVELOPMENT PLAN

The *Santa Cruz Harbor Development Plan (HDP)* was developed in conjunction with the City of Santa Cruz *1990-2005 General Plan and Local Coastal Program* update. The *HDP* was first adopted by the Santa Cruz Port District in November 1992 and was readopted in February 1996 after City Council adoption and Coastal Commission certification of the document. The entire *HDP* and its policies were included in the LCP (Volume II of the *1990-2005 General Plan/LCP*) as part of the LCP amendment (Major Amendment #2-93) approved by the Coastal Commission in 1994. The stated purpose of the *Santa Cruz Harbor Development Plan* is to increase the Harbor's capacity to serve both recreational and commercial maritime uses. Land use policies specify that facilities that support boating, fishing, coastal recreation and visitor-serving uses in the Harbor area should be favored over general office or retail uses. In addition, the *Harbor Plan* promotes the intensification of these uses. The policies in the *HDP* have been updated to reflect the status of planned harbor improvements since the adoption of the *HDP* in 1996. The *Plan* and these updated policies are included in Chapter V of this document.

SEABRIGHT AREA PLAN

The *Seabright Area Plan* was adopted by the City Council in 1981 with the intent to guide development to improve and preserve this historic, small-scale residential neighborhood on the eastern side of Santa Cruz. The *Plan* addresses the area south of Clinton Street, which is included in the coastal zone. The *Seabright Area Plan* Summary, which was included in Volume II of the 1990-2005 General Plan/Local Coastal Plan, identified only two coastal policies related to new construction and development. The Seabright Area Plan is now 40 years old and portions are outdated. The *Plan* is not wholly included within this revised Local Coastal Program; however, relevant policy excerpts are included in Chapter III-B of this document.

Between 2019 and 2021, the City launched the Resilient Coast Initiative to work with the local community, and a broad spectrum of visitors to and users of the City's coastline beaches and bluffs, to identify and prioritize strategies to prepare for and respond to climate change and the accelerating rate of sea level rise (SLR). The Resilient Coast Initiative, discussed in greater detail in Chapter III-F of this document, focused on four zones along the City's coastline: 1) Natural Bridges State Beach area, 2) West Cliff Drive corridor, 3) Main and Cowell Beaches, and 4) the Seabright Beach area. One element of the Resilient Coast Initiative (as of Summer 2021) proposes the City's next steps to continue working with the community on these focus areas in order to prepare a more detailed sea level rise adaptation plan for the neighborhoods and coastline while maintaining and enhancing a variety of coastal access opportunities. It should also be noted that the Resilient Coast Initiative helped inform the development of the *West Cliff Drive Adaptation and Management Plan*, a Public Works Plan for West Cliff Drive, including the planning and policies used in the Plan. Both the Resilient Coast Initiative and the Public Works Plan have helped create the necessary LCP policy updates. It is anticipated that the City's future Resilient Coast work with the Seabright area community, the State Parks Department, and other interested partners will allow coastal policies for the Seabright area to be better tailored and updated for the area's SLR adaptation going forward.

WESTERN DRIVE MASTER PLAN

The *Western Drive Master Plan*, prepared in 1978, includes lands along Western Drive, generally between Arroyo Seco Creek on the east and Moore Creek on the west, and from Highway 1 on the south to High Street on the north. The *Plan* area west of Western Drive is in the coastal zone. The Plan included recommendations to improve the Western Drive right-of-way, retain the rural character of the area, and both protect and provide public access to the Moore Creek and Arroyo Seco Canyons. The *Plan* was adopted "in concept only" by the City Council on December 12, 1978.

Subsequently, nine years later, in November 1987, the City Council adopted the *Moore Creek Corridor Access and Management Plan*, which as discussed above, was a focused effort to bring together existing City policies into a comprehensive document to implement goals of the General Plan, Local Coastal Plan, and the Western Drive Master Plan. Thus, the 1987 Moore Creek Corridor Plan incorporated the goals and recommendations of the *Western Drive Master Plan* regarding the Creek corridor, although a summary of the Western Drive Master Plan was also included in Volume II of the *1990-2005 General Plan/Local Coastal Plan*, identifying coastal policies related to: preservation of rural character, trees, and view corridors; building setbacks; and public access that were derived from the goals and recommendations of the Western Drive Plan. Since the Western Drive Master Plan was adopted only "in concept" by the City and is now over 40 years old, many of the original recommendations have been completed as the area has been largely built out, superseded by other plans, or are otherwise no longer relevant. Relevant coastal policies that were originally included in Volume II of the *1990-2005 General Plan/Local Coastal Program* are now included in Chapter III-A of this document.

Resource Management Plans/Management Plans for City-Owned Properties

BEACH MANAGEMENT PLAN FOR MAIN AND COWELL BEACHES

A *Beach Management Plan* for the City's Main and Cowell Beaches (location of beaches shown on Figure IIIA-1 in Chapter VIII) was first developed in accordance with the City's *1990-2005 General Plan/LCP*, Parks and Recreation Policy PR 1.7.3, which directed the preparation and implementation of such a management plan to address a variety of ongoing maintenance needs at the City beaches. The *Beach Management Plan* was initially adopted by the City in 1995, and was included in LCP Amendment #1-95, Part B, approved by the Coastal Commission in June 1995. The Coastal Commission staff report at the time stated that the *Plan* was a "required component" of the City's certified LCP Land Use Plan. Ongoing implementation of the *Beach Management Plan* has been approved by the Coastal Commission pursuant to coastal development permits issued by the Commission since 1995. The current *Plan* was approved by the CCC in December 2019 for implementation over a five-year period.

The purpose of the *Beach Management Plan (BMP)* is to guide the activities of public agencies and private property owners regarding maintenance, operations and uses allowed and encouraged within Main and Cowell Beaches in order to protect natural resources, provide for public safety, and maximize the extent and quality of the recreational experience of the residents of and visitors to the coastal areas of the City of Santa Cruz. The *BMP* includes standards for the use of mechanized equipment on the beach for maintenance, kelp removal, access and other related activities and addresses safety facilities and operations; recreational educational programs on the beaches; special events and other commercial uses of the beaches; signage; and flooding and drainage issues.

The *Beach Management Plan* describes the existing permanent and temporary facilities and uses that occur on an ongoing year-round and seasonal basis at the Main and Cowell Beaches. It is not a plan for future development or new commercial use of the beaches. It is designed to identify and allow those specified uses and activities that are authorized by a Coastal Commission-approved coastal development permit. Therefore, the *BMP* is generally updated every five years and is not included as a separate element in this LCP document. However, the requirement for continued implementation of the Beach Management Plan for Main and Cowell Beaches, including the parameters to be addressed within it, is included as a policy in this LCP (see Chapter III-B).

CITY-WIDE CREEKS AND WETLANDS MANAGEMENT PLAN

The *City-Wide Creeks and Wetlands Management Plan* was originally prepared pursuant to the City's *1990-2005 General Plan/LCP* Environmental Quality Policy EQ 4.2 and its accompanying programs in the LCP. The *City-Wide Creeks and Wetlands Management Plan* was adopted by the City Council in 2006 to provide a comprehensive approach to managing all creeks and wetlands within the City of Santa Cruz. The California Coastal Commission took action on approving the *City-Wide Creeks and Wetlands Management Plan* in October 2007/May 2008 as LCP Amendment (STC-MAJ-1-06). The Coastal Commission action applied to only those portions of the *Creeks and Wetlands Management Plan* that address resources located within the coastal zone. Long-term goals to manage these resources include:

- Reduce and/or eliminate pollutants discharged to aquatic bodies,
- Improve water quality,

- Improve and restore natural habitat,
- Increase biodiversity,
- Lower water temperatures, and
- Increase public awareness of the value of watershed quality.

The *Creeks Management Plan* recommends specific setback requirements based on biological, hydrological, and land use characteristics for various watercourse types within the City. The recommended setbacks within a designated management area include three subareas: a riparian corridor, a development setback area, and an additional designated area extending outward from the edge of the development area. The *Creeks Management Plan* together with any development and specify the uses allowed within a designated management area, development setback area, and/or riparian corridor. An overview of the *City-Wide Creeks and Wetlands Management Plan* is provided in Chapter III-D, and the full *Plan* is included by reference into this LCP document and is available on the Planning Department website.

SAN LORENZO URBAN RIVER PLAN

The *San Lorenzo Urban River Plan* (*SLURP*) (see Figure II-2 in Chapter VIII) was the product of a planning process initiated by City Council in 1999 to update the previous plans for the San Lorenzo River, Jessie Street Marsh, and Branciforte Creek that had guided flood control, vegetation restoration, and public access improvements along the San Lorenzo River. The "Lower San Lorenzo River and Lagoon Management Plan," a plan never adopted by the City, is included as an appendix in the *SLURP* and comprises the biological restoration plan for the San Lorenzo River. The *Jessie Street Marsh Management Pla*n, adopted by the City Council in 1998, is also included as an appendix. The *Jessie Street Marsh Plan* was adopted by City Council in 2003, and contains recommendations for habitat enhancement, public access, and ideas to promote future river-oriented development.

Most the area covered by the *SLURP* is located outside of the coastal zone, except for the lower portion of the San Lorenzo River that is generally south of Laurel Street. The California Coastal Commission took final action on the City's LCP Amendment (No. STC-MAJ-2-03) on May 12, 2004. The Amendment included replacement of the Commission-certified LCP Land Use plan policies of the *San Lorenzo River Enhancement and Design Plan* (previously adopted by the City Council in 1987 and 1990) with new policies developed from the recommendations in the *San Lorenzo Urban River Plan (SLURP)*. The Coastal Commission certified the Amendment with four suggested modifications which were subsequently adopted by the City Council. The Coastal policies from the *San Lorenzo Urban River Plan*, further updated in the *Downtown Plan* approved by the City Council in 2017 and by the Coastal Commission in 2018, are included in Chapter V of this LCP document.

ARANA GULCH MASTER PLAN

Arana Gulch is a City-owned greenbelt property situated along the City's eastern boundary, to the north of the Santa Cruz Small Craft Harbor (see Figure II-2 in Chapter VIII). This 67.7-acre open space property features coastal prairie, riparian and oak woodland, seasonal wetlands, and the lower reaches of Arana Gulch Creek. The *Arana Gulch Master Plan* was adopted by the City Council in July 2006 as a Parks Master Plan. The California Coastal Commission approved a coastal development permit (CDP 3-11-074)

for implementation of the *Master Plan* in October 2013. The *Master Plan*, while not included as part of this LCP, frames a vision for the property to reflect the policies in the *City's 1990-2005 LCP* and *2030 General Plan* and establish goals for protection and enhancement of the Arana Gulch resource, and its use by the public. The *Arana Gulch Master Plan* provides that most of Arana Gulch should continue to remain undeveloped with focused management and protection of the sensitive habitat areas. Public access improvements have been completed, and habitat restoration efforts are ongoing pursuant to the adopted *Master Plan* and approved coastal development permit.

MOORE CREEK INTERIM MANAGEMENT PLAN

Moore Creek Preserve is a 246-acre, City-owned greenbelt property located on the western edge of the City, to the north of Highway 1 (see Figure II-2 in Chapter VIII). The *Moore Creek Preserve Interim Management Plan* was adopted by City Council in June 2002 as an "Interim Management Plan," not as a Park Master Plan. The document is intended to guide management of the Moore Creek Preserve only until future preparation and approval of a long-term Park Master Plan for the property, which is not currently underway, and is not included in this LCP. The *Management Plan* identifies interim uses and management actions for identified plant resource management areas and provides specific management guidelines for the habitat areas of three special status species. Resource management guidelines in the *Moore Creek Interim Plan* include specific management strategies for cattle grazing, mowing, removal of non-native plant species, installation of grazing fencing, monitoring of visitor trail use for impacts, and conducting annual surveys.

An earlier plan for the Moore Creek corridor, the *Moore Creek Corridor Access and Management Plan*, was approved by the City Council about 35 years ago in 1987 as a specific plan/general plan amendment (NS-17, 849). The coastal policies of this *Access and Management Plan* were identified in the *1990-2005 General Plan/Local Coastal Program* and are maintained and included in Chapter III-A of this LCP document.

NEARY LAGOON MANAGEMENT PLAN

Neary Lagoon is a City-owned wetland and natural area situated in the central part of the City (see Figure II-2 in Chapter VIII). Acquired by the City in 1967, the 14-acre lagoon, together with the surrounding riparian and woodland habitat within the management area, totals 44 acres. The drainage outlet from the lagoon to Monterey Bay is located at Cowell Beach.

The *Neary Lagoon Management Plan (NLMP)* was prepared in several components, and a final Plan was adopted by the City Council in July 1992. The Coastal Commission also approved the *Neary Lagoon Management Plan* in parts. The *Plan* fulfills: 1) the Coastal Commission's conditions and requirements for City preparation of such a management plan, as specified in the 1975 coastal permit (P-1523) for construction of recreation improvements at the site, and 2) the Commission's subsequent directive contained in the 1989 coastal permit (3-89-54) and LCP Amendment 1-92 for re-designation and expansion of the City's wastewater treatment plant. This requirement to prepare a management plan was included in the City's certified LCP. The Coastal Commission has final authority over the *Neary Lagoon Management Plan* under the 1989 coastal permit (3-89-54). Furthermore, the *City-Wide Creeks*

and Wetlands Management Plan also indicates that the Neary Lagoon property is subject to the provisions of the *NLMP*.

The *Neary Lagoon Management Plan* is a comprehensive guide that addresses public access and use, hydrology, water quality, vegetation management and habitat restoration, wildlife and fishery management, cultural resources, and aesthetics. The *NLMP* seeks to balance the issues of public access, water quality protection, flood control, and habitat integrity by setting forth basic goals and identifying critical projects and practices that support those goals. Since the *Management Plan* approval in 1992, the City has successfully undertaken several of the projects and programs identified in the *Plan*, including improved public access by expansion of the floating walkway and trail network, in addition to a regular vegetation and sediment management and removal program to maintain a balance of natural habitat types.

The *NLMP* consists of ten management elements with associated management goals, objectives, and programs. These *NLMP* policies were included as an Area Plan Summary in Volume II of the *1990-2005 General Plan/Local Coastal Plan*. Because the *NLMP* was not initially required or adopted as part of the City's LCP, and its implementation is required by both the coastal permit approved by the Coastal Commission and by the *City-Wide Creek and Wetlands Management Plan*, the *NLMP* is not included in this LCP document. However, the *Plan* continues to be implemented in accordance with provisions set forth under the Coastal Commission-approved coastal development permit. This LCP document includes policies that call for continued implementation of the Neary Lagoon Management Plan as approved by the Coastal Commission in Chapter III-D of this LCP.

State Park General Plans

Three California State Parks (Beaches) are located within the City's coastal zone (see Figure II-2 in Chapter VIII):

- Lighthouse Field State Beach
- Natural Bridges State Beach
- Twin Lakes State Beach

General plans for these State Beaches have been adopted by the State of California: the *Lighthouse Field State Beach General Plan* (1984), the *Natural Bridges State Beach Plan* (March 1992), and *the Twin Lakes State Beach General Plan* (March 1992). As part of the City's *1990-2005 General Plan/LCP*, coastal policies were developed from the policies and information in the State of California-adopted General Plans and included in Volume II of the City's *1990-2005 General Plan/Local Coastal Plan*. Since any development in State parks or beaches may require a coastal development permit, an overview of these State park plans and their coastal policies is included in Chapter V of this document.

This page is left intentionally blank.

III-A. COASTAL PUBLIC ACCESS

IN THIS SECTION:

Coastal Act Policy Overview

COASTAL ACT POLICIES RELATED TO PUBLIC ACCESS

- ❑ Provide maximum public access (conspicuously posted) (30210)
- ❑ Provision of coastal access
  - Development shall not interfere with public's right to access to sea (30211)
  - Public access to coast shall be provided in new development (30212)
  - Distribute public facilities (including parking) throughout area to mitigate impacts, social and otherwise, of overcrowding or overuse by the public of any single area (30212.5)
  - Regulate time, place, manner of public access taking into account topography, sensitive resources and private property rights (30214)
- ❑ Maintain and enhance public access to coast-transit service, non-auto alternatives (30252)

Introduction

Article 2 of Chapter 3 of the State of California Coastal Act addresses public access to the coast and sea with the goal to provide maximum access and recreational opportunities. Article 2 addresses the need to provide for the public's right of access to the California coast, provide public access as part of coastal developments, and distribute public facilities along the coast. The Coastal Act also specifies that lower cost, affordable visitor and recreational facilities are to be protected, encouraged, and, where feasible, additional facilities provided, and that developments that provide public recreational opportunities are preferred. This Chapter discusses coastal public access in Santa Cruz while recreational and visitor-serving uses are discussed in Chapter III-B of this LCP document.

The City of Santa Cruz offers exceptional public access opportunities to the beach and natural areas along the coast of the Monterey Bay and Pacific Ocean. Most of City's coastline, between the first public road and the shoreline, is in public ownership. The Santa Cruz Small Craft Harbor forms the City's

eastern boundary and is a prominent coastal recreational feature. Twin Lakes State Beach is in the eastern portion of the City (see Figure II-2, Chapter VIII), between the Harbor and the San Lorenzo River, and includes Seabright Beach and existing proximate residential development. Primary access to Seabright Beach is provided from Seabright Avenue and other local neighborhood streets. The Santa Cruz Beach Boardwalk covers most of the area between the San Lorenzo River and the Municipal Wharf, except for the City's Main and Cowell Beaches, just west of the Boardwalk (see Figure IIIA-1, Chapter VIII). West Cliff Drive (see Figure IIIA-2, Chapter VIII) provides easy public access along the coast for most of the remainder of the City and ends at the entry to Natural Bridges State Beach. Lighthouse Field State Beach is located on West Cliff Drive. At the western edge of the City, the Coastal Science Campus facilities of the University of California, Santa Cruz, are located, with areas available to the public and areas restricted for scientific research, including the Long Marine Laboratory and Seymour Marine Discovery Center.

Overview of City Coastal Access

Overview of Existing Coastal Access

Coastal access routes and access points provide the public with direct access to the shoreline and coastal recreation and preservation areas in the City. Visitor/coastal access routes have been designated and well signposted within the City to facilitate the movement of visitor traffic. These routes are intended to be inviting to visitors and to provide convenient, clear access to and from visitor-serving and coastal destinations. Existing primary access routes to coastal areas within the City of Santa Cruz include the following, which are shown on Figure IIIA-1.[1]

- Ocean Street/Riverside Avenue,
- Seabright Avenue/Atlantic Avenue,
- Murray Street,
- River/Front Streets,
- Center Street/Lower Pacific Avenue,
- Bay Street, and
- Swift/Delaware/Swanton Blvd.

West Cliff Drive, Beach Street, and East Cliff Drive are the predominant streets that parallel the City's coastline and provide visitor and local resident access to the public access points to the beach and bluff tops. Direct access points are found all along the City's coastline and provide entrances to the City's coastal areas. Coastal recreational, research, and open space areas are outlined in Table IIIA-1, highlighted on Figure IIIA-1, and shown on Figure IIIA-2. The following section of this LCP (Chapter III-B, Recreation and Visitor Serving Uses) provides a full description of coastal recreational and visitor-serving areas and uses. Public parking for vehicles and bicycles is provided throughout the beach and coastal area.

The City's coastal zone is generally built out, with provision of access to the coast provided at numerous points as discussed in the next subsection on Coastal Paths and Trails. There are no known major access

[1] All figures are included in Chapter VIII of this document for ease of reference.

deficiencies or areas of encroachment on public coastal access. The widening of the railroad trestle over the San Lorenzo River connecting Beach Street with East Cliff Drive, completed in mid-2019, significantly enhanced public pedestrian and bicycle access and connectivity along this stretch of City coastline.

The coastal bluffs in some areas do present some safety concerns, although generally railings, low fencing, and signage are in place to deter people from accessing the edge of the bluffs where public access is not specifically provided due to hazards. Ongoing coastal bluff erosion has led to the need for intermittent replacement or upgrade of safety railings along the West Cliff Drive bicycle and pedestrian path.

TABLE III A-1: Coastal Recreation and Research Areas

Coastal Recreation Areas [IN ALPHABETICAL ORDER]

1. Arana Gulch (City of Santa Cruz)
2. East Cliff Drive (City of Santa Cruz)
3. Lighthouse Field State Beach (State of California)
4. Main and Cowell Beaches (City of Santa Cruz)
5. Monterey Bay National Marine Sanctuary Exploration Center (National Oceanic and Atmospheric Administration)
6. Moore Creek Preserve (City of Santa Cruz)
7. Mitchell's Cove Beach (City of Santa Cruz)
8. Municipal Wharf (City of Santa Cruz)
9. Natural Bridges State Beach (State of California)
10. Santa Cruz Beach Boardwalk (Privately owned)
11. Santa Cruz Small Craft Harbor (Santa Cruz Port District)
12. Seabright (Twin Lakes State Beach) (State of California)
13. Seymour Marine Discovery Center (University of California, Santa Cruz)
14. West Cliff Drive (City of Santa Cruz)

Coastal Research / Preservation Areas

15. Long Marine Lab/Younger Lagoon (University of California, Santa Cruz)
16. Monterey Bay National Marine Sanctuary (National Oceanic and Atmospheric Administration)

Temporary events, special events, and recreation programs are held throughout the year along the coast within the City of Santa Cruz, particularly in the summer and early fall months. At the Main and Cowell Beaches, annual programs such as the Junior Lifeguards are subject to provisions of the City's *Beach Management Plan* for Main and Cowell Beaches. (See Chapter II for a description of the *Management Plan*.) Other events, such as Open Streets Santa Cruz and the Santa Cruz Triathlon, are staged along West Cliff Drive, and require closure of the roadway to private vehicles. All such special and

temporary events require permits which are processed by the Parks and Recreation Department in conjunction with the Police Department and the Fire Department's Marine Safety Division. These events are allowed only if they are sited and designed to minimize impacts on general public recreational use to the extent possible, and do not block access to the beach or lateral access along the lower beach. Other events such as surfing contests are occasionally held on beaches and surf breaks along West Cliff Drive, but do not typically require the closure of the public street.

Coastal Paths and Trails

EXISTING PATHS AND TRAILS

Santa Cruz has an extensive trail network, featuring both paved and unpaved pathways, connecting open space, parks, the coast, downtown, and neighborhood areas. This network includes multi-use trails, some of which are wheelchair accessible, and hiking-only trails. In addition, the area's State Beaches and the Santa Cruz Small Craft Harbor offer a range of publicly-accessible trails. These paths and trails support walking, jogging, hiking, and bicycling as well as coastal access. City and regional paths and trails not only provide access to coastal recreational areas, but also provide access to and connections between various parks, recreational facilities, and natural and urban areas.

Pedestrian and Bicycle Paths. Figure IIIA-2 identifies existing and planned pedestrian and bicycle paths and trails within, and providing access to, the coastal zone. Also shown are existing coastal access points and facilities, such as stairways, that provide direct pedestrian access to the beach. Most of the neighborhoods along the City's coastline are already developed with a pedestrian sidewalk system. As shown on Figure IIIA-1, State and local beaches, the Santa Cruz Boardwalk, the Municipal Wharf, and the Small Craft Harbor are the primary coastal areas that attract a wide range of visitors.

The West Cliff Drive multi-use path is a prominent accessway along the coast that provides pedestrian, bicycle, and wheelchair use for visitors and local residents. Major bicycle routes within the coastal zone in addition to West Cliff Drive and its parallel multi-use path include Bay Street, Delaware Avenue, Segment 7 of the Rail Trail, and Murray Street. A designated two-way cycle track is located along the seaward side of Beach Street.

The levees lining both sides of the San Lorenzo River also provide pedestrian and bicycle access paths along the River, connecting to citywide and regional trail networks. The Santa Cruz Riverwalk is the north-south bicycle and pedestrian path that follows the San Lorenzo River within Santa Cruz for approximately 2.5 miles on either side of the river, for a total length of approximately 5 miles. The lower reach of the river, from the downtown area south to the Monterey Bay, is within the coastal zone. The San Lorenzo River has been channelized since the late 1950s. Multi-use paved trails exist on the top of the river levee on both sides of the river within the coastal zone and are widely used by cyclists and pedestrians as a transportation corridor and for views of the river and surrounding habitat and birds and other wildlife.

Trails in Open Space Areas

- *Arana Gulch* is a City-owned greenbelt property totaling 67.7 acres situated along the City's eastern boundary, north of the Santa Cruz Small Craft Harbor. When acquired by the City in

1994, this greenbelt property included an unimproved trail system, much of which existed as cattle trails or unpaved access roadways. Under City ownership, some of these trails have been improved and are now regularly maintained. Arana Gulch provides pedestrian, bicycle, and on-leash dog use access and includes a few visitor amenities such as benches and informational signage on area history and area flora and fauna. As set forth in the City's *Arana Gulch Master Plan* (briefly described in Chapter II), this open space area includes a trail system featuring some paved multi-use trails (wheelchair accessible), a new western entrance from residential areas near Agnes Street, and a bridge spanning Hagemann Gulch (opened in 2015), unpaved pedestrian trails, interpretive displays, and overlooks. The access improvements are complete and provide a well-traveled trail connection between Arana Gulch and the Santa Cruz Small Craft Harbor area, and the Seabright, Soquel Avenue, and Brommer Street (in the County) neighborhoods. Most of the Arana Gulch open space will continue to remain undeveloped, with a focus on management and protection of the sensitive habitat areas, with some limited cattle grazing at appropriate times of year. No on-site parking or restrooms are proposed within the greenbelt property, with existing parking and restroom facilities currently located within the Santa Cruz Small Craft Harbor nearby to the south. Additional parking is provided along the multi-use trail adjacent to the Santa Cruz Bible Church near the intersection of Frederick Street and Broadway Avenue.

- *Moore Creek Preserve* is located on the western edge of the City, north of California State Highway 1 within the coastal zone. As described in Chapter II, the *Moore Creek Corridor Interim Management Plan* (2002) serves as a guide for management of the Moore Creek Preserve until City preparation/approval of a long-term park master plan for the property. Existing interim uses include approximately 3 miles of hiking trails, cattle grazing, and the study, preservation, enhancement, and protection of native species and their habitat. The interim trail system is based primarily on trails and unpaved service roads that existed prior to City ownership and is largely a result of historic cattle grazing operations. No onsite parking, public access roads, or restroom facilities are included in the *Interim Management Plan*.

  The *Moore Creek Corridor Access and Management Plan* (1987) includes recommendations for public access, land dedication, and resource management. The plan's goal is to provide public access in a manner compatible with private property, existing development, and the constraints of the natural setting. Presently, there is limited public access within the eastern Moore Creek Canyon, although the *Plan* identifies a proposed trail along the east side of the East Branch of Moore Creek. With the City's acquisition of the Moore Creek Preserve to the west, provision of public access has been focused in this area. The formerly proposed trail system on the east side of the East Branch of Moore Creek has not been developed due to private ownership, steep slopes, and provision of trail access in the City-owned Moore Creek Preserve. A pedestrian trail system exists in the Moore Creek Preserve that prohibits bicycles, horses, and dogs (see *Moore Creek Preserve, above*). No new trails are currently planned. The Parks Master Plan 2030 includes a recommendation to consider adding parking along Hwy 1 and to explore opportunities to enhance access and connectivity.

- *Jessie Street Marsh.* The *Jessie Street Marsh Management Plan*, adopted by the City Council in 1999 and included as an appendix in the *San Lorenzo Urban River Plan*, was prepared to provide a long-term plan to preserve and enhance the natural resources of the marsh, improve water

quality, manage flood waters, and provide appropriate public access. The *Plan*, not yet implemented due to budget constraints and issues of feasibility, includes recommendations for trails, interpretive signs, overlook and nature viewing areas, and improved access to the City's Ocean View Park to the northeast. There are informal trails within the marsh area but no formal signage to direct visitors.

- *Neary Lagoon* is a City-owned wetland and natural area that is comprised of 44 acres situated in the central part of the City, described previously in Chapter II. Public access includes an interpretive trail system, nature observation areas (frequently used by birdwatchers), interpretive exhibits, and recreational facilities including a children's play area within designated areas. The access pathways are designed to encourage pedestrian use, and are wheelchair accessible. Since the approval of the *Neary Lagoon Master Plan* in 1992, the City has successfully undertaken several of the projects and programs identified in the *Plan,* including improved public access through expansion of the floating walkway and trail.

PLANNED PATHS AND TRAILS

Santa Cruz is mostly built out, with access to the beach and coast provided and evenly distributed throughout the City. Table IIIA-2 below summarizes proposed and planned pedestrian and multi-use trail improvements. The City's adopted *Active Transportation Plan* (2017) includes the following proposed multi-use trails: Branciforte Creek multiuse path, and the Monterey Bay Sanctuary Scenic Trail Network as discussed below.

The *California Coastal Trail* (CCT) is a network of public trails along California's 1,200-mile coastline from Oregon south to Mexico. According to the Coastal Commission, the Coastal Trail is planned to ultimately be a continuous public trail designed to "foster appreciation and stewardship of the scenic and natural resources of the coast through hiking and other complementary modes of non-motorized transportation." The vision for this coastal trail network originally stemmed from the voter approval of California Proposition 20 in 1972, which recommended that such a trails system be established on or near the coast. In 2001, the State legislature directed the Coastal Conservancy, in consultation with the Coastal Commission and the California State Parks Department, to further coordinate the development of the trail, which is currently more than two-thirds complete. Coastwalk California/California Coastal Trail Association is a volunteer organization that advocates completion of the California Coastal Trail and has worked with the Coastal Commission in gaining approval of individual segments. In the City of Santa Cruz, this trail generally follows existing roads, including West Cliff Drive.[2]

Monterey Bay Sanctuary Scenic Trail Network (MBSST). The Santa Cruz County Regional Transportation Commission (SCCRTC), in association with other regional agencies, has proposed construction of a 50-mile Monterey Bay Sanctuary Scenic Trail Network between Santa Cruz and Monterey Counties. The Trail Network is planned to be a multi-use system of bicycle and pedestrian facilities that allows the public to enjoy and experience the Monterey Bay National Marine Sanctuary and adjacent coastal areas. The Trail Network is proposed to span the Monterey Bay from Lover's Point, located in the City of Pacific Grove in Monterey County, northward to the Town of Davenport in Santa Cruz County. (The Transportation Agency for Monterey County (TAMC) is responsible for the trail segments in Monterey

[2] See "California Coastal Trail" Information Page online at: www.coastwalk.org. See also "Coastal Access Program: the California Coastal Trail" online on the California Coastal Commission website.

County.) The spine of the Trail Network is planned to be the 32-mile Coastal Rail Trail from Davenport to Watsonville to be built within or adjacent to the SCCRTC-owned rail right-of-way. Remaining miles will be connecting paths, sidewalks, bike lanes, other roadway improvements, or unpaved coastal spur sections.

TABLE IIIA-2

Proposed/Planned Pedestrian, Bikeway, and Multi-Use Path Improvements

Pedestrian Improvements 1. Delaware Avenue (Swift Street to Shaffer Road) 2. Downtown/Beach Hill/ Beach (See Downtown Plan) 3. East Cliff Drive (Cliff Drive to Cypress Avenue) 4. Murray Street Bridge (Widen pedestrian sidewalk as part of bridge seismic retrofit improvements)
Bikeway Improvements 5. Delaware Avenue (Swift Street to Shaffer Road) 6. Ocean Street (Soquel to East Cliff) 7. Riverside Avenue (Consider Contra-flow bike lanes from Beach to Third) 8. San Lorenzo Railroad Bridge (Widened for bike travel in 2019) 9. Murray Street Bridge (Widen bike lanes as part of bridge seismic retrofit improvements) 10. Seabright Avenue (Murray Street to Water Street)
Multi-Use Paths 11. Monterey Bay Sanctuary Scenic Trail Network 12. Swanton Blvd Multiuse Path

The SCCRTC adopted a final *Monterey Bay Sanctuary Scenic Trail Network Master Plan* in November 2013, with a revision adopted February 6, 2014. This Master Plan established the continuous alignment and set of design standards for the Coastal Rail Trail and its associated spur trails within the context of existing physical constraints of the railroad, coastal access requirements, and existing highway and public street rights-of-way. The Coastal Rail Trail will provide improved connectivity to the coast in a manner that creates ease of access for pedestrians, cyclists, local resident, visitors, and families. Twenty individual segments will form a continuous trail spanning the coastal reaches of Santa Cruz County from Davenport to Watsonville. The trail is split into three areas or reaches: the Northern, Central, and Watsonville Reaches. The City of Santa Cruz is included in the Central Reach, which begins at the City's northern edge near Shaffer Road and extends southeast to the Town of Aptos.

Segments 7-8 and the western portion of Segment 9 of the planned Coastal Rail Trail are within the City of Santa Cruz. Segment 7 runs from Antonelli Pond to the intersection of Pacific Avenue and Beach Street, connecting to the new Monterey Bay National Marine Sanctuary Exploration Center. Segment 8

extends from the Pacific Avenue/Beach Street intersection to the San Lorenzo Rail Bridge Crossing. The 1.73 miles from the widened San Lorenzo River Rail Bridge to 17th Avenue constitutes Segment 9. Trail features and planned improvements are summarized on Table IIIA-3. Segment 7 Phase 1 is complete, Segment 7 Phase 2 will go to construction in 2022, and Segments 8 and 9 are currently in design within the City of Santa Cruz. Construction funding is being sought to complete construction of Segment 8/9, with these sections anticipated to be competed or under construction by 2024.

TABLE IIIA-3

Proposed Monterey Bay Sanctuary Scenic Trail Network Improvements in City of Santa Cruz

Segment	Length	Proposed Improvements
7	3.1 miles	▪ 2.17 miles of multi-use paved path along rail right-of-way ▪ 0.08 miles of on-street bike route ▪ 0.85 miles of multi-use paved path along the coastal side of the rail right-of-way ▪ Fourteen street crossings ▪ Three rail crossings and one additional private crossing ▪ One bike bridge (Moore Creek crossing)
8	0.77 miles	▪ 0.77 miles of existing Class II bike lanes ▪ One bike and pedestrian bridge across San Lorenzo River (Completed 2019) ▪ Improvements of striping to cycle track with roadway roundabout at Pacific Avenue and Beach Street ▪ One rail crossing with upgrades to Beach Street and Pacific Avenue intersection ▪ Two street crossings with upgrades to Beach Street and Pacific Avenue intersection
9	1.73 miles	▪ 1.53 miles of multi-use paved path ▪ 0.20 miles of on-street facilities ▪ One bike/pedestrian bridge crossing over the Small Craft Harbor ▪ Four road crossings (Mott Avenue, Seabright Avenue, 7th Avenue)

Source: Santa Cruz County Regional Transportation Commission. January 2013.
Adopted *Monterey Bay Sanctuary Scenic Trail Network Master Plan.*

Alternative Transportation Modes to the Coast

TRANSIT & DOWNTOWN TROLLEY

Transit service is provided by the Santa Cruz Metropolitan Transit District (SCMTD) to the Main and Cowell Beaches area, Lighthouse Field State Beach, Natural Bridges State Beach, and the Santa Cruz Small Craft Harbor. In addition to the SCMTD transit services, a Downtown Trolley service has typically been in operation since 2010, which operates between the Downtown and the Wharf/Beach areas between Memorial Day and Labor Day. The Santa Cruz Trolley Consortium, Inc., a non-profit corporation, operates the trolley, which is owned by the City of Santa Cruz. The service also is sponsored by the Downtown Association and numerous businesses and organizations along with a grant from the Monterey Bay Unified Air Pollution Control District in cooperation with the City of Santa Cruz.

RECREATIONAL RAIL SERVICE

An existing rail line though the City (the Santa Cruz Branch Rail Line, SCBRL) forms a continuous, single-track, 32-two mile corridor from Davenport to the City of Watsonville. The Santa Cruz County Regional Transportation Commission (RTC) finalized purchase of the entire right-of-way in October 2012; however, there is a twenty foot wide freight easement that is separate from the purchase. The Santa Cruz County RTC maintains an agreement with a common carrier to provide freight service on the line. The long-term plan for the SCBRL is to provide commute passenger service as well as freight service and a multi-use trail along the line, but it is unclear if this plan would be financially feasible.

The Santa Cruz Big Trees and Pacific Railway Company operates a tourist-oriented passenger service between the Santa Cruz Beach Boardwalk and Felton on its nine-mile track line from Santa Cruz, (Beach Street near the Santa Cruz Boardwalk) to its current terminus at Roaring Camp in Felton. The service is typically provided daily from mid-June through the end of August, and on weekends and holidays in May, early June, September through October. The trains run twice in each direction every day during regular operations, and use the tracks that cross Pacific Avenue just north of the intersection of Pacific Avenue and Beach Street. A limited "holiday" train service is operated in late November and December.

Coastal Access Plan

Coastal access routes and points provide the public with direct access to the shoreline and coastal recreation and preservation areas in the City. Direct access points are found all along the City's coastline and provide entrances to the City's primary coastal areas. (See Table IIIA-1 for Coastal Recreation and Research/Preservation Areas, and Figure IIIA-1 for the City's existing coastal access routes and points). Access routes to ten widely visited coastal areas within the City of Santa Cruz are described in detail below.

Existing Access

1. **UCSC Coastal Science Campus and Long Marine Laboratory.** The University of California, Santa Cruz (UCSC) campus owns property at the City's western edge that houses its Long Marine Lab Marine Science campus, the Seymour Marine Discovery Center, and other facilities. The site is a marine research campus operated by UCSC and is part of an area formerly referred to as the "Westside Lands." The California Coastal Commission has certified a Coastal Long-Range Development Plan for this UCSC property, which became effective in January 2009. The coastline at this location is characterized by a sharp bluff that drops straight to the sea. Coastal activities for the public include the Seymour Marine Discovery Center visitor center, ocean viewing, and scheduled tours of the marine research facilities. Access to Younger Lagoon, which forms the western edge of the marine campus, is restricted in order to protect the surrounding area as a Natural Reserve; however, pre-scheduled, docent-led bird watcher, researcher, and visual access is available.

   Access Point: Access is possible via Natural Bridges Drive to Delaware Avenue and Delaware Avenue Extension, leading to the Long Marine Lab Facilities. There is no direct access to the water area below the bluff. Per conditions of the University's Coastal Commission-certified Coastal Long

Range Development Plan, public access to Younger Lagoon Reserve beach is provided only through controlled visits.

Roadway Access: Roadway access is possible from State Highway 1/Mission Street (via Natural Bridges Drive to Delaware Avenue and Delaware Avenue Extension). Public parking is available on the Marine Science campus.

Public Transit: Santa Cruz Metro Routes 3 and 20 provide access along Delaware Avenue to Shaffer Road.

Bike/Pedestrian Access: A bike route runs to the end of Delaware Avenue just past Antonelli Pond. There are no sidewalks leading to the marine campus area.

2. **Natural Bridges State Beach.** Natural Bridges is a State beach located near the western edge of the City extensively used by both area residents and visitors for public recreation and beach access. The beach area is surrounded by a natural amphitheater and lagoon with eucalyptus trees. Coastal activities for visitors include ocean viewing, walking, surfing, fishing, jogging, sunbathing, swimming, picnicking, and a full range of sandy beach activities (e.g., playing Frisbee) accommodated by large open areas.

   Access Points: Access to Natural Bridges State Beach is possible via several trails from public parking areas along West Cliff Drive, Swanton Boulevard and within the park. Access is also possible along a gradually sloping pathway beginning at the northwest end of the park on Horizon Drive within the De Anza Mobile Home Park. Some potential hazards exist at this access point since portions of the beach are commonly under water at high tide.

   Roadway Access: Roadway access is possible from West Cliff Drive and also State Highway 1/Mission Street (via Natural Bridges Drive - Delaware Avenue - Swanton Boulevard, or Delaware Avenue - De Anza Mobile Home Park - Cascade Drive - Horizon Drive). Several paved parking areas are contiguous to the beach. Parking within De Anza Mobile Home Park is private and by permit only, although several spaces have been designated as publicly-accessible proximate to the Coastal Trail access at this location.

   Public Transit: Santa Cruz Metro Route 20 (via Western Drive) provide direct access to Natural Bridges State Beach.

   Bike/Pedestrian Access: A bicycle and pedestrian pathway leads directly to Natural Bridges State Beach via the West Cliff Drive corridor. Bike and pedestrian ways are also located along Swanton Boulevard and Delaware Avenue.

3. **West Cliff Drive.** West Cliff Drive is a publicly-owned City right-of-way corridor with an adjacent bicycling and pedestrian path paralleling the coastline designated as a city park. Access to sandy beaches and rocky bluff areas is possible at various points along the length of West Cliff Drive and the multi-use trail (See Figure IIIA-2 in Chapter VIII for locations of stairways to the beach). Coastal activities include ocean viewing, sunning, surfing, surfing, rock fishing, wind-surfing, biking, and walking.

Access Points: A bicycle-pedestrian pathway with easy access between the Natural Bridges State Beach entrance and the City's Municipal Wharf roundabout, and stairways leading down to several beach areas with key access to the coastal areas. The coastal bluffs are subject to ongoing erosion and tidal rocks are extremely slippery when wet, particularly at high tide, thus limiting access at a few other points along the area, although bluff top viewpoints are always accessible.

Roadway Access: West Cliff Drive runs the length of the area and several side or perpendicular streets such as Bay, Woodrow, Fair, and Swanton connect to West Cliff Drive. Parking is available in public lots and pullouts along West Cliff Drive and in curbside parking on adjacent streets.

Public Transit: Santa Cruz Metro Route 20 and 22 provide service along Delaware Avenue perpendicular to the coast, within a four- to five-block walk to West Cliff Drive, and also provides access to the other end of West Cliff Drive at the end of Bay Street, near the roundabout near the Municipal Wharf.

Bike/Pedestrian Access: Direct access is provided along the length of the West Cliff Drive bicycle and pedestrian pathway.

4. **Lighthouse Field State Park & Lighthouse Point/Steamer Lane.** Lighthouse Point is the geographic feature which defines the northern end of Monterey Bay. The point projects markedly into the Pacific Ocean, creating a stunning visual focal point and prime surfing point (called Steamer Lane, located to the east of Lighthouse Point). The area is publicly owned and utilized for surfing, ocean viewing, walking, and occasional gatherings, including weddings, typically on the lawn areas surrounding the Lighthouse.

Access Points: The area surrounding the lighthouse is immediately accessible by West Cliff Drive; however, the actual bluff promontory is fenced and not accessible to the public due to dangers presented by wave action and ongoing erosion. Steamer Lane surfing and shoreline is accessed by a stairway at the parking lot/restroom area.

Roadway Access: Roadway access is possible via the length of West Cliff Drive or from Highway 1/Mission Street (via Bay Street).

Public Transit: Santa Cruz Metro Route 20 provides access at the corner of Delaware Avenue and Liberty Street, approximately 3/4 mile from Lighthouse Point, or in the other direction from the end of Bay Street, approximately 1/2 mile.

Bike/Pedestrian Access: Direct access is provided by and along the West Cliff Drive bicycle and pedestrian pathway and to the north along Pelton Avenue.

5. **Cowell Beach.** Cowell Beach is a municipal beach and one of the main beaches frequented by people in the City. It is a relatively large, deep beach, with a gradual drop off at the water line, located at the foot of the eastern end of West Cliff Drive, Beach Street, and the Municipal Wharf and roadway roundabout. Uses include ocean viewing, sunning, walking, surfing, rock fishing, swimming, and

volleyball. The beach is relatively calm and safe for swimming due to the protected nature of the water in the bay between the bluffs and the Wharf, and because lifeguards are provided by the City of Santa Cruz during peak use periods.

Access Points: The principal access to Cowell Beach is via cement stairs and ramp at the foot of the Wharf (west side) or from Main Beach to the east by walking westward along the sandy beach under the Wharf.

Roadway Access: Roadway access is possible via Bay Street to West Cliff Drive, Front Street to Washington Street, or from the Riverside Bridge to Second Street to Front Street. Parking is available immediately contiguous to the beach in small parking lots or along adjacent streets, and in other commercial parking lots.

Public Transit: Santa Cruz Metro Route 19 and 20 (Mission/Beach) proximate access to Cowell Beach at Pacific and Viaduct.

Bike/Pedestrian Access: Direct access is provided by the West Cliff Drive bicycle and pedestrian pathway, a low rubber berm-separated two-way bicycle track along Beach Street, bike lanes on Pacific Avenue, and through pedestrian access along the Beach Street promenade.

6. **Main Beach.** Main Beach is an intensely utilized public beach running the length of Beach Street from the foot of the Municipal Wharf eastward to the mouth of the San Lorenzo River. The beach is long and deep with a very gradual drop-off into the surf. Swimming is relatively calm and safe, especially during peak months when the beach is patrolled by City lifeguards and is frequented by family groups, often in conjunction with a visit to the Boardwalk. Coastal activities include ocean viewing, sunning, walking, surfing, fishing, swimming, volleyball, jogging, and playing Frisbee.

Access Points: Main Beach can be accessed from points on Beach Street and from stairs off the Municipal Wharf and from the Santa Cruz Beach Boardwalk from 10 stairways at different locations. Access is also usually possible near the mouth of the San Lorenzo River at the corner of Beach and Third Streets, then via the railroad track right-of way and a scramble down the remains of a concrete ramp and large rocks to the beach sand. Note this is not currently a fully improved access point.

Roadway Access: Roadway access is possible from West Cliff Drive to Beach Street, from Front Street to Washington Street Extension to Beach Street, or from Riverside Avenue to Third Street. Parking is available along Beach Street, several side streets, and in various area public and private parking lots.

Public Transit: Santa Cruz Metro Route 19 and 20 (Mission/Beach) proximate access to Cowell Beach at Pacific and Viaduct.

Bike/Pedestrian Access: Direct access is possible from the West Cliff Drive bicycle and pedestrian pathway, the Beach Street low rubber berm-separated two-way bicycle track, from the San Lorenzo River levee path, and from the western end of the bicycle and pedestrian pathway cantilevered on the railroad

trestle bridge spanning the San Lorenzo River, as it connects with the River Levee path.

7. **Municipal Wharf.** The Municipal Wharf extends out perpendicularly into the Bay for approximately half a mile between Cowell and Main Beaches. The Wharf is owned and operated by the City and is a major tourist attraction featuring restaurants, fishing areas, fish markets, gift and curio shops, and other businesses, including boat and kayak rental operations. The Wharf provides visitor amenities, such as restrooms and benches, and coastal activities include ocean and sea life (e.g., sea lions and otters) viewing, walking, fishing, and boating. The City adopted the *Wharf Master Plan* in November 2020 laying out a new long term vision for sustaining the historic Municipal Wharf through expanded public access, amenities, coastal resilience, and economic activity.

   Access Points: The wharf area is accessible via its entrance on the roadway roundabout at the foot of Beach and Washington Streets. Access for boat pilots and passengers is also possible via docking areas at the sea level base of the wharf.

   Roadway Access: Roadway access is possible to the end of the Wharf from Pacific Avenue or West Cliff Drive via Bay Avenue and is also provided along the length of the Wharf with parking areas proximate to fishing spots and restaurants and shops.

   Public Transit: Santa Cruz Metro Routes 10, 19, and 20 (UCSC), and 71 (Freedom/Soquel), provides transit access to the Wharf near the roundabout of Pacific Avenue and Beach Street.

   Bike/Pedestrian Access: Direct access is provided along the West Cliff Drive bike and pedestrian pathway and the two-way cycletrack, and pedestrian Promenade along Beach Street. Bike and pedestrian access is also possible along the full length of the Wharf.

8. **San Lorenzo Point.** San Lorenzo Point, owned by the State of California, is a long, narrow promontory projecting into Monterey Bay just to the east of the mouth of the San Lorenzo River, located at the western end of East Cliff Drive. Although the narrowest end of this long spit of bluff top is fenced off for public safety due to ongoing sea erosion, San Lorenzo Point, with benches and picnic tables, still provides opportunities for ocean viewing, sunning, picnicking and walking, and is a particularly good spot for bird and wildlife watching at the River mouth, and for views of Main Beach and the Santa Cruz Boardwalk rides across the River.

   Access Points: The San Lorenzo Point area is immediately accessible from East Cliff Drive. A pathway leading to the end of promontory is currently fenced to restrict access due to public safety concerns.

   Roadway Access: Roadway access is possible via Murray Street to East Cliff Drive, (using Ocean Street to San Lorenzo Blvd to Murray Street or Seabright Avenue to Murray Street). Some parking is ~~limited~~ available on East Cliff Drive and along adjacent streets.

Public Transit: Santa Cruz Metro Route 68 provides service to the corner of Seabright Avenue and Murray Street, within a walk of approximately one-quarter mile to San Lorenzo Point.

Bike/Pedestrian Access: Bicycle lanes run the length of Murray Street, with an additional quarter of a mile ride to the 90-degree corner on East Cliff Drive with direct access to the Point. Pedestrian access is also possible via East Cliff Drive, and from biking or walking eastward on the railroad trestle river bridge and path and continuing up a paved multi-use ramp to join the sidewalk along East Cliff Drive.

9. **Seabright/Twin Lakes Beaches.** Seabright Beach is part of the Twin Lakes State Beach, a public beach running from the mouth of the San Lorenzo River to the Santa Cruz Small Craft Harbor. The beach is intensively utilized by local residents and visitors and provides opportunities for coastal activities such as ocean viewing, sunning, surfing, walking, surf-fishing, swimming, and playing frisbee.

Access Points: Access to Seabright Beach is possible from many points: a short trail that descends to the beach beginning from East Cliff Drive at the foot of Mott and Cypress Avenues; stairs at the end of Third Avenue; and a pathway at the eastern end of Atlantic Avenue near the Santa Cruz Small Craft Harbor.

Roadway Access: Roadway access is possible via Seabright Avenue to Atlantic Avenue, and from East Cliff Drive. The demand on this beach as a recreational resource can exceed the number of readily available parking spaces in the immediate area, although street parking is generally available within a quarter- to half-mile walk.

Public Transit: Santa Cruz Metro Route 68 stops at the foot of Seabright and Murray Street within a walk of approximately three-quarters of a mile to the beach.

Bike/Pedestrian Access: Bicycle lanes exist along the length of Murray Street to Seabright Avenue, and also on Atlantic Avenue. From the west, and from Main and Cowell Beaches, bike and pedestrian access is from the San Lorenzo railroad trestle bridge to the long, paved multi-use path ramp to the East Cliff Drive sidewalk. The beach is accessible from the corner of Seabright Avenue and East Cliff Drive

10. **Santa Cruz Small Craft Harbor.** The Santa Cruz Small Craft Harbor is comprised of an Upper and Lower Harbor area (separated by Murray/Eaton Streets and both the railroad and roadway bridges spanning the Harbor), and forms the eastern edge of the City. The Harbor is owned and operated by the Santa Cruz Port District, and is generally accessible to the public. Uses of the Harbor include: boating, ocean viewing, sunning, walking, surf fishing, boat fishing, rock fishing, biking, and jogging.

Access Points: The Santa Cruz Small Craft Harbor is immediately accessible from Atlantic Street and Mariner Park Way into the parking area from the west, and on the east side of the Harbor, from Lake Avenue, Brommer Street, and East Cliff Drive. Access is also provided by the pedestrian

sidewalks, multi-use pathways, and dock areas that circumscribe most of the actual Harbor area, including a pedestrian/bicycle pathway from Arana Gulch south to the Upper Harbor area. There are also two pedestrian access paths to the Harbor from its western bluff top, one beginning with stairs at Frederick Street Park and continuing down on a path below residential rear yards and the other a paved, sloped pathway beginning from the cul-de-sac at the end of Frederick Street. Boating access is usually possible at the mouth of the Harbor, particularly for personal watercraft such as kayaks, although silt deposits must be periodically dredged to provide safe ingress and egress for larger boats.

Roadway Access: Roadway access is possible via Seabright Avenue to Atlantic Street, Seabright and Seventh Avenues to Murray/Eaton Streets, and then from Murray/Eaton Streets to Lake Avenue to the Small Craft Harbor entrance. There are a limited number of on-street parking spaces proximate to the Harbor, and demand for parking can occasionally exceed supply during summer months. There is paid parking available at the Harbor. Within the Harbor, a seasonal "water taxi" provides visitor access to the beach area and visitor amenities such as restaurants from more distant parking locations

Public Transit: Santa Cruz Metro Route 68 provides direct access to the Harbor at the corner of Lake Avenue and East Cliff Drive.

Bike/Pedestrian Access: Bicycle lanes exist down the length of Murray/ Eaton Street, and bicycle and pedestrian access to the Harbor is available from along Seabright Avenue and Atlantic Avenue, as well as from Lake Avenue to the east of the Harbor and the City limits. Bicycle and pedestrian access is also available to the northern end of the Upper Santa Cruz Small Craft Harbor via Arana Gulch and its bicycle paths and bridges.

Planned Access Improvements

Figure IIIA-2 (See Chapter VIII) and Table IIIA-2 above summarize key planned access improvements. See also the Coastal/Access Policies subsection below.

Coastal Access Policies & Actions/Programs

3A-1 Access Opportunities

3A-1.1 Protected Coastal Access. Protect and maintain existing coastal access points open to the public, including public access to, through, and around the Santa Cruz Small Craft Harbor, in a manner that is consistent with the California Coastal Act and public safety.

a. Maintain and enhance safe and free bicycle and pedestrian access to and along the Wharf.

b. Work with the Port District to maintain and enhance public access and recreational opportunities around the Harbor as it is redeveloped or improved.

c. Maintain the existing trail from Frederick Street Park along the bluff to the cul-de-sac at the end of Frederick Street (originally Heritage Landing housing development) to the Harbor.

d. Maintain the level of public access to Seabright (Twin Lakes) Beach, while limiting or reducing impacts on residential areas and encouraging alternatives to the automobile. Expand bicycle parking. Any residential preferential parking programs proposed in the Seabright areas south of Murray Street between the Harbor and the Natural History Museum shall include in the details of the program and the criteria used to determine that no negative impact on public access to Seabright Beach will occur.

e. Study the effects of current and future sea level rise and climate change on access to the coast, and prepare updated policies and/or actions for maintaining long-term coastal access and resiliency.

f. Update street vending regulations in compliance with the Safe Sidewalk Vending Act (SB 946) and to protect coastal access.

3A-1.2 Enhanced/Expanded Coastal Access. Where practical, expand or enhance public access to facilitate enjoyment of beaches and recreational, natural, and other areas along the coastline.

a. Maintain a continuous pathway along the coast within the City limits by enhancing the physical link between West Cliff and East Cliff Drives and the Beach Promenade.

b. Maintain and enhance the recreational value of City trails and major active transportation routes like the San Lorenzo River levee, East Cliff, Monterey Bay Scenic Trail, and the West Cliff Drive multi-use pathways.

c. Improve pedestrian linkages between West Cliff Drive and the San Lorenzo River.

3A-1.3 Access Linkages. Maintain and enhance pedestrian access linkages and recreational trails between key coastal areas and other areas of the City to provide access to and connections between the City's parks, recreation facilities, and natural, coastal, and urban areas, such as between Downtown, the San Lorenzo River, the area south of Laurel Street, the Main Beach, Ocean St Park, the Wharf, and West Cliff Drive.

a. Continue to locate and design trail systems, access points, and recreational corridors to minimize the impact on areas through which they travel.

b. Explore and implement opportunities to expand existing or planned recreational trail systems to adjacent communities and underserved neighborhoods within the City.

3A-1.4 Access Easement Dedication. Require trail dedication or easements for new projects located along planned trail routes.

3A-1.5 Coordination with Public Entities. Coordinate with other public entities to ensure public access to unrestricted open space lands and coastline.

a. Cooperate with state and local agencies and private organizations in planning and implementing the California Coastal Trail (Monterey Bay Sanctuary Scenic Trail Network) segments through the City of Santa Cruz.

3A-1.6 Special Events. For special events, periodic closure of public right-of-ways or limiting vehicular access along streets such as West Cliff Drive, Pacific Avenue, or Beach Street, to enhance recreational access opportunities for residents and visitors.

3A-1.7 Uniform Directional and Wayfinding Signage. Maintain and expand the citywide uniform directional sign and Wayfinding programs to provide a clear, continuous, and uniform signage system to facilitate visitor orientation to the City and to promote easier access to coastal recreation and visitor destination areas for all modes of transportation.

3A-1.8 Create Complete and Livable Streets. Supporting the intent of California Government Code § 65302(b), explore and implement opportunities for "complete streets" to provide safe multi-modal transportation routes to coastal resources and coastal access destinations. Prioritize multimodal and active transportation uses to increase coastal access.

3A-1.9 Wharf Master Plan. Develop a Public Works Plan to guide implementation of public access improvements identified in the Wharf Master Plan, such as the East Promenade, boat landings, Terraced Overlook, and Western Walkway.

3A-2 Provision of Shoreline Access

3A-2.1 Public's Right to Access the Ocean. Ensure that development does not interfere with the public's right to access the ocean (where acquired through use or other legislative authorization).

a. Require new development and public works projects to provide public access from the nearest public roadway to the shoreline and along the coast, except where it is inconsistent with public safety, protection of fragile coastal resources, or where adequate access exists nearby.

b. Provide public access from and through new development to adjacent or nearby coastal recreation areas, trail networks, and the shoreline.

3A-2.2 Acquisition of Property Rights to Provide Access. As opportunities arise and when economically feasible, consider City acquisition, or dedication of easements, parcels, or other property rights that provide access to City-owned open space lands, scenic views, public access routes, and coastline.

3A-3 Facilities to Support / Enhance Coastal Access

3A-3.1 Distribution of Public Facilities. Whenever feasible and where the proposed uses will not adversely impact other nearby uses or the environment, distribute public access facilities (including parking

areas) throughout the coastal recreation areas to mitigate the potential impacts of overcrowding or over-use by the public of any single area.

3A-3.2 Vehicular, Transit, Bicycle, & Pedestrian Access. Maintain and enhance vehicular, transit, bicycle, and pedestrian access to coastal recreation areas and visitor destination points.

a. Improve access along the Visitor/Beach Area travel corridors through coordinated signs and street naming, protected turn lanes, remote parking/shuttle programs, bike share programs, and other strategies.

b. Consider the use of new technology along the city's principal entry roads to inform visitors about and guide them to beach shuttle services, parking areas, and retail business and business amenity areas.

c. Maintain and improve bike parking at coastal recreation areas along the City's coastline including Natural Bridges State Beach, West Cliff Drive pocket beaches, Main and Cowell Beaches, Seabright (Twin Lakes) State Beach, and the Small Craft Harbor.

d. Encourage visitor-serving developments, such as hotels, to provide bicycles and shuttle programs for use by patrons. Expand protected and off-street bike routes to coastal access destinations, where feasible, and as may be identified in the City's Active Transportation Plan.

3A-3.3 Promotion of Alternative Transportation Modes. Promote alternative transportation modes to provide convenient and clear access into and out of major coastal destination areas and to reduce conflicts with residential traffic

a. Encourage the use of park-and-ride lots, public transit, shuttle programs, satellite fee and free parking, and other public transit methods to ensure adequate access to beaches and the Municipal Wharf.

b. Improve access to and multi-modal routes between tourist and visitor destinations and lodging facilities.

c. Encourage a Downtown/Beach bus or shuttle along the route of the trolley as proposed in the Downtown Plan, and development of weekend/summer bus service from Santa Clara Valley to and from Santa Cruz.

d. Encourage tour bus trips to local attractions throughout Santa Cruz County such as the Santa Cruz Beach Boardwalk.)

e. Encourage Santa Cruz and Big Trees Railroad and other operators using historic rail cars to provide tours of Santa Cruz.

f. Encourage developments along the Santa Cruz Regional Transportation Commission (RTC) rail corridor to provide enhanced active transportation facilities (e.g. bike share and storage, etc.) and where appropriate, pedestrian/bicycle connections to anticipated future rail transit station locations.

3A-4 Public Access Management in Sensitive Coastal Areas

3A-4.1 Repair & Maintenance of Coastal Accessways. Repair, maintain, and maximize public access to and enjoyment of recreational areas along the coastline consistent with consideration of resource conservation principles, safety, and rights of private property owners.

3A-4.2 Access Improvements in Sensitive Habitat Areas. Allow public access improvements in sensitive habitat areas when sited, designed and maintained in a manner that avoids or minimizes impacts to the sensitive habitat and that is consistent with the provisions of applicable adopted management plans, (i.e., City-Wide Creeks and Wetlands Management Plan).

Area-Specific Coastal Access Policies

IN THIS SECTION:	IN CHAPTER V:	ATTACHED BY REFERENCE:
● Moore Creek and Western Drive	⊙ Beach/South of Laurel Area ⊙ San Lorenzo Urban River Plan ⊙ Harbor Development Plan	⊙ B/SOL Design Guidelines ⊙ City-Wide Creeks & Wetlands Manage. Plan

Moore Creek Corridor Access and Management Plan & Western Drive

3A-MC.1 Moore Creek Trail System. Evaluate the possibility of developing a low-profile trail system in Moore Creek Canyon corridor linking the corridor with UCSC, Natural Bridges State Park Coastal Trail, and Wilder Ranch and Beaches State Park.

a. Provide connections from existing City rights-of-way, Antonelli Pond, and the existing trail easement at Pacific Shores Apartments (Shaffer Rd) to a Moore Creek Canyon trail system.

3A-MC.2 Public Access to Moore Creek. Maintain existing public access to Moore Creek Preserve.

3A-MC.3 Moore Creek Access Improvements. Design future improvements to circulation facilities should be designed to improve access to Moore Creek, both physically and visually to the extent consistent with environmental constraints.

a. Require that future road improvements or improvements to existing roadways around Moore Creek include provisions for pedestrians and bicyclists as well as vehicles.

b. Install or improve sidewalks along streets leading to and from proposed Moore Creek trails including on Meder Street, Grandview Street and Delaware Avenue.

c. Require that access to public viewing areas of Moore Creek Preserve along Western Drive be accessible to the handicapped to the maximum extent feasible.

III-B. RECREATION & VISITOR-SERVING USES

IN THIS SECTION:

Coastal Act Policy Overview

COASTAL ACT POLICIES RELATED TO RECREATION & VISITOR-SERVING USES

- ❑ Provide maximum recreational opportunities (30210)
- ❑ Recreational Uses
  - Protect Coastal Areas Suited for Water-oriented Recreational Activities (30220)
  - Protect Oceanfront Land Suitable for Recreational Use (30221)
  - Reserve Upland Areas Necessary to Support Coastal Recreational Uses (30223)
  - Encourage Increase Recreational Boating Uses (30224)
- ❑ Visitor-Serving Uses (30222)
  - Priority To Visitor-Serving Commercial Recreational Facilities (30222)
  - Protect, encourage and where feasible provide lower cost visitor & recreational facilities (30213)
  - Location of Visitor-Serving Developments in Existing Developed Areas (30250c)

Introduction

Article 3 of the Coastal Act addresses recreation and visitor-serving uses with policies to protect coastal areas suited for water-oriented activities and oceanfront land suitable for recreational use, as well as interior upland areas necessary to support coastal recreational uses. Priority is given to the visitor-serving commercial recreational facility uses designed to enhance public opportunities for coastal recreation over all other land uses except agriculture and coastal-dependent industry. For example, increased recreational boating in coastal waters can be encouraged by developing support facilities such as dry storage areas for boats, public boat launching facilities, and additional boat berths. Article 2 (Access), as discussed more fully in the prior section of this chapter, also seeks to provide maximum recreational opportunities and access points along the coast. The Coastal Act provides that lower cost visitor and recreational facilities are to be protected, encouraged, and that where feasible, new facilities should be provided with new development that provides public recreational opportunities preferred.

Overview of City Recreational & Visitor-Serving Uses

The California coastline is a valuable and, particularly within the City of Santa Cruz, a well-known natural and recreational resource, heavily utilized by both local residents and visitors. The City's approximately 4.6 mile coastline along Monterey Bay is a prime recreational resource and visitor destination, providing scenic views and almost unparalleled recreational opportunities within a relatively compact area. According to the Santa Cruz County Conference and Visitors Council (SCCCVC), there are typically over 3 million visitor trips taken to Santa Cruz County each year, most of which include stops within the City. Public roads parallel most of the length of the Santa Cruz coastline, providing direct public access to the Monterey Bay and Pacific Ocean. As a result, coastal recreation areas provide the public with a variety of recreational activities including:

- ocean and marine wildlife viewing;
- beach/coast-side walking, sitting, jogging, skating, and bicycling, and other active transportation uses;
- sunbathing;
- picnicking;
- swimming, surfing, bodyboarding, standup paddle-boarding, diving, and windsurfing;
- fishing;
- beach volleyball;
- developed park space for sports, play, and leisure activities;
- recreation programs and special events; and
- kayaking, sailing, and boating.

Coastal Recreational Areas

Coastal recreational areas are shown on Figure IIIA-1[1] and public parks, open spaces and beaches are detailed in Table IIIB-1 below. Key coastal recreational areas and visitor attractions within the City of Santa Cruz include the City and State beaches, coastal pathways, the Municipal Wharf, the Santa Cruz Small Craft Harbor, and the Santa Cruz Beach Boardwalk Amusement Park. Coastal-oriented environmental education facilities and museums include the Monterey Bay National Marine Sanctuary Exploration Center, the Seymour Marine Discovery Center at UCSC's Coastal Science Campus (including the Long Marine Laboratory), the Santa Cruz Surfing Museum, and the City of Santa Cruz Natural History Museum.

Santa Cruz offers residents and visitors a wide range of parks, open space, beaches, trails, and other recreational opportunities. The City has responsibility for management, maintenance, and operation of over 1,700 acres of parks and open space lands and various community/recreational facilities, and also oversees development of new parks and improvements within all City-owned parks, open space, and community facilities. The City of Santa Cruz is served by 32 neighborhood parks (totaling approximately 49 acres); six community parks (approximately 181 acres); five City-owned beaches, including the Municipal Wharf; seven City-owned greenbelt properties (approximately 1,315 acres); a regional Golf Course (approximately 151 acres); three California State parks (approximately 130 acres); and the University of California, Santa Cruz campus lands and privately-owned recreational facilities. Table IIIB-1

[1] All figures are included in Chapter VIII of this document for ease of reference.

summarizes those City parks and recreational facilities that are located at least partially within the coastal zone. Figure IIIA-1 shows locations of the parks, open space, and recreational areas in the coastal zone.

TABLE IIIB-1: Parks and Open Space Lands in City's Coastal Zone

TYPE - Facility	SIZE (in acres)
Parks	
▪ Beach Flats Park – 122 Raymond St.	0.22
▪ Bethany Curve Greenbelt – Delaware to West Cliff	3.4
▪ Chestnut Park	0.28
▪ Depot Park, Funspot, Bike Park, & Scott Kennedy Fields	9.0
▪ Frederick Street Park – 168 Frederick Street	3.97
▪ Garfield Park – 624 Almar Avenue	1.78
▪ Ken Wormhoudt Skate Park at Mike Fox Park	1.25
▪ La Barranca Park	2.26
▪ Laurel Park – 301 Center Street	1.77
▪ Lighthouse Neighborhood Park – Lighthouse Ave	0.35
▪ Mimi De Marta Park	0.5
▪ Moore Creek Overlook – Cypress Street	0.12
▪ Neary Lagoon Park	1.27
▪ Ocean View Park – 102 Ocean View Avenue	3.06
▪ Rincon Park – 601 Chestnut Street	0.06
▪ Poets Park– 200 Raymond Street	0.13
▪ Pump Track – 100 Western Drive	N/A
▪ Riverside Gardens Park	0.52
▪ Star of the Sea – Frederick St. & Darwin Street	2.1
▪ Tyrell Park – Santa Cruz Museum	1.2
▪ West Cliff Drive Multi-Use Path	14.6
Subtotal (rounded)	48
Greenbelts & Open Space Lands with Recreational Uses	
▪ Arana Gulch – Agnes St.	67.7
▪ Jessie Street Marsh	3.2
▪ Moore Creek Preserve	263.75
▪ Neary Lagoon – 100 California St.	37
Subtotal (rounded)	372
City-Owned Beaches and Wharf	
▪ Cowell Beach, Its Beach (west portion), Main Beach, Mitchell's Cove, Santa Cruz Wharf	41
Subtotal (rounded)	41
State of California-Owned Beaches	
* Lighthouse Field State Beach	38
* Natural Bridges State Beach	65
* Seabright (Twin Lakes) State Beach	27
Subtotal (rounded)	130
TOTAL IN COASTAL ZONE	591

As described in the Section IIIA regarding coastal access, the City also has a wide and varied array of pedestrian and bicycle pathways, providing coastal access and recreation opportunities throughout the City. Visitors to the City are often particularly drawn to the multi-use paved pathway from the Santa Cruz Municipal Wharf to Natural Bridges State Beach along West Cliff Drive, as well as the pathway along the top of both sides of the San Lorenzo levee system running through the Downtown. These trails, and particularly the City's interconnected bike trail network, make it possible for visitors to leave their cars in a central location and walk or cycle to many of the City's visitor attractions.

CITY BEACHES AND THE MUNICIPAL WHARF

The City of Santa Cruz owns and manages beaches including Main Beach, Cowell Beach, the eastern portion of Its Beach, and Mitchell's Cove. Main Beach is a broad expanse of sand extending from the San Lorenzo River mouth west to the Municipal Wharf. Cowell Beach lies to the west of the Wharf, extending westward to the bluff at the beginning of West Cliff Drive. Both beaches are heavily used by visitors and residents during summer months for sunbathing, wading, swimming, and other recreational activities. Cowell Beach is also a popular surf break with access from the beach and also a stairway accessed along West Cliff Drive. The City of Santa Cruz provides seasonal life guard services on Cowell and Main Beaches. Beach volleyball courts are available on Main Beach for recreational play and occasionally more organized tournament events. Dogs are prohibited by the City on both Main Beach and Cowell Beach.

A *Beach Management Plan (BMP)* for Main and Cowell Beaches was developed in accordance with the *1990-2005 General Plan/Local Coastal Program* under Parks and Recreation Policy 1.7.3, which directed the initial preparation and implementation of the BMP. The City limits beach access during nighttime hours on Main and Cowell Beaches to provide a safe and clean environment. From midnight to an hour before sunrise, visitors can cross dry sand portions of the beach to recreate along or access the water. All other forms of access on the dry beach are not allowed during this timeframe. The approach follows California Coastal Commission guidance for beach closures and is less restrictive than the State beaches within the City limits and across the State of California. State beaches are commonly closed to any public access from sunset to sunrise. The City has continued to prepare updates of the BMP, most recently in 2019. The *BMP* describes the existing permanent and temporary facilities on the two beaches and the uses that occur on an ongoing and seasonal basis, including City maintenance operations and a beach concessionaire. It is not a plan for future development or new commercial use of the beaches. See Chapter II of this document for further description of the *BMP*. The Parks Master Plan 2030 includes additional recommendations for Cowell and Main Beaches including improving the Junior Lifeguard Headquarters and storage facilities, improving ADA access on the beach area, renovating the restrooms, and other visitor-serving amenities.

On the coastal bluffs seaward of West Cliff Drive, a pedestrian/bicycle path extends from the City's Cowell Beach west to the entrance to Natural Bridges State Beach. Situated at points along West Cliff Drive, two smaller sandy beaches are accessible by stairways: Its Beach and Mitchell's Cove. Its Beach, located to the west of Lighthouse Point, is owned in parts by the City and State, with the access stairs to the beach located on State Parks property. This small "pocket" beach varies in size depending on the season and the state of the tides. Popular activities here include sunbathing, wading, and bodyboarding. Dogs are allowed, but are restricted to be on-leash only. Further to the west along the West Cliff Drive multi-use pathway is Mitchell's Cove, where dogs are allowed to be off-leash only during certain hours.

Along the coastal side of Beach Street, a two-way cycletrack extends the West Cliff Drive multiuse path from Bay Street to the San Lorenzo River, where the recently widened bike and pedestrian trestle bridge extends over the river.

Lighthouse Point, owned and managed by the City, features the Surfing Museum, which is located within the Abbott Memorial Lighthouse. The Point offers an expansive overlook of the Steamer Lane surfing area and opportunities for viewing sea lions, otters, migrating whales (in season), and marine birds. A grassy area at Lighthouse Point is commonly used for informal play and picnicking and occasional special events.

The Municipal Wharf, constructed in 1914 and having celebrated its centennial, extends 2,700 feet out into Monterey Bay and separates Main Beach from Cowell Beach. Popular with visitors and residents, the Wharf features public walkways, overlooks, seating areas, interpretive exhibits, restaurants, shops, kayak and boat rentals, all supported by proximate, on-Wharf parking areas. Nature viewing, particularly of the sea lions lounging on the support piers and lower dock areas of the Wharf, and recreational fishing from its railings are also popular activities. On November 24, 2020, the City Council adopted the *Santa Cruz Wharf Master Plan* in accordance with direction in the *Beach/South of Laurel Area Plan* coastal policies. This Plan details policies and possible actions for future use options and development of the Wharf, and makes recommendations for its maintenance, expansion, and other improvements to better serve frequent users and visitors; however, it is not a development permit or a construction-ready plan and is not incorporated as part of this LCP. Additional design and review as well as extensive community engagement will be required prior construction of any new buildings.

STATE BEACHES

Three State Beaches – Lighthouse Field, Natural Bridges, and Twin Lakes (Seabright) State Beaches – offer significant open space and recreational opportunities within the City limits on approximately 130 total acres. The three Beaches are owned and operated by the California Department of Parks and Recreation. State Beach General Plans, prepared by the Department, are the primary management documents for State parks and beaches. The State Parks and Recreation Department has authority over all state parks and beaches in California.

Lighthouse Field State Beach. Lighthouse Field State Beach is a 36-acre open space situated along Monterey Bay, featuring coastal terrace, ocean cliffs, and part of Its Beach. Trails cross a 32-acre coastal prairie which includes monarch butterfly habitat. Parking and restrooms are provided across the street from the City's property at Lighthouse Point. Public use is restricted to day use only, with no overnight parking or camping permitted. An additional parking area along Pelton Avenue that is identified in the Plan has not yet been constructed. Many visitors commonly park along both sides of Pelton Avenue, a City public street.

Natural Bridges State Beach. Natural Bridges State Beach is a 65-acre open space and wetland situated near the western boundary of the City. The somewhat sheltered cove, with its wide, sandy beach located within Natural Bridges State Beach, is popular for sunbathing, wading and swimming, exploring tide pools, and surfing. Public facilities identified in the *Natural Bridges State Beach General Plan (1992)* include a visitor center, picnic areas, trails and walkways, restrooms, and day-use parking areas. The

main entrance is presently located at the western terminus of West Cliff Drive. The *Plan* proposes future development of a new main entrance located off of Delaware Avenue, which was the location of the original entrance in the 1950s. The future entrance relocation plan could be particularly appropriate as increasing sea level rise and coastal bluff erosion beginning to threaten the existing bluff-top parking area at the current Beach park entrance. Two nature preserves are designated within Natural Bridges State Beach: the Monarch Butterfly Natural Preserve and the Moore Creek Wetland Preserve. Paths and a wooden walkway have been developed to provide access to key Monarch Butterfly viewing areas and including interpretive signage, some oriented for children.

Twin Lakes State Beach. Seabright Beach, located within the City, is part (approximately 27 acres) of the Twin Lakes State Beach, which extends eastward from the San Lorenzo River to and including the beach east of the Santa Cruz Small Craft Harbor. The Harbor is predominantly in the unincorporated area of Santa Cruz County, with only the westernmost portion located within the City limits. Seabright Beach, entirely within the City, is a very wide and deep beach that extends from San Lorenzo Point, a bluff overlooking the mouth of the San Lorenzo River, to the west jetty of the Santa Cruz Small Craft Harbor. Access to the beach is provided along East Cliff Drive from a main entrance across from the end of Cypress Avenue, as well as via a stairway at Third Avenue. The sandy beach can also be reached from the west Harbor jetty, which also provides access to the Santa Cruz Breakwater Lighthouse, constructed in 2001, commonly known as Walton Lighthouse after Charles Walton, who donated the funds for the lighthouse in memory of his brother, Derek Walton, a merchant seaman.

A public restroom is located near the East Cliff Drive/Cypress Avenue main entrance to Seabright Beach. Portable lifeguard towers are installed seasonally. The *Twin Lakes State Beach General Plan (1992)* proposes a year-round lifeguard facility and a future new restroom between Third Avenue and the jetty. Popular activities at Seabright Beach include sunbathing, wading and swimming, beach walking/jogging, picnicking, and fires within designated concrete rings. Dogs are restricted to be on-leash only. The sandy beach area directly along the eastern edge of the Santa Cruz Small Craft Harbor is owned and managed by the Port District. Further east, primarily within the County, Twin Lakes State Beach also includes several smaller sand beaches, with additional public restroom facilities located on the beach near East Cliff Drive at Seventh Avenue, just east of the City limits.

CITY-OWNED & MANAGED NATURAL AREAS AND OTHER OPEN SPACE

The City owns and manages several other centrally-located open space and wetland areas. Several are within the coastal zone: Arana Gulch, Moore Creek Preserve, Neary Lagoon, the lower reach of the San Lorenzo River, and Jessie Street Marsh. These areas are briefly described below. These facilities are also described in the Section IIIA, Coastal Public Access.

Arana Gulch. This City-owned, 67-acre greenbelt property is situated along the City's eastern boundary, north of the Santa Cruz Small Craft Harbor. The *Arana Gulch Master Plan* was adopted by the City in 2006 with an implementation plan approved by the Coastal Commission in 2013 (See Chapter III-A for more detail). A defined and improved trail system, much of which existed prior to City ownership as cattle trails or unpaved access roadways, and a new suspension bridge over the creek at the Upper Harbor have been completed and provide for use by pedestrians, including on-leash dogs, and bicycles. Arana Gulch trails also provide access to the Small Craft Harbor as well as several connections to

surrounding neighborhoods. Most of Arana Gulch remains undeveloped, with a focus on management and protection of the identified sensitive habitat areas. No on-site parking or restrooms are proposed within the greenbelt property, although there is interpretive signage and occasional benches along some trails. Public restrooms are available nearby within the Harbor.

Moore Creek Preserve**.** Moore Creek Preserve, located on the western edge of the City, north and inland of State Highway 1, is a 246-acre, City-owned and managed open space property within the coastal zone. Existing uses include hiking trails (approximately 3 miles long, cattle grazing, and the study, preservation, enhancement, and protection of native species and their habitat. Dogs are prohibited within the Preserve, and no onsite parking, public access road, or restroom facilities are currently provided. The Parks Master Plan 2030 recommends considering adding a parking area off of Hwy 1, improving trail and interpretive signage, and exploring additional public access improvements at the property.

San Lorenzo River**.** The lower reach of the San Lorenzo River through central Santa Cruz is located in the coastal zone. The river has been channelized since the late 1950s, and a program of extensive native tree and shrub planting was completed as part of the river levee improvement project in the 1990s. Multi-use paved trails exist along the on top of the levee on both sides of the river within the coastal zone. Recreational opportunities include trail use by pedestrians and cyclists, nature viewing, bird watching, and fishing.

Neary Lagoon. Neary Lagoon is a City-owned, 37-acre wetland and natural area situated in the central part of the City. Public access includes an interpretive trail system, nature observation areas including floating boardwalks to access the lagoon, interpretive exhibits, and recreational facilities (including two playgrounds for children), BBQ pits, and basketball and tennis courts. There is limited parking, and access is designed to encourage pedestrian use and includes wheelchair accessibility. Public restrooms are located near the intersection of California and Bay Streets in Neary Lagoon Park. Most of the public use components of the *Neary Lagoon Management Plan (1992)* have been fully implemented. Public use guidelines contained in the *Management Plan* discourage bicycle riding except on designated through trails, and prohibit dogs anywhere within the management area. Neary Lagoon is a particular draw for both local and visiting birdwatchers.

Jessie Street Marsh. Jessie Street Marsh is a City-owned wetland and open space located just to the north of the San Lorenzo River mouth. The marsh area presently has informal unimproved pathways, with no developed site amenities. A developed trail descends down the coastal bluff from Ocean View Park and along the southern Jessie Street marsh area, to East Cliff Drive.

SANTA CRUZ SMALL CRAFT HARBOR

The Santa Cruz Small Craft Harbor, owned and operated by the Santa Cruz Port District, is a regional resource providing broad recreational, commercial, social, and economic benefits to the community. The Harbor functions as a group of interdependent water-related activities including boat-launching, berthing for commercial fishing vessels and recreational boats, boat repair facilities, marine-related retail/commercial businesses, restaurants, sailing programs and boat storage, a yacht club, and kayak and boat rentals and sales. The Harbor planning area encompasses about 29 acres of land and 46 acres of

water and accommodates approximately 950 berths and ties for commercial and recreational boats. Lands under Port District jurisdiction include 3.3 acres of sandy beach immediately on both sides of the Harbor jetties. Approximately 50,000 square feet of commercial space and approximately 1,045 automobile parking spaces accommodate the patrons of restaurants, retail shops, boat sales, bait and tackle shops, and a variety of other marine-related uses. Parking areas for recreational vehicles and boat trailers are also available. Coastal policies for the Santa Cruz Small Craft Harbor are included in Chapter V of this document.

Coastal Visitor-Serving Areas

There is no reliable data available about the extent of visitor access to the City's coastline, although as previously mentioned, the Santa Cruz County Conference and Visitors Council (SCCCVC) estimates that there are over 3 million visitor trips taken to Santa Cruz County each year and most visitors could be expected to seek out the coast during their stay. The City's visitor-serving land uses are concentrated along Ocean Street and Beach Street, with the Santa Cruz Beach Boardwalk being a prominent recreational facility and, per the SCCCVC, the top-drawing Santa Cruz County attraction in terms of number of annual visitors.

Santa Cruz County is an important vacation and recreation area because it has a spectacular coastline, beaches accessible to all age groups, and forested mountains with parks and trail access, all in proximity to several Northern California metropolitan areas including the City of San Jose, about a 45-minute drive to the north, with its more than a million residents. Tourists are attracted to Santa Cruz for many of the same reasons residents are: quality of the natural and built environment, historic character, attractive shopping and recreational opportunities, frequent cultural events and entertainment, and the overall small community and "laid back" local ambience.

Tourism plays a major role in both the City and the regional economy, generating direct revenue in the form of hotels' transient occupancy tax (TOT), admissions tax (e.g., Santa Cruz Beach Boardwalk), and parking fees, and also indirect tax revenue from visitor purchase of goods and services (restaurant dining). The City's ongoing major strategy for tourism involves working closely with the Santa Cruz Conference and Visitors' Council (SCCCVC), private businesses including the Santa Cruz Beach Boardwalk, surfing organizations and other groups to tap visitor "potential" in ways that look to expand off-peak and off-season tourism and improve aspects of visitor-serving amenities and visitor destinations, but preserve the special qualities of Santa Cruz,.

There are three main market segments of the City's visitor-serving industry: day visitors, overnight leisure visitors, and conference visitors. Of these groups, the overnight leisure and daily travelers are the primary focus of existing tourist facilities. As articulated in the City's *2030 General Plan* Economic Development goals and policies, the City aims to expand its conference visitor market through the development or expansion of conference facilities, additional high quality and high amenity hotel facilities, and other promotional programs. These facilities would generally complement leisure visitor-serving facilities and not conflict with single-day tourism because most business and conference attendance occurs off-peak (Sunday night through Thursday) and in the off-season (November to March) from beach-going vacationers. The conference market niche currently served by the City is for small to mid-sized groups seeking unique locations, not major event conferences. Visitors to smaller conferences generally stay longer and spend

more money locally than the typical overnight leisure visitor, and they typically generate less traffic or other impacts.

Recreation & Visitor-Serving Policies & Actions/Programs

3B-1 Maximize Recreational Opportunities

3B-1.1 Protection and Enhancement of Coastal Recreational Areas. Protect, maintain, maximize, and, where feasible, expand and enhance publicly accessible coastal recreational and open space areas, consistent with consideration of resource conservation principles, public safety, and rights of private property owners.

3B-1.2 Enhancement of Public Enjoyment of Coastal Recreational Areas. Maximize and, where feasible, enhance beaches and recreational amenities and natural coastal areas along the coastline to maximize public enjoyment.

a. Continue to provide adequate lifeguard services on City beaches between Cowell Beach and the San Lorenzo River between Memorial Day and Labor Day.

b. Expand and renovate restrooms, storage, and visitor-serving amenities and services at Main and Cowell Beaches.

c. Redevelop Lifeguard Headquarters to expand capacity and lifesaving resources, consistent with Wharf Master Plan.

d. Encourage, sponsor, and increase the number and quality of special events and recreational programs attractive to both visitors and residents.

e. Plan public spaces, particularly in community focus areas such as the Downtown, Wharf, the Beach, and South-of-Laurel areas in ways allowing for the flexibility to adapt them to special events and community activities.

f. Coordinate scheduling, promotion, and administration of special events at City facilities among City departments (e.g., Parks and Police), the Santa Cruz County Conference and Visitors Council (CVC), hotel and business associations, and other appropriate groups.

g. Continue to expand the connected network of bicycle and pedestrian facilities to provide continuous coastal access and viewing without the need for a motor vehicle.

3B-1.3 Wharf Master Plan. Implement Santa Cruz Wharf Master Plan calling for improved public access, enhanced recreational opportunities, upgraded visitor amenities, expanded access to the Monterey Bay National Marine Sanctuary, and marketing strategies aimed at improving the commercial viability of Wharf businesses.

a. Implement updated design standards for the Wharf area as part of the Wharf Master Plan, addressing the area's importance as a center of tourism.

b. Retain existing space available for coastal-related and visitor-serving uses on the Wharf such as restaurants and outdoor dining, Wharf administration, boat rental, public parking, and shopping, and, where feasible, intensify or redevelop to meet increased visitor needs.

c. Expand uses that require physical access to the water, such as boating and fishing, as part of any Wharf decking extension, including adequate support areas for such uses (boat hoist, fish-cleaning stations).

d. Utilize the Wharf's unique setting to expand educational, environmental, and scientific opportunities and initiatives, including those connected with the Monterey Bay National Marine Sanctuary and sustainable management of coastal resources.

e. Implement resilience projects, such as those identified in the Wharf Master Plan or as may become necessary, to sustain coastal access on the Wharf against rapidly changing climate and economic conditions.

3B-1.4 West Cliff Drive. Maintain the linear coastal park and multi-use trail along the City's coastline as part of or consistent with an adopted *West Cliff Drive Management Plan*. Develop and implement an integrated design, recreation, cliff stabilization, and landscaping plan for West Cliff Drive to enhance public access, safety, and recreational enjoyment of these areas.

a. Analyze facilities and the need for additional or rehabilitation of existing lighting, restrooms, drinking fountains, artistic and landscape enhancements, benches, bike parking, directional and interpretive signs, accessways, stairways, overlooks, and improved safety proposals.

b. Implement long-term landscape plans for West Cliff Drive.

c. Manage public parking policies and implement expanded parking management strategies along West Cliff Drive to increase parking availability for coastal access of various user groups.

3B-1.5 East Cliff Drive. Maintain integrated design and landscaping for East Cliff Drive in order to enhance public access, safety, and recreational enjoyment in these areas.

3B-1.6 Enhancement of Outdoor Recreational and Educational Opportunities. Provide and enhance outdoor recreational and educational opportunities within open space lands and coastal areas consistent with adopted master or management plans, when and where such opportunities do not adversely affect other goals of the Local Coastal Program, including protection of environmentally sensitive areas.

a. Promote eco-tourism and adventure tourism.

b. Promote the development of eco-tourism programs that are or could become associated with environmentally-focused activities (e.g., whale watching), and programs of the Monterey Bay National Marine Sanctuary, and the Long Marine Lab (e.g., study of the San Lorenzo River reach), and other environmental programs.

c. Work with the California Department of Parks and Recreation to maintain and improve lower cost recreational and parking facilities at Lighthouse Field, Twin Lakes (Seabright), and Natural Bridges State Parks, each of which is considered a significant lower cost recreational facility within the City.

d. Expand opportunities for bicycle parking within coastal areas to enhance access.

e. Continue to maintain and develop facilities at neighborhood and community parks that provide a diverse range of sports, fitness, classes, and other recreational and leisure activities.

f. Work with the Coastal Commission to streamline permitting processes and timelines for routine maintenance to reduce delays and unnecessary costs and ensure the coastal area remains safe, clean, and attractive. (NEW)

3B-1.7 Lower Cost Visitor and Recreational Facilities. Existing lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Preference should be given to development providing public recreational opportunities.

a. Maintain and periodically update a Short-Term Rental Ordinance to provide for alternative visitor facilities that support objectives of providing lower cost accommodations balanced with the preservation of neighborhood character and function and with the provision of long-term rental housing.

b. Maintain, promote, and where feasible, expand the capacity and utilization of Carmelita Cottages and other low-cost overnight accommodation facilities.

3B-1.8 Provision of Parks for Residential Development. Provide adequate parks and recreational facilities for new residential development in the coastal zone to meet the demands of future residential development and population growth.

a. Require park land dedication of suitable recreational land at a ratio of 4.5 acres/1000 population generated by a development project or payment of a corresponding in-lieu fee to support parks.

3B-2 Beach Access and Management

3B-2.1 Beach Management. Continue to implement and periodically update a "beach management plan" for Main and Cowell Beaches, including all public and private properties, which addresses drainage onto the beach, vending, litter control and beach maintenance, special events coordination, distribution of recreational uses, handicapped-accessible areas, and interpretive signage to ensure safe public access and protection of environmentally sensitive areas in accordance with the coastal development permit approved by the Coastal Commission.

3B-2.2 State Park Beaches. Encourage the State Department of Parks and Recreation to maintain and implement plans for Lighthouse Field, Natural Bridges and Twin Lakes State Beaches.

3B-3 Boating and Water-Related Activities

3B-3.1 Monterey Bay National Marine Sanctuary. Recognize the importance of and promote the Monterey Bay National Marine Sanctuary to potential visitors in support of the City's recreation, tourism, fishing, boating, and other water-oriented activities.

3B-3.2 Support of Fishing on Wharf. Maintain and do not reduce fishing access on the Municipal Wharf.

3B-3.3 Recreational Boating Opportunities. Encourage and support increased recreational boating opportunities for visitors and residents; cooperate with the Port District, the City of Capitola, and the County to provide additional berth and dry storage facilities for small boats; and prohibit coverage of sandy beach areas by new permanent recreational facilities to maintain availability of these areas for boat storage/"parking".

3B-4 Visitor Serving Opportunities

3B-4.1 Santa Cruz as Year-Round Tourist Destination. Increase the promotion of Santa Cruz as a year-round tourist destination and enhance and promote the identity of existing and potential visitor areas in the City.

a. Improve the character and quality of visitor-serving commercial areas to encourage more off-season and overnight visits and cultural and community events.

b. Work with the Santa Cruz County Conference and Visitors Council (SCCCVC) and other groups to increase off-peak and off-season tourism by enhancing and promoting off-peak events; improving existing visitor attractions; expanding the diversity of visitor attractions; and emphasizing the area's special features such as natural environment, historic character, cultural and recreational opportunities, and visual and performing arts and events that can draw visitors to the City.

3B-4.2 Santa Cruz as Conference Destination. Promote Santa Cruz as a conference destination.

a. Support the development of a new conference center; evaluate the possible contribution a conference center would make in attracting visitors; and consider the opportunities to link such a facility to a performing arts facility.

b. Encourage the development of facilities that would accommodate large conferences and conference-goers in conjunction with existing or new hotel development.

c. Encourage the participation of smaller lodging facilities to serve the conference and other markets.

d. Redevelop or rehabilitate existing event facilities, such as the Santa Cruz Warriors Arena, Cocoanut Grove, and the Santa Cruz Civic Auditorium, to expand local conference and events capacity and flexibility.

3B-4.3 New and Upgraded Lodging. Encourage the development of new lodging facilities, particularly those targeting a higher-end market and those providing additional visitor amenities.

a. Attract a quality, top-end, full-service hotel to expand and improve the year-round conference segment of the tourism market.

b. Encourage upgrades of existing hotel facilities in locations and at a scale supportive of the City's character to enhance the quality of visitor-serving areas and promote development of the conference tourism market.

3B-4.4 Discouraged Conversion of Visitor Accommodations. Discourage permanent conversion of overnight visitor accommodations in the coastal zone to housing or other non-visitor serving uses to assure no net loss of visitor accommodations in the City, and also encourage upgrades to existing lodging facilities.

3B-4.5 Visitor-Serving Accommodations. Assess the impacts of the wide availability of inferior hotel/motel rooms, and develop incentives to encourage owners to upgrade existing hotel/motel facilities while ensuring the retention of moderately priced accommodations.

a. Maintain a long-term lease with Santa Cruz Hostel, Inc. or other low-cost accommodation operator to continue operation of a hostel proximate to key beach and visitor attractions (e.g., Carmelita Cottages in 2021) to provide lower-cost visitor accommodations.

b. Encourage efforts by Santa Cruz Hostel, Inc. to renovate and upgrade facilities.

c. Continue to allow public use of the hostel (e.g., Carmelita Cottages) grounds (Lottie Sly Park) for passive daytime recreational activities.

3B-4.6 Retention of Visitor Attractions. Work to retain the city's core visitor attractions.

a. Work with local owners to ensure a continuing high-quality visitor experience for their patrons.

3B-4.7 Beach Visitor Center. Establish a center for Beach and Wharf Area activities and events that provides space for event assembly, visitor information, public event security, film-making support, and other visitor support activities.

3B-4.8 Commercial Visitor-Serving Businesses. Encourage additional commercial businesses that support and enhance creative industries and lifestyles such as marine, retail, visitor, and recreational activities and services.

a. Consider the development of regular tourism programming on radio, local cable television podcasts, websites, and other media to provide information about cultural activities and other community events.

3B-5 Visitor-Serving Development Siting and Design

3B-5.1 Visitor-Serving Facility Design and Trip Reduction. Encourage visitor-serving facilities that are arranged and developed in a compact, integrated manner to reduce use of automobiles for circulation and emphasize pedestrian movement.

a. Tie visitor-serving facilities in with potential shuttle, bike share programs, and rail system improvements to offer opportunities for commercial economic expansion while ensuring reduced number of automobile trips.

b. e.g., pedestrian, bicycle, and transit use, and bike share programs) through bicycle- and pedestrian-oriented design of visitor-serving facilities and provision of on-site amenities and services, including Class I and Class II bicycle parking, to reduce automobile traffic

while promoting protection of neighborhoods, important views, and the natural environment.

c. Where appropriate, require access easements, active transportation facilities, and/or plaza type improvements, at or in close proximity to locations that SCCRTC has identified for potential future passenger rail stations.

Area-Specific Coastal Recreation & Visitor-Serving Policies

IN THIS SECTION:	IN CHAPTER V:	ATTACHED BY REFERENCE:
● Seabright Beach Area	⊙ Beach Area ⊙ Harbor Development Plan	

Seabright Beach Area

3B-SB-1 Seabright Beach and Harbor. Promote Seabright area beaches and the Harbor to play a more significant role as important Santa Cruz visitor attractions.

III-C. MARINE ENVIRONMENT

IN THIS SECTION:

Coastal Act Policy Overview

COASTAL ACT POLICIES RELATED TO MARINE ENVIRONMENT

- ❑ Maintain and enhance marine resources and sustain biological productivity of coastal waters (30230)
  - Maintain and Restore Water Quality and Biological Productivity (30231)
  - Protect Against Oil Spills (30232)
- ❑ Fishing and Boating
  - Protect Facilities Serving Commercial Fishing & Recreational Boating (30234)
  - Importance of Fishing Activities (30234.5)
- ❑ Alterations
  - Diking, Filling or Dredging of Coastal Waters and Wetlands (30233)
  - Shoreline Protection (30235)
  - Stream Alterations for Water Supply or Flood Control (30236)

Introduction

Article 4 of Chapter 3 of the Coastal Act regulates activities that could affect the marine environment and also requires the protection and enhancement of marine and coastal water resources, including water quality. This section of the Coastal Act also addresses filling and dredging in coastal waters and wetlands, alteration of the shoreline, and protection of facilities that serve commercial fishing and recreational boating.

Overview of Marine, Water, and Shoreline Conditions

Monterey Bay National Marine Sanctuary

The City of Santa Cruz is situated along the Monterey Bay, which was designated a national marine sanctuary by the federal government in 1992. The Monterey Bay National Marine Sanctuary stretches from Cambria in San Luis Obispo County to the south northward to Marin

County, encompassing 276 miles of shoreline. It extends seaward from the shore an average of 30 miles—covering more than 5,000 square miles of ocean. The Sanctuary—administered by the National Oceanic and Atmospheric Administration (NOAA)—was established to promote resource protection, research, education, and public use. It boasts one of the most diverse marine ecosystems in the world, including the nation's largest kelp forest and one of North America's largest underwater canyons.

The *Monterey Bay National Marine Sanctuary Final Management Plan (MBNMSFM Plan)*, originally adopted in 2008 and revised in 2015, was developed by NOAA to establish programs for understanding and protecting the Sanctuary's resources. The *MBNMSFM Plan* includes several action plans targeting four major themes (coastal development, ecosystem protection, water quality, and wildlife disturbance), strategies for collaboration with the two neighboring sanctuaries (the Cordell Bank and Gulf of the Farallones National Marine Sanctuaries), and procedures for daily operations. Successful implementation of each of the action plans relies on partnerships with federal, state, and local agencies in addition to local stakeholders.

In addition, in 2012, the California State Water Resources Board adopted the *California Ocean Plan (CO Plan)* to protect the quality of ocean waters for use and enjoyment by the people of California. The *CO Plan* requires control of the discharge of waste into ocean waters in accordance with general as well as more detailed bacterial, physical, chemical, biological, and radioactivity provisions. The *CO Plan* sets forth limits for the water quality characteristics of ocean waters to ensure the general protection of beneficial uses and the prevention of introduced irritants. The *CO Plan* lists very specific maximum allowable levels of various bacteria and chemicals. Additionally, the *CO Plan* details requirements for management of waste discharge into ocean waters and program implementation techniques, and provides highly specified scientific definitions regarding bacterial, physical, chemical, and biological violations of water quality standards.

City Watercourses and Watersheds

There are 39 miles of watercourses and numerous other wetland areas in the City of Santa Cruz that convey stormwater, protect water quality, and support diverse natural habitats and aquatic and terrestrial resources. There are 25 watercourses within five primary watersheds and four other watercourses/drainages. The five primary watershed areas include: the San Lorenzo River, Arana Gulch Creek, Neary Lagoon, Arroyo Seco, and Moore Creek. Table IIIC-1 summarizes the watercourses and major wetlands within the City, which are shown on Figure IIIC-1[1], and identifies watercourses within the coastal zone. A brief overview of the watersheds within the City is provided below.

[1] All figures are included in Chapter VIII of this document for ease of reference.

TABLE IIIC-1: City Watercourses and Known Wetlands

Watershed - Watercourse	Watercourses Included	Known Wetlands Included	Within Coastal Zone
San Lorenzo River Watershed	San Lorenzo River		✓-part
	Branciforte Creek		
	Carbonera Creek		
	Glen Canyon Creek		
	Redwood Creek		
	Pogonip Creek	Salz Pond	
	Tick Drainage		
	Arroyo de San Pedro Regaldo		
	Wagner Seep		
	Pasatiempo Creek		
	Jessie Street Channel	Jessie Street Marsh	✓
	Ocean Villa Creek		✓
Arana Gulch Creek Watershed	Arana Gulch Creek		✓-part
	Hagemann Creek		
	Woods Creek		
Neary Lagoon Watershed	Laurel Creek	Westlake Pond	
	Bay Avenue Creek	Neary Lagoon	✓
	Bayona Creek		
	Chrystal Gulch		
	Dodero Spring Creek	Kalkar Quarry Spring	
	Longview Creek		
	Ojos de Agua Creek		
Arroyo Seco Watershed	Arroyo Seco Creek		✓
Moore Creek Watershed	Moore Creek	Antonelli Pond	✓-part
Other Watercourses	Natural Bridges Creek		✓
	Lighthouse Drainage		✓
	Pilkington Creek		✓
	Bethany Creek		✓

As discussed in Chapter II of this document, the *City-Wide Creeks and Wetlands Management Plan* was adopted by the City Council (and approved by the California Coastal Commission) to provide a comprehensive approach to watercourses the City. Long-term goals to protect water quality include those listed below. Specific development standards and guidelines are included in the *Management Plan* and in Municipal Code section 24.08.2180 – Watercourse Development Standards.

Long-term goals:

- Reduce and/or eliminate pollutants discharged to aquatic bodies,
- Improve water quality,
- Increase public awareness of the value of watershed quality.

SAN LORENZO RIVER WATERSHED

The San Lorenzo River Watershed is the largest watershed in the City, with the San Lorenzo River flowing adjacent to the center of the City's downtown area. The San Lorenzo River drains a 138-square mile watershed, featuring both forested and urbanized areas within the City, Santa Cruz County, and beyond the County line. Within the City limits, the lower San Lorenzo River flows southward from the Sycamore Grove area of Pogonip, through the center of downtown Santa Cruz, to the Monterey Bay and Pacific Ocean. This lower reach of the San Lorenzo River encompasses much of the river's historic floodplain. Branciforte Creek and Jessie Street Marsh are tributaries to the San Lorenzo River. The San Lorenzo River watershed is comprised predominantly of open space lands (41%) in the northern portion, and residential neighborhoods (26%) and paved roads (13%) as the river flows south through the City. Other land uses in the Watershed include commercial businesses and a portion of the University of California, Santa Cruz (UCSC) campus. The primary tributary streams within City limits include Carbonera Creek, Branciforte Creek, Glen Canyon Creek, and Pogonip Creek.

Over the last 60 years, the San Lorenzo River has been impacted by increasing development within its watershed and the channelization of the lower 2.5 miles into a levee flood control structure following a damaging flood in Santa Cruz in 1955. This flood control project, developed in cooperation with the U.S. Army Corps of Engineers (USACE), originally included rip-rap levee banks, removal of all vegetation from the banks, and dredging of the river channel bottom. During construction of the levee project, Jessie Street Marsh was filled and the lower Branciforte Creek was channelized in a concrete channel. In 2000, the USACE completed another levee improvement project that raised the height of the levees and improved and restored the original riparian habitat. Related projects completed in 2001 and subsequently increased the height and removed the footings from the riverbed of several bridges near the City's downtown (Riverside Avenue, Water Street, Soquel Avenue, and Broadway/Laurel Bridges) to allow the freer flow of flood waters, and constructed a riverbank stabilization project along Laurel Street Extension/Third Street, including a natural rock-form wall along the river, with new vegetation planted along the toe of the wall to provide shade for fish and other wildlife.

In recent years, the USACE completed a project that included recompaction and paving of a portion of the levee near Water Street. The City also completed a project to reconstruct a portion of the levee where a small leak was repaired near Jessie Street Marsh, which required recompaction of portion of levee. The USACE's Operations, Maintenance, Replacement, Repair and Rehabilitation (OMRR&R) manual requires that the City conduct annual vegetation management and sediment disking for flood control purposes. The maintenance activities ensure that the levee system maintains capacity during high flow events.

MOORE CREEK WATERSHED

The Moore Creek watershed is located on the western side of Santa Cruz and drains directly into the Monterey Bay and Pacific Ocean at Natural Bridges State Beach. This watershed is comprised primarily of open space (50%) and the UCSC campus (23%). Also within the lower watershed area are residential areas, general industrial businesses, and parks. The primary resources located within this watershed are Younger Lagoon, Moore Creek, Antonelli Pond, Natural Bridges State Beach, and the Monterey Bay.

WESTSIDE WATERSHED

The Westside Watershed is also located on the western side of the City, between the Moore Creek Watershed and the Neary Lagoon Watershed. The southern boundary of the Westside Watershed is the Monterey Bay and Pacific Ocean. A significant portion of the Watershed is comprised of residential areas (53%) and paved roads (21%). Other land uses include open space, churches and schools, and industrial facilities. The primary resources are Bethany Creek, Arroyo Seco corridor, Lighthouse Field State Park, and the Monterey Bay.

NEARY LAGOON WATERSHED

The Neary Lagoon Watershed is located in between the Moore Creek, Westside, and San Lorenzo River Watersheds. This watershed drains into Monterey Bay and the Pacific Ocean at Cowell Beach. The watershed drains the majority of the UCSC campus (44%) and residential neighborhoods (33%). Other land uses include roads, open spaces, churches and schools, and commercial businesses. Neary Lagoon is centrally located in the City's urban core and is comprised of approximately 44 acres of wetland, riparian, and woodland habitats. The lagoon collects runoff and groundwater from approximately one half of the west side of the City, most of which is residentially developed. A weir controls the lagoon water level and the Lagoon outlet releases to Monterey Bay at Cowell Beach during the wet weather season via a gravity storm drain and one force main storm drain. During the dry weather season, the Lagoon's discharge is diverted to the Wastewater Treatment Facility. The primary resources within this watershed are Donero Creek, Westlake Pond, Laurel Creek, Bay Creek, Neary Lagoon, Cowell Beach, and the Monterey Bay.

ARANA GULCH CREEK WATERSHED

The Arana Gulch Watershed is located on the City's eastern border and is also partially within the unincorporated residential areas of Santa Cruz County. The watershed drains into Monterey Bay and Pacific Ocean at the Santa Cruz Small Craft Harbor. The watershed within City limits is comprised predominantly of residential neighborhoods (34%) and open space (34%). Other land uses include paved roads, churches and schools, and the Santa Cruz Port District (Harbor) lands. The primary resources include Arana Creek, West Branch Creek, Hagemann Gulch, Woods Lagoon, the Santa Cruz Small Craft Harbor, and Monterey Bay.

City Drainage and Stormwater Management

The City's storm drain system is comprised of a wide variety of conveyance systems such as underground pipes, small open drainage channels, creeks, and the San Lorenzo River. The system includes numerous storm drain inlets and catch basins (approximately 1,450) throughout the City, and five pump stations that discharge stormwater directly into the San Lorenzo River. In addition, along both the east and west sides of the City, there are stormwater outfalls that discharge onto the beaches or coastal bluffs, and into Monterey Bay and the Pacific Ocean.

Urban runoff and other "non-point source" discharges are regulated by the 1972 Federal Clean Water Act (CWA), through the National Pollutant Discharge Elimination System (NPDES) permit program. In 1999, the U.S. Environmental Protection Agency (EPA) promulgated Phase II Storm Water Regulations under the authority of the Clean Water Act section 402 that required the State Water Resources Control Board (SWRCB) to issue NPDES permits to operators for Discharges of Storm Water from Small Municipal Separate Storm Sewer Systems (MS4 General Permit). In 2003, the SWRCB adopted the General Permit for storm water discharges from Small MS4s.

Between 2004 and 2009, the City of Santa Cruz, considered a small municipality, developed a Storm Water Management Program (SWMP) to fulfill the requirements of the Phase II NPDES General Permit for Discharges of Storm Water from Small Municipal Separate Storm Sewer Systems (MS4 General Permit) and to reduce the amount of pollutants discharged in urban runoff. The City's SWMP, which was approved by the Central Coast Regional Water Quality Control Board on April 14, 2009, is a comprehensive program to reduce the amount of pollutants discharged in urban runoff and to improve and protect water quality.

In 2013, a new statewide NPDES Small MS4 General Permit was adopted by the SWRCB, and the City updated its SWMP into a "Guidance Document" for the transition between the requirements of the previous permit and those of the new General Permit as required for permit coverage. The program elements of the NPDES permit include public education and outreach, public involvement, illicit discharge detection and elimination, construction site runoff control, pollution prevention, and post-construction and program effectiveness assessment.

Fishing and Boating

A wide variety of fishing and boating opportunities exist along the City's coast. The Santa Cruz Small Craft Harbor accommodates boat berths for private, commercial fishing, and charter boats, as well as dry boat spaces and launch ramps. The Harbor is also utilized for small row boats, sail boats, and kayaks, with storage facilities provided for the boats and some rack storage for kayaks.

The Santa Cruz Municipal Wharf also provides opportunities for pier fishing, kayak and small fishing boat rentals, but not for commercial fishing. Soon after its construction in 1914, the Wharf became an attractive facility for the mooring and off-loading of commercial fishing vessels, but its role in the commercial fishing industry has greatly changed over time as the Wharf no longer serves the commercial fishing industry. The increasingly diminished local fish supply and the

construction of the Santa Cruz Small Craft Harbor in 1962-63, with its easy "land side" accessibility, gradually shifted commercial fishing away from the Wharf.

Coastal Bluff Retreat and Shoreline Protection

Coastal bluff (cliff) retreat is the result of ongoing coastal headland erosion by weathering, physical disturbance, and, in the case of ocean cliffs, the continuous and forceful actions of waves and tides. Landward erosion by wind and wave action over time has created coastal bluffs along most of the City's coastline. The term 'bluff retreat' is commonly used to describe the horizontal (landward) erosion of the shoreline along the coast. Coastal erosion includes both cliff and bluff erosion, as well as beach erosion, and is a result of both winter storm waves and the ever-rising level of the sea. Wind, waves, and long-shore currents are the main driving forces behind coastal erosion. Winter storm waves are larger, steeper, and contain more energy, and typically move significant amounts of sand from the beaches to offshore sand bars, creating steep, narrow beaches at the shore. In the summer, lower, less energetic waves typically allow the gradual return of the sand to the shoreline, making for wider sandy beaches. During the winter months when many sandy beaches are narrow or absent altogether, the storm waves affect the cliffs and bluffs more constantly and with more force.

In the City of Santa Cruz, coastal bluff retreat is particularly prevalent and easily noticeable along the ocean cliffs along West Cliff Drive. The retreat rates for these coastal bluffs are influenced by the orientation of the cliff relative to the prevailing storm wave direction, coastline geometry, rock type, and beach width and depth. A number of studies were performed of coastal bluff retreat rates in the Santa Cruz area including both area-wide studies and site-specific studies for individual coastal development projects. This data collection and information development for the City's *General Plan 2030 EIR* found that average retreat rates along the coastline within the City of Santa Cruz have been measured at 2.75 to 5.9 inches per year for the portion of the shoreline studied, although retreat rates were determined to have exceeded 23 inches per year at specific locations. However, in the years following the approval of the City's *General Plan 2030*, more recent studies on climate change, global warming, and the increasing rate of sea level rise, including work by the City of Santa Cruz to develop its Climate Action Plan 2020, updated to 2023 in 2019, suggest that both the overall rate of coastal bluff retreat is accelerating, and that there is potential for a greater number of larger, more serious events in the coming decades. This significant trend as well as options for the City's response to coastal bluff retreat are explored in much greater detail in Subchapter III-F of this LCP.

The general physical characteristics of the City's coastline are depicted on Figure IIIC-2 (See Chapter VIII). This Figure also shows the areas of shoreline protection, and the types of protection that have been installed over time in response to coastal bluff retreat.

Dredging and Fill in Coastal Waters

Annual maintenance dredging is conducted at the Santa Cruz Small Craft Harbor pursuant to permits issued to the Port District by the federal and state agencies, including the California

Coastal Commission. Periodic dredging at Neary Lagoon also occurs in accordance with provisions of the Coastal Development Permit issued by to the City of Santa Cruz by the Coastal Commission.

Marine Environment Policies & Actions/Programs

3C-1 Maintain and Enhance Marine Resources

3C-1.1 Protection of Monterey Bay National Marine Sanctuary Resources. Continue to recognize and protect the Pacific Ocean, Monterey Bay, and the National Marine Sanctuary as important natural resources and valuable open space that support fishing, boating, and marine uses.

a. Cooperate with appropriate agencies to protect and manage marine resources.

b. Work with the California Department of Parks and Recreation and other agencies to protect tide pool areas below De Anza Mobile Home Park and along Natural Bridges State Beach and West Cliff Drive.

3C-1.2 Oppose Offshore Oil Exploration/Development. Work with the County of Santa Cruz and other groups to take all actions possible to oppose exploration for and development of offshore oil off the California coast, oil tanker traffic along the coast of Monterey Bay, and on-shore support facilities, and to establish a permanent ocean sanctuary for all portions of the California coast in which drilling is not already proceeding.

a. Participate in the development and implementation of a Regional Oil Spill Contingency Plan to guide emergency response efforts in the event of an offshore oil spill, including the Port District mobile oil spill response unit at the Harbor.

b.

3C-2 Water Quality

3C-2.1 Marine Water Quality Protection. Protect and, where feasible, restore the quality of coastal waters, including the ocean, rivers, streams, wetlands, and groundwater, and protect the quality of water discharged into the Monterey Bay. Allow no dumping of materials into the Monterey Bay.

3C-2.2 Discharge Requirements. Meet State Water Resources Control Board standards for discharge of sewage and storm waters to the Monterey Bay.

3C-2.3 Stormwater Quality and Stormwater Outfalls. To the extent feasible, prevent stormwater pollution and minimize introduction of pollutants into stormwater runoff.

a. Implement the City's stormwater management program in accordance with the federal and state National Pollutant Discharge Elimination System (NPDES) permit.

b. Avoid construction of new stormwater outfalls, remove obsolete outfall structures, and direct stormwater to existing facilities with appropriate treatment and filtration, where feasible. Where new outfalls cannot be avoided, plan, site,

and design stormwater outfalls to minimize adverse impacts on coastal resources, including consolidation of existing and new outfalls where appropriate.

3C-2.4 Design of New Development to Prevent Coastal Water Quality Pollution. Ensure that new development is designed to avoid the discharge of pollutants into coastal waters (including the ocean, wetlands, and watercourses) to the maximum extent practicable to prevent water quality degradation.

a. Require new development to incorporate low-impact development (LID) strategies to the maximum extent practicable, such as minimizing impervious surfaces, slowing and infiltrating stormwater onsite, and maintaining pre-development runoff levels.

b. Incorporate effective site design and source control Best Management Practices (BMPs) in all developments where feasible and in accordance with provisions of the State and Regional Water Board standards.

c. Site and design development adjacent to sensitive habitat areas to protect the habitat from any significant disruption of habitat values resulting from the discharge of stormwater or dry weather flows.

d. Plan, site, and design development to protect and, where feasible, restore natural hydrologic features such as groundwater recharge areas, natural stream corridors, floodplains, and wetlands.

3C-2.5 Water Quality at Landfill. Maintain drainage facilities at the City's sanitary landfill to prevent surface water from coming into contact with waste and any discharge of leachate to surface waters.

3C-2.6 Erosion Control. Require implementation of erosion control plans and measures in areas subject to erosion and in accordance with provisions of the *City-Wide Creeks and Wetlands Management Plan.*

a. Prohibit grading and earth disturbance during the rainy season (October 15 through April 1) unless otherwise permissible under the City's Grading Ordinance and with proper containment, and ensure that any graded or stockpiled areas are stabilized and revegetated (or covered) before winter (rainy) months.

3C-2.7 Septic Systems. Require any new development with a septic system to meet County health standards and, where relevant, require soil percolation potential to be a part of development review.

3C-2.8 Agency Cooperation. Cooperate with private and public agencies to protect water quality throughout the region.

3C-3 Fishing and Boating

3C-3.1 Monterey Bay Ecosystems. Support the efforts of the Monterey Bay National Marine Sanctuary to protect the natural ecosystems of the Monterey Bay National Marine

Sanctuary, recognizing that the health of the Monterey Bay is integral to the economic health of the City's tourism, recreational boating, fishing, and aquaculture industries.

3C-3.2 Boating and Fishing Opportunities. Maintain access to boating and fishing opportunities from the Municipal Wharf and support efforts to maintain boating opportunities at the Santa Cruz Small Craft Harbor.

3C-4 Shoreline Protection

3C-4.1 Shoreline Protection. Revetments, breakwaters, groins, harbor channels, seawalls, coastal bluff retaining walls, and other construction that alter natural shoreline processes shall be permitted only when required to serve coastal-dependent uses or protect existing structures or public access, beaches, roadways, or utilities in danger from erosion, when designed to eliminate or mitigate adverse impacts on local shoreline sand supply, and when approved by Coastal Commission.

a. Require coastal protective structures to be sited and designed to minimize impacts to coastal resources, minimize alteration of natural shoreline processes, provide coastal access where safe and feasible, and minimize visual impacts.

3C-4.2 West Cliff and East Cliff Coastal Bluff Erosion. Develop and implement cliff stabilization criteria for incorporation into management plans for the West Cliff and East Cliff areas to be developed pursuant to policies 2-1.4 and 2-1.5.

a. Develop criteria for maintaining riprap, consistent with protection of paleontological resources and bird nests, and trail maintenance.

b. Develop design criteria for shoreline protective structures (e.g., minimize amount of material and coverage; emphasize use of non-glare, non-reflective, natural or natural-appearing materials, incorporation of access facilities).

3C-5 Dredging

3C-5.1 Dredging. Minimize dredging pursuant to appropriate resource management plans.

3C-5.2 Reduction/Use of Sediment in Harbor. Work with the Santa Cruz County and the Port District to reduce erosion and sedimentation occurring in Arana Gulch that is discharged into the Santa Cruz Small Craft Harbor. Coordinate with Port District Harbor regarding possible availability and suitability of materials resulting from operational dredging within the Harbor for beach replenishment

3C-5.3 Use of Dredged Materials. Consider use of dredged materials from the San Lorenzo River for beach replenishment, where suitable.

Area-Specific Coastal Marine Environment Policies

IN THIS SECTION:	IN CHAPTER V:	ATTACHED BY REFERENCE:
	⊙ San Lorenzo Urban River Plan ⊙ Harbor Development Plan	o City-Wide Creeks Plan

This page left intentionally blank.

III-D. LAND RESOURCES

IN THIS SECTION:

Coastal Act Policy Overview

COASTAL ACT POLICIES RELATED TO LAND REOURCES

- ❑ Sensitive Habitat Areas (30240)
- ❑ Agricultural Lands (30341.5, 30242)
  - Prime Ag Land Protection (30241)
  - Ag Land Viability & Conversion (30341.5, 30242)
  - Timberlands (30243)
- ❑ Scenic Resources (30251)
- ❑ Archaeological & Paleontological Resources (30244)

Introduction

Article 5 of Chapter 3 of the Coastal Act addresses land resources, including environmentally sensitive habitat areas, prime agricultural lands, timber lands, and archaeological and paleontological resources. Article 6 states that scenic and visual qualities of coastal areas shall be "considered and protected as a resource of public importance." These land resources topics are included in this chapter.

Overview of Land Resources

Sensitive Habitat Areas

DEFINITIONS

The Coastal Act defines an "environmentally sensitive area" 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 30107.5)

Wetlands are generally defined as areas that are permanently, or periodically, inundated by surface or groundwater and which support vegetation adapted to such hydrologic conditions. The specific criteria utilized to define wetlands vary depending on the agency. Wetlands are regulated by federal and state agencies, including the U.S. Army Corps of Engineers (USACE) and the California Coastal Commission. The U.S. Environmental Protection Agency (EPA) and the USACE have used the following definition of wetlands since the 1970s for regulatory purposes: "Wetlands are areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas." An area must meet the criteria for hydric soils, hydrophytic vegetation, and wetland hydrology to be formally delineated as a wetland under USACE jurisdiction.

The California Coastal Act, Section 30121, broadly defines a wetland as "lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens." The California Coastal Commission (CCC) generally follows the California Department of Fish and Wildlife (CDFW) wetland definition and classification system for delineating wetlands. While all three wetland indicators (hydrophytic vegetation, hydric soils, and wetland hydrology) must be present for an area to be considered a wetland by the USACE under the Clean Water Act, only one positive indicator must be present for an area to be delineated as a wetland according to CCC guidelines. The City of Santa Cruz *City-Wide Creeks and Wetlands Management Plan* (Appendix A) provides definitions of coastal wetlands consistent with Coastal Commission definitions.

SENSITIVE HABITATS WITHIN THE CITY OF SANTA CRUZ

The City of Santa Cruz has recognized sensitive habitat areas as those generally considered by local, State, or federal agencies as habitats that support special status species, provide important habitat values for wildlife, represent areas of unusual or regionally restricted habitat types, and/or provide high biological diversity. Habitat types considered sensitive include those identified on the California Natural Diversity Data Base (CNDDB) working list as "high priority" habitats (i.e., those habitats that are rare or endangered within California). Generally, wetland and riparian communities are considered sensitive habitat due to their value to wildlife and their limited distribution and decreasing acreages statewide.

The City is largely developed, but supports habitat areas primarily within the City-owned and managed greenbelt and open space areas and along creeks. Native trees such as coast live oaks and redwoods are widespread in developed areas, where they have historically been planted. Vegetation types within the City and coastal zone are shown on Figure IIID-1[1].

The City supports four habitat types that are recognized as sensitive habitat types: freshwater wetland, salt marsh, riparian forest and scrub, and the coastal prairie portions of grassland habitats. Except for freshwater wetland, these habitat types correspond to habitat types that the CNDDB has designated as "high priority." In addition, coastal bird habitat is considered sensitive habitat because of high biological diversity, and any area supporting a special status species would also be considered a sensitive habitat. Generally, special status species are found within these four sensitive habitats. Locally, the

[1] All figures are included in Chapter VIII of this document for ease of reference.

overwintering monarch butterfly habitat is considered sensitive due to its restricted range and the CNDDB ranking as "rare." Sensitive habitats within the City's coastal zone are shown on Figure IIID-2. Additionally, the federally-protected waters of the Monterey Bay National Marine Sanctuary could be considered a sensitive habitat. Wetlands and riparian habitats are the two primary sensitive habitats within the City's coastal zone. The major streams and water bodies within the City are shown on Figure IIIC-1, with descriptions of those watersheds within the coastal zone presented in Chapter III-C – Marine Environment.

HABITAT AND OPEN SPACE MANAGEMENT PLANS

As summarized in Chapter II, there are a number of resource management plans that have been adopted by the City, some of which have also been approved by the Coastal Commission as amendments to the LCP or as separate coastal development permits, also summarized in Chapter II. These various plans provide guidance on management of sensitive biological resources within the City. Key provisions of these plans as related to important biological resources are summarized below.

- *City-Wide Creeks and Wetlands Management Plan*. Development adjacent to riparian and creek habitats, as well as known wetlands, is subject to setback requirements and development standards set forth in the *City-Wide Creeks and Wetlands Management Plan (Management Plan)*. The *Management Plan* was prepared in response to the 1995-2005 LCP policies 4.2.1 and 4.2.2 regarding preparation of management plans and riparian setbacks. Final approval of the *Management Plan* by the California Coastal Commission was made in May 2008 as an LCP amendment. The *Management Plan* is considered part of the City's LCP for those areas within the City's coastal zone, and the *Management Plan* is included by reference to this LCP. As previously described in Chapter III-C, there are 39 miles of watercourses and numerous wetland areas in the City that convey stormwater, protect water quality, and can support diverse natural habitats and aquatic and terrestrial resources. Table IIIC-1 in Chapter III-C summarizes the watercourses and major wetlands within the City, (shown on Figure IIIC-1[2]), and identifies those watercourses located within the coastal zone.

  The purpose of the *City-Wide Creeks and Wetlands Management Plan* is to provide a comprehensive approach to managing all creeks and wetlands within the City. Long-term goals to manage these resources include:

  - Reduce and/or eliminate pollutants discharged to aquatic bodies;
  - Improve water quality;
  - Improve and restore natural habitat;
  - Increase biodiversity;
  - Lower water temperatures; and
  - Increase public awareness of the value of watershed quality.

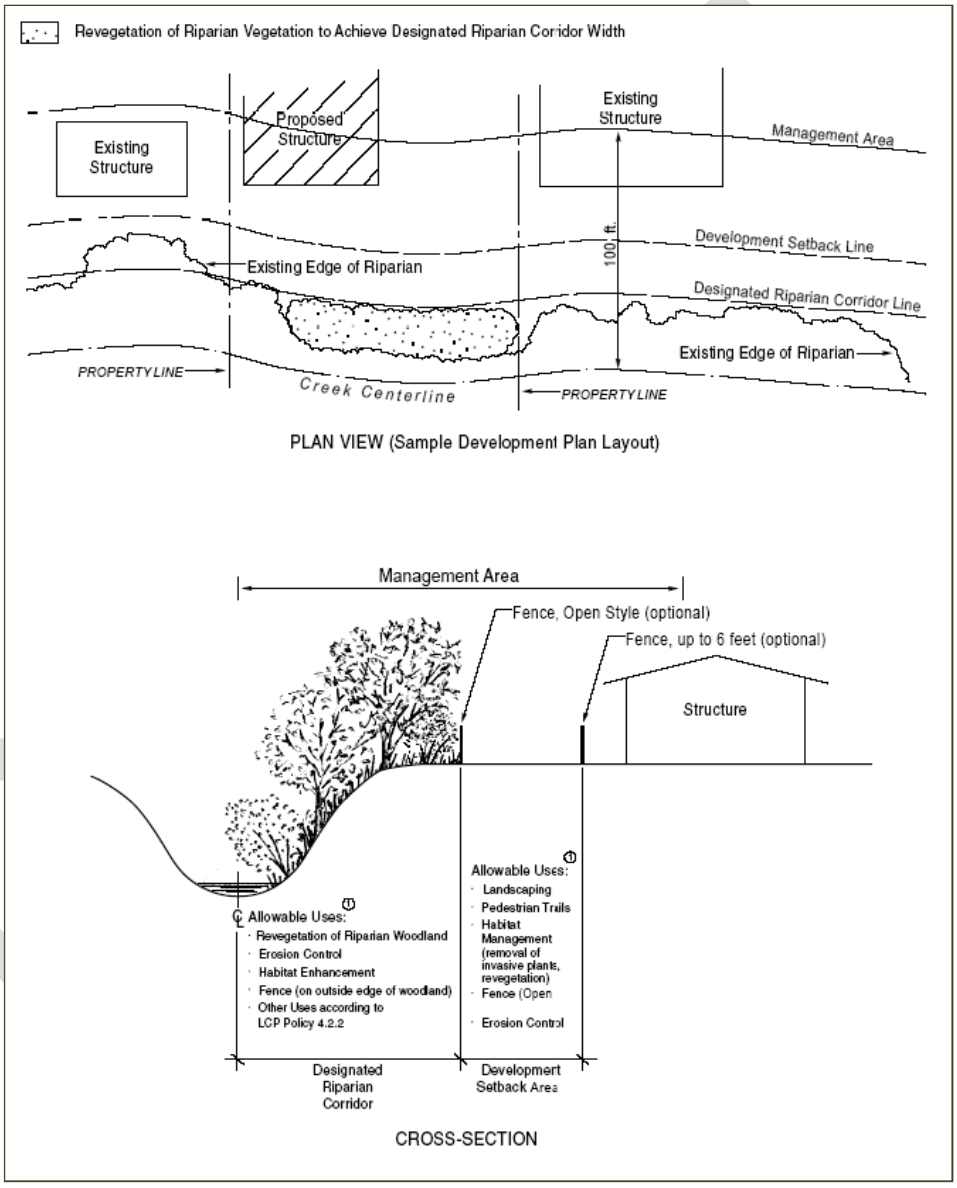
  The *Management Plan* identifies specific setback requirements based on biological, hydrological, and land use characteristics for various watercourse types within the City. The types of setbacks within a designated management area include a riparian corridor setback, a

[2] All figures are included in Chapter VIII of this document for ease of reference.

development setback area, and a management area, an additional area that extends from the outward edge of the development setback area.

A riparian corridor[3] is adjacent to the watercourse and is the width of the riparian and/or immediate watercourse influence area. The width of the riparian corridor is measured from the

Riparian Corridor



[3] The riparian corridor is intended to provide an adequate riparian width to maintain or enhance habitat and water quality values. Allowable uses within the riparian corridor are limited.

centerline of the watercourse. The development setback area[4] is the area projecting outward from the edge of the designated riparian corridor where development is restricted, providing a buffer between the riparian corridor and development. The management area, riparian corridor, and development setback area distances vary depending on the watercourse area and its categorization.[5] All distances are measured from the centerline of the watercourse outward as shown on the schematic above.

The *City-Wide Creeks Management Plan* outlines a process for permitting development adjacent to watercourses. In order to determine the level of permit review required for the variety of watercourse types within the City, all watercourse reaches are categorized as "A," "B," or "C" watercourses. These categories are based on the quality, continuity, and enhancement potential of the riparian habitat associated with the watercourse, the potential for the watercourse to support special status species, and the ability of the habitat to be expanded based upon existing development.

Implementing regulations are included in the City's Municipal Code (Part 21 of Title 24 – Zoning) that establish the requirements for obtaining a Watercourse Development Permit and specify uses permitted within the designated management area, development setback area, and riparian corridor. The management area is the area where the watercourse regulations would apply. Any development located outside of the management area would not be subject to watercourse regulations. Generally, Watercourse Development Permits are required for allowed uses within any setback area of a Category A watercourse and for allowed uses within the riparian corridor and development setback areas of a Category B watercourses. Development activities within Category C watercourses are exempt. Development standards are included in the City's Municipal Code section 24.08.2180.

- *Arana Gulch Master Plan*. Arana Gulch is a City-owned greenbelt property situated along the City's eastern boundary, immediately to the north of the Santa Cruz Small Craft Harbor. This 67.7-acre open space property features coastal prairie, riparian and oak woodland, seasonal wetlands, and the lower reaches of Arana Gulch Creek. Arana Gulch supports three sensitive habitat areas: 1) areas of Santa Cruz tarplant (*Holocarpha macradenia*), a State listed endangered species and a federally-listed threatened species; 2) riparian habitat; and 3) seasonal wetlands. In addition to public access and use recommendations, the *Arana Gulch Master Plan (Master Plan)* identifies resource management areas and management guidelines for each of following areas: coastal prairie/Santa Cruz tarplant; Arana Gulch Creek riparian and wetland; and Hagemann Gulch riparian woodland. Habitat restoration and maintenance efforts are underway pursuant to provisions of the *Master Plan* and the coastal development permit approved by the Coastal Commission for implementation of the *Master Plan*.

[4] The development setback width is intended to provide an appropriate water quality and habitat buffer between the riparian corridor and development within the remaining management area. New development generally would be limited in this area to landscaping and limited pervious surfaces.

[5] The 25 feet outward from the edge of the development setback is intended to provide an adequate area for permit review and to be consistent with the *Management Plan* goals and City of Santa General Plan/LCP policies to maintain or enhance water quality or riparian habitat values.

- ***Moore Creek Management Plans.*** The *Moore Creek Corridor Access and Management Plan* was prepared as a focused effort to bring together the then-existing policies from the City's *1994 General Plan* and the *Western Drive Plan* into a comprehensive document. Recommendations are included for public access, land dedication and open space easements, and resource management related to vegetation, water quality, and erosion. In 2002, the City approved the *Moore Creek Interim Management Plan,* which more specifically addresses management of the 246-acre Moore Creek Preserve area of the corridor.

  The 246-acre natural Moore Creek Preserve area (see Figure IIIA-1 in Chapter VIII) was purchased by the City in 1998. The *Moore Creek Preserve Interim Management Plan* (*Interim Management Plan*) was adopted by City Council in June 2002 as an "Interim Management Plan," not as a Park Master Plan. The document is intended to guide management of the Moore Creek Preserve until preparation/approval of a long-term Park Master Plan for the property. The *Interim Management Plan* identifies interim uses and management actions. The uses and infrastructure improvements specifically permitted in the MCPIMP include: hiking trails (dogs prohibited); cattle grazing; and study, preservation, enhancement, and protection of native species and their habitats.

  The *Interim Management Plan* identifies three plant community resource management areas with specific management guidelines for habitat areas of three special status species as identified below. Resource Management Guidelines are included in the *Interim Management Plan* for each of these areas. Specific management strategies include cattle grazing, mowing, removal of non-native plant species, addition of grazing fencing, monitoring of trail use for impacts, and conducting annual surveys. Hydrology and erosion control management actions also are outlined.

  - Plant Communities
    - Coastal Prairie
    - Riparian and oak woodland (Moore Creek canyon and Wilder Creek canyon)
    - Mixed eucalyptus and Monterey cypress grove (Monarch butterfly over-wintering habitat)

  - Special Status Species
    - Ohlone Tiger Beetle habitat
    - San Francisco Popcorn Flower habitat
    - California Red-Legged Frog habitat

- ***Neary Lagoon Management Plan.*** Neary Lagoon is a City-owned wetland and natural area situated in the central part of the City (see Figure II-2 in Chapter VIII). Acquired by the City in 1967, the 14-acre lagoon and surrounding riparian and woodland habitat within the management area total 44 acres. The outlet from the lagoon to the Monterey Bay is located at Cowell Beach.

  Neary Lagoon was originally an oxbow, a U-shaped bend, of the San Lorenzo River that was gradually isolated from the main river channel. During the 1850s, the lagoon covered approximately 75 acres, extending to what is now Pacific Avenue in downtown. By the 1930s,

the lagoon was primarily a marsh with little open water. In the 1970s, the City designated the Neary Lagoon Park and Wildlife Refuge as a community facility.

The *Neary Lagoon Management Plan (Management Plan)* was adopted by the City and approved by the Coastal Commission to fulfill conditions of a coastal development permit issued to the City to construct park and wildlife refuge improvements as approved by the Coastal Commission. The *Management Plan* is a comprehensive guide that addresses public access and use, hydrology, water quality, vegetation management and habitat restoration, wildlife and fishery management, cultural resources, and aesthetics. The *Management Plan* also addresses management of lagoon water levels (important for flood protection), water quality, and mosquito control. Specific management actions are included for each of these elements. The *Management Plan* also identifies habitat types and Management Zones A through J. The habitat areas in Neary Lagoon include:

- Freshwater Marsh
- Open Water
- Riparian and Mixed Oak Woodland
- Grassland, Recreational, and Ruderal Areas

Habitat and wildlife/fisheries management actions include removal of non-native plant and wildlife species, maintenance of a balance between freshwater marsh and open water habitat through removal of tules and cattails, sediment removal, establishment and enhancement of islands within the lagoon for waterfowl, grassland restoration, and performance of annual surveys and monitoring.

- ***San Lorenzo Urban River Plan.*** The *San Lorenzo Urban River Plan* (SLURP) is the outcome of a planning process initiated by the Santa Cruz City Council in 1999 to update the previous plans for the San Lorenzo River that guided flood control, vegetation restoration, and public access improvements along the River. Only the lower portion of the River is within the coastal zone. The need for an updated plan was a result of the river levee improvement project in the late 1990s, completed in 2000, the listing of steelhead and coho salmon as federally threatened species, and the federal designation of the San Lorenzo River as critical habitat for these species. The *SLURP* contains recommendations for habitat enhancement as well as for public access and ideas to promote future river-oriented development. One of the key goals of the *SLURP* is to enhance and restore the biotic values of the river, creek, and marsh fish and wildlife habitat.

  Appendices to the *San Lorenzo Urban River Plan* include the *Lower San Lorenzo River and Lagoon Management Plan* and the *Jessie Street Marsh Management Plan (JSM Management Plan,* described below*)*. The *Lower San Lorenzo River and Lagoon Management Plan* provides resource management and restoration recommendations within the constraints of also providing flood protection through a levee system through downtown Santa Cruz. Management and restoration recommendations address: annual vegetation management; summer lagoon water level management; enhancement of the aquatic, shoreline and riparian habitats; and marsh restoration.

- *Jessie Street Marsh Management Plan*. Jessie Street Marsh is a City-owned wetland and open space site located just to the north of the San Lorenzo River lagoon that was purchased by the City as part of the mitigation for the City's wastewater treatment plant expansion project in the 1990s. Fresh water flows into the marsh are from stormwater runoff and springs along the bluff. Historically, Jessie Street Marsh was part of a large tidal estuary open to the San Lorenzo River. After construction of the San Lorenzo River levee system in 1955 following a significant flood event, river tidal flows and most saltwater circulation were blocked from entering the marsh. The *JSM Management Plan* seeks to preserve and enhance the natural resources of the marsh, improve water quality, manage flood waters, and provide appropriate public access. In addition to public access and use recommendations, the *JSM Management Plan* proposes to modify the marsh area to increase the tidal exchange with the San Lorenzo River and enhance salt/brackish marsh and fresh water marsh habitat areas. Both marsh and upland woodland habitats would also be enhanced by removing invasive, non-native plants and re-vegetating degraded areas. The management approach is to maximize the biodiversity of the marsh areas and enhance the biotic resources.

Agricultural and Forest Resources

The State of California established the Farmland Mapping and Monitoring Program (FMMP) in 1982 in response to a critical need for assessing the location, quality, and quantity of agricultural lands and the conversion of these lands over time. The FMMP produces maps and statistical data used for analyzing impacts on California's agricultural resources. Agricultural land is rated according to soil quality and irrigation status; the best quality land is called Prime Farmland. The maps are updated every two years with the use of a computer mapping system, aerial imagery, public review, and field reconnaissance.[6] The program produces "*Important Farmland Maps,"* which are a hybrid of resource quality (soils) and land use information. The maps identify five farmland categories, as well as two non-agricultural categories: Prime Farmland, Unique Farmland, Farmland of Statewide Importance, Farmland of Local Importance, and Grazing Land, and the two non-agricultural categories, "Urban and Built-Up Land" and "Other Land".

The City of Santa Cruz is largely developed and all lands within City limits and the City's existing Sphere of Influence are designated as "Urban and Built-Up Land" and "Other Land" in the State Farmland Mapping program. There are no designated "prime" agricultural lands within the City's coastal zone. Some adjacent lands outside City limits, but within the City's *General Plan 2030* planning area, are designated "Prime Farmland," "Farmland of Statewide Importance," and "Grazing Land." Agricultural lands within the coastal zone that are adjacent to the City include lands immediately west of the City limits. State-mapped agricultural lands are shown on Figure IIID-3 (see Chapter VIII for all Figures).

FOREST RESOURCES

The City of Santa Cruz is primarily developed with most remaining open space located within parks and City-owned greenbelt lands as shown on Figure IIIA-1. There are no designated Timberland Preserve lands or commercial timber harvesting areas within the City. Some areas of mixed evergreen, redwood

[6] California Department of Conservation, 2021.

forest, and oak woodlands occur within the City, primarily within the city-owned open space or greenbelt lands.

Scenic Resources

The beauty of Santa Cruz's natural setting contributes significantly to the City's aesthetic and visual character. The Monterey Bay, Pacific Ocean, and coastline constitute the entire southern boundary of the City and are important natural features in the City's urban setting. Santa Cruz has nearly four miles of coastline on the Monterey Bay and much of the City sits above coastal bluffs, with beaches and a rocky shoreline below. The coastline provides a clearly defined City boundary, giving continuity and a strong sense of orientation and identity to the area. Beaches and coastal bicycle, pedestrian, and automobile routes such as West Cliff Drive provide highly scenic and popular places for residents and visitors. The visual quality of the shoreline, as well as clearly delineated public access to and along it, is essential to the community character.

Prominent scenic coastal views are primarily those that are oriented toward Monterey Bay and the Pacific Ocean as shown on Figure IIID-4. There are no designated scenic highways or roads within the City; however, West Cliff Drive is a popular scenic route along the coast, and is a primary location of prominent and panoramic views of the Monterey Bay. In addition to West Cliff Drive, other coastal viewpoints with prominent ocean views include the Municipal Wharf, East Cliff Drive, San Lorenzo Point, and the Santa Cruz Small Craft Small Craft Harbor jetties.

Landmarks are distinctive natural and built features that are highly visible or that help to define the identity of a particular place. The City's *General Plan 203*0 definition of a "landmark" includes "a visually prominent or outstanding structure or natural feature that functions as a point of orientation or identification." Because of the City's varied topography, Santa Cruz has few built landmarks that are visible from many different parts of town. Within the coastal zone, the Santa Cruz Beach Boardwalk's brightly-painted roller coaster is distinctive, but since the Boardwalk is just a few feet above sea level, the roller coaster and other rides are not widely visible, even from other points along the coast. Other notable landmarks within the Coastal Zone include the Municipal Wharf, the Santa Cruz Small Craft Harbor, and the lighthouses at both Lighthouse Field and the Harbor's western jetty.

Cultural Resources

Cultural resources encompass paleontological, archaeological, and historic resources. Paleontology is the study of plant and animal fossils; paleontological resources generally are more than 10,000 years old. Archaeology is the study of prehistoric human activities and cultures. Historic resources are associated with the more recent past. In California, historic resources are typically associated with the Spanish, Mexican, and American periods in the State's history.

PALEONTOLOGICAL RESOURCES

Paleontological resources are fossilized remains of plants and animals, and associated deposits. The cultural resources investigation conducted as part of the *General Plan 2030* identified 48 vertebrate fossil localities within five miles of Santa Cruz. These localities have yielded vertebrate fossil specimens that have been found in the Santa Margarita Sandstone, Santa Cruz Mudstone, Purisima Formation, and

from the Late Pleistocene terrace deposits in and near the General Plan planning area. Based on a literature review, four geologic units in the City are known to contain fossils: Late Pleistocene alluvium; the Purisima Formation; the Santa Cruz Mudstone; and the Santa Margarita Sandstone (see Figure IIID-5). Though Holocene alluvium is generally considered too young to contain paleontological resources, this geologic unit is moderately sensitive for paleontological resources because it is underlain by sedimentary geologic units that have a high paleontological sensitivity.

ARCHAEOLOGICALLY SENSITIVE AREAS

Archaeological sensitivity areas that were developed as part of the City's *General Plan 2030* and updated in 2019 are illustrated in Figure IIID-6 (see Chapter VIII). The "Highly Sensitive" areas are parcels with recorded archaeological deposits or confirmed archaeological sensitivity in which the property qualifies under any of the following three conditions: (1) the parcel contains all or portions of a recorded archaeological deposit; (2) the parcel lies wholly or partially within a buffer around the boundaries of a recorded archaeological deposit;[7] or (3) the parcel contains unrecorded archaeological materials identified by an archaeologist during prior study. "Sensitive" designations apply to parcels that do not have recorded archaeological sites, but are located within sensitive areas based on the professional archaeological review and GIS analysis. Areas shown as "Negative" are sites that have had professional archaeological investigations with negative results (i.e., no archaeological deposits were identified), but are located in sensitive areas. The remaining undesignated areas were determined not be archaeologically sensitive (Dudek, July 2018).

HISTORIC RESOURCES

Listed Resources and Districts. As one of California's oldest settlements, founded in 1791, Santa Cruz has many historical buildings. Currently, approximately 600 buildings are listed in the City's Historic Building Inventory. Buildings of greatest historical and architectural significance have been designated "landmarks" pursuant to section 24.12.430 of the City's Zoning Ordinance. Currently there are 34 designated landmarks in the City, some of which are located in the coastal zone. The Mission Santa Cruz, Villa de Branciforte, and the Boardwalk are also California Historical Landmarks.

Historic districts may be designated pursuant to criteria and procedures in the Zoning Ordinance (Part 2 of Section 24.06). A proposed historic district must be a geographically definable area possessing a significant concentration or continuity of sites, buildings, structures, or objects unified by past events, or aesthetically by plan or physical development, and the collective value of the historic district taken together may be greater than the value of each individual structure. Existing and potential historic districts are shown on Figure IIID-7 (See Chapter VIII). Currently, there three National Register districts (Mission Hill Historic District, Downtown Neighborhood District, and Cowell Lime Works District), two of which are also local historic districts (Mission Hill and the Downtown Neighborhood Districts). The Mission Hill and Cowell Lime Works Districts are outside the coastal zone, with a small portion of the Downtown Neighborhood District within the coastal zone. Potential historic districts are located in the

[7] The buffer is provided to account for the possibility that unidentified portions of the recorded deposit may lie outside of its known boundaries and extend onto adjoining parcels. As the location of archaeological sites is confidential to prevent illicit artifact collection, the depth of the buffer is not disclosed.

Beach Hill and Ocean View Street neighborhoods, which are within the coastal zone, except for the northern portion of the Ocean View Avenue neighborhood.

Areas of Historical Sensitivity. There are documented occurrences of historical deposits dating to the Spanish and Mexican periods in California. In addition to intact historic resources, Santa Cruz has areas where settlement during the Spanish and Mexican periods may have left historical deposits. These eras are of high interest due to the relative paucity of intact, recoverable deposits associated with these periods. Sites associated with similar communities have had significant archaeological research value and have been found to be historically significant. Figure IIID-8 depicts those areas with sustained residential, institutional, industrial, and commercial activity during the Spanish and Mexican eras, including the Santa Cruz Mission and Villa de Branciforte.

Land Resources Policies & Actions/Programs

3D-1 Sensitive Habitat Areas and Natural Resources

3D-1.1 Sensitive Habitat Protection. Protect sensitive habitat areas (see Figure IIID-2) against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.)

a. Utilize biological resource protocols to determine if a sensitive biological resource is present and to employ appropriate avoidance or management strategies when sensitive biological resources occur. Table IIID-1 at the end of this subchapter summarizes assessment protocols to determine if a sensitive biological resource is present, and identifies general avoidance or management strategies to be employed when sensitive biological resources occur.

b. Minimize the impacts of grading, landscaping, drainage, and development on sensitive habitat areas.

c. Encourage the planting and restoration of native rather than non-native vegetation throughout the City, and encourage the eradication and control of non-native and invasive plant species.

d. Site and design development in areas adjacent to environmentally-sensitive habitat areas to prevent impacts which would significantly degrade those areas and so they are compatible with the continuance of such habitat areas.

3D-1.2 Protection of Riparian and Wetland Habitats. Preserve and enhance the character and quality of riparian and wetland habitats, and increase and maximize public access where appropriate.

a. Conserve creek, riparian, and wetland resources in accordance with the adopted *City-Wide Creeks and Wetlands Management Plan* and the *San Lorenzo Urban River Plan*.

b. Where consistent with riparian and wetland protection, allow low-impact public access such as unpaved trails, boardwalks, and vista points.

c. Require setbacks and implementation of standards and guidelines for development and improvements within the City adjacent to creeks and wetlands as set forth in the *City-Wide Creeks and Wetlands Management Plan*.

d. For Neary Lagoon, provide at least a 100-foot buffer between non-recreational land uses (e.g., parking, housing) and the lagoon. Exceptions may be granted for the City's Secondary Wastewater Treatment Plant (to the limits shown in the *Neary Lagoon Management Plan*) project provided that mitigation measures as specified in the environmental impact report and management plan are concurrently implemented.

e. Encourage the restoration and enhancement of existing riparian corridors, wetlands, and water resources.

f. Ensure river or stream alterations a consistent with the natural characteristics of the stream and limited to those allowed pursuant to the *City-Wide Creeks and Wetlands Management Plan* and Coastal Act Section 30236, which includes those alterations necessary for water supply, flood control, and habitat improvement projects.

g. Develop an Adopt-a-Stream program on a trial basis and determine its potential to protect, enhance, and restore stream resources within the City.

3D-1.3 Protection of Special Status Species & Habitats. Continue the protection of rare, threatened, and endangered species and the habitats supporting them.

a. Maintain an up-to-date list of special status species and habitat areas. Specific site information may be kept confidential to protect the resources.

3D-1.4 Protection of Monarch Butterfly Overwintering Habitat. Protect monarch butterfly overwintering sites and ensure adequate buffering of these sites from development.

a. Maintain a Monarch Butterfly Management Plan.

3D-1.5 Protection of Seabird Rookeries and Roosting Areas. Preserve the habitat of and minimize disturbance to seabird rookeries and roosting areas along the coastline from activities that could disturb or disrupt breeding or result in loss of habitat, such as construction activities, recreational activities, or special events.

a. Preserve Black Swift and Pigeon Guillemot habitat by requiring that construction in areas near these habitats must avoid disturbing them during the nesting season ensuring that no significant adverse impact occurs.

b. Continue to require applicants for special events permits to demonstrate how they will protect habitat and minimize disturbance to seabird rookeries and roosting areas.

3D-1.6 Protection of Monterey Bay Ecosystem. Protect the natural ecosystem of the Monterey Bay National Marine Sanctuary and the shoreline.

3D-1.7 Protection of Native Grasslands and Coastal Prairie. Preserve the character and quality of native coastal prairie grassland habitats by minimizing disturbance and removal of native grasslands and design landscaping to provide a natural buffer.

3D-1.8 Wildlife Corridors. Protect, enhance, and maintain significant wildlife dispersal corridors and buffers.

a. Restrict the use of barriers that can hamper wildlife movement through corridors and buffers.

3D-1.9 Implementation of Management Plans. Implement and maintain updated management plans for the protection and enhancement of natural areas throughout the City including: Arana Gulch, Jessie Street Marsh, Moore Creek Preserve, Neary Lagoon, and the San Lorenzo River. (EQ 4.2.1,

a. Implement recommendations for Jessie Street Marsh set forth in an updated marsh management plan.

b. Encourage other governmental agencies and/or organizations to implement management plans for Natural Bridges Marsh and Antonelli Pond.

3D-1.10 Tree Groves, Heritage Trees, and Landscaping.

a. Protect, manage, and enhance tree groves and understory plants that provide sensitive habitat features.

b. Protect heritage trees and minimize tree cutting between the nearest through public road and the coast.

c. Require a minimum two-for-one or more replacement planting and maintenance program when tree removal is necessary for new development.

d. Where feasible, plant species that are native, drought-resistant, and may be best suited for providing cover and food sources for wildlife.

3D-2 Agricultural Resources

3D-2.1 Agricultural Land Protection. Protect significant agricultural land uses within and at the edge of the City from development.

a. Support County policies and programs aimed at preserving agricultural and grazing uses within its Planning Area and on the North Coast.

b. Promote sustainable agriculture programs throughout the City and County.

c. Encourage organic farming practices on agricultural lands and community gardens within the City.

3D-2.2 Agricultural Buffers. Require or maintain an appropriate buffer to agricultural fields in the County and allow non-residential uses (such as community gardens and/or recreational uses) within portions of the buffer that are found to not adversely impact or be adversely impacted by the agricultural operations.

a. Require development adjacent to natural areas and agricultural/grazing lands to be compatible with adjacent lands in terms of land use, visual transition, and siting.

3D-3 Scenic Resources

3D-3.1 Scenic Resources. Preserve natural, scenic, and distinguishing natural features that visually define areas within the City and strengthen Santa Cruz's visual image.

a. Enhance the prominence of the San Lorenzo River as a natural feature giving structure, orientation, and recreational enjoyment to the City's residents and visitors.

b. Minimize the impact of grading and development on important natural features such as coastal terraces and bluffs.

c. Protect existing significant vegetation and landscaping that provides scenic value.

d. Maintain the visual prominence of important city landmarks and destinations as viewed from major circulation routes and public viewpoints when possible.-

3D-3.2 Scenic Views. Preserve important public views and viewsheds and minimize, where practical, obstruction of important views by new development.

a. Identify important scenic vistas and view corridors of communitywide value, such as views of and from coastal areas (Wharf, beaches), scenic background foothill views, and Beach Hill, and require development to provide visual and physical breaks to allow access to these areas.

b. Protect public views to and along the ocean.

c. Maintain the prominence of Beach Hill when development is proposed on or near it, and ensure that development maintains important public views from Beach Hill, especially the view towards the Monterey Bay.

3D-3.3 Protection of Scenic Views with New Development. 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 public 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 such as those designated in the *California Coastline Preservation and Recreation Plan* prepared by the California Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

a. Ensure that the scale, bulk, and setbacks of new development preserve important public scenic views and vistas, as well as public views of city landmarks where possible, and that new development does not impede or disrupt public scenic views.

b. Site and design development in the coastal zone to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and to restore visual quality in visually degraded areas.

c. New or renovated development shall add to, not detract from, City-identified landmarks, historic areas and buildings, and established architectural character worthy of preservation.

d. Develop siting, scale, landscaping, and other design guidelines to protect important public views of coastal open space areas and ensure that development is compatible with the character of the area.

e. Use planned development and other clustering techniques to protect resources and public views and allow for siting of development that is sensitive to adjacent uses.

3D-3.4 Visual Connections to Open Space. Protect public visual access to natural areas and ensure that development adjacent to coastal open space lands maintains visual connection to that open space.

3D-3.5 Improvement of the Visual Appearance of Access Routes. Improve the visual appearance of visitor routes and entrances to the city.

3D-4 Cultural Resources

3D-4.1 Preservation of Archaeological and Paleontological Resources. Preserve or, where not possible, responsibly manage sensitive archaeological and paleontological sites important to the community's heritage in the coastal zone.

3D-4.2 Protection of Archaeological and Paleontological Resources. Protect or, where not possible, responsibly manage sensitive archaeological and paleontological resources as early in the land-use planning and/or development process as possible.

a. Require preparation of archaeological investigations on sites proposed for development identified as "Highly Sensitive" or "Sensitive" on the maps of Archaeological Sensitivity and Historical Archaeological Sensitivity, prior to approval of coastal permits, to evaluate the extent of on-site archaeological and paleontological resources and to recommend appropriate mitigation measures if required. The investigation shall include archival research, site surveys, and necessary supplemental testing as may be required. Research and site surveys must be performed by qualified professionals.

b. Allow minor projects with little excavation to be exempt from this requirement for preparation of an archaeological assessment within the "Sensitive" areas. Minor projects generally involve spot excavation to a depth of 12 inches or less below existing grade, or uses that have virtually no potential of resulting in significant impacts to archaeological deposits. Exempt projects may include: building additions, outdoor decks, or excavation in soil that can be documented as previously disturbed.

c. Develop a mitigation plan for proper site disposition prior to approval of any project that may adversely impact a paleontological site. Site preservation should be given the highest feasible priority.

d. Require an archaeological observer on or in the vicinity of known sites for projects involving alterations, reconstruction, or a new impact via earth-moving activities and for projects on or in the vicinity of known burial or most sacred sites. Require a Native American observer during earth-moving activities.

e. The City shall notify applicants within paleontologically sensitive areas of the potential for encountering such resources during construction and condition approvals that work will be halted and resources examined in the event of encountering paleontological resources during construction. If the find is significant, the City shall require the treatment of the find in accordance with the recommendations of the evaluating paleontologist. Treatment may include, but is not limited to, specimen recovery and curation or thorough documentation.

3D-4.3 Discovery of Archaeological and Paleontological Resources. Upon discovery of an archaeological or paleontological resource, work must halt on a project and a mitigation plan be developed to determine the extent and value of the site and its proper disposition, prior to resumption of the project.

a. Manage the discovery of human remains and the protection of archaeological deposits in accordance with local, State, and federal requirements.

b. Require consultation with a Native American authority in the identification of burial or most sacred sites and include Native American participation in the development of, and recommendations for, site disposition and mitigation programs.

3D-4.4 Historic Buildings. Protect and encourage restoration and rehabilitation of historic and architecturally-significant buildings and landmarks.

a. Encourage compatible development within historic districts and on sites outside but immediately adjacent to those boundaries.

Area-Specific Coastal Land Resources Policies

IN THIS SECTION:	IN CHAPTER V:	ATTACHED BY REFERENCE:
	⊙ Beach/South of Laurel ⊙ Ocean Street Area Plan ⊙ San Lorenzo Urban River Plan ⊙ Harbor Development Plan	⊙ City-Wide Creeks Plan ⊙ B/SOL Design Guidelines

TABLE IIID-1 Assessment and Management Protocols for Sensitive Species and Habitat

RESOURCE	REGULATORY AUTHORITY	ASSESSMENT (to determine presence)	MITIGATION/ MANAGEMENT* (if resource is present)
Sensitive Habitats			
Freshwater Wetland & Salt Marsh	City Ordinance & Plans CDFW Wetlands Resources Policy U.S. Army Corps of Engineers	Wetland Delineation	• Permit from Corps (for fill) • Avoidance and/or Mitigation, such as buffers, restoration or enhancement, and water quality protection
Riparian Habitat	City Ordinance & Plans CEQA Review	*City-Wide Creeks & Wetlands Management Plan* or Habitat Assessment	• Comply with *Creeks Plan* setback requirements & development standards and guidelines • Streambed Alteration Agreement from CDFW if required
Coastal Prairie	CEQA Review	Habitat Characterization	• Avoid direct impacts and buffer • Mitigation for indirect impacts
Coastal Bird Rookeries	CEQA Review Division of Migratory Birds- MBTA (USFWS)	Habitat Characterization Breeding bird surveys	• Avoid direct impacts • Conduct construction activities outside of nesting season and/or establish appropriate buffers
Special Status Species			
<u>Listed Special-Status Plant Species</u> ▪ Robust spineflower ▪ Santa Cruz tarplant ▪ San Francisco popcorn flower	CEQA Review CESA and NPPA (CFGC)	Botanical survey during flowering period	• Avoidance – design to avoid removal of individuals and habitat • Provide appropriate buffers to protect from indirect impacts • Mitigation and/or Management to protect from indirect impacts and maintain long-term viability of species • Consultation with and MOU from CDFW
<u>Other Special-Status Plant Species</u> ▪ Santa Cruz manzanita ▪ Gardner's yampah ▪ Cloris' popcorn flower ▪ Santa Cruz clover ▪ Hickman's popcorn flower	CEQA Review	Botanical survey during flowering period	Avoidance and/or Mitigation – see above.

Listed Special-Status Wildlife Species ▪ Ohlone tiger beetle	ESA (USFWS)	Survey during emergence season	• Avoidance – design plans to avoid take of individuals and habitat • Mitigation and Management to protect from indirect impacts • USFWS Take permit through HCP process (no federal nexus) or Section 7 (federal nexus)
▪ Coho Salmon (Central CA ESU)	ESA (NOAA NMFS) CESA (CDFW)	Habitat assessment	• Consultation with NMFS • Avoidance of instream construction during migration period • Mitigation for indirect impacts
▪ Steelhead trout (Central CA ESU)	ESA (NOAA NMFS)	Habitat assessment	• Consultation with NMFS • Avoidance of instream construction during migration period • Mitigation for indirect impacts
▪ Tidewater goby	ESA (USFWS)	Habitat assessment Protocol level survey during sandbar formation (permit required)	• Consultation with USFWS • Avoidance and/or Mitigation
▪ California red-legged frog	ESA (USFWS)	Habitat Assessment Protocol Level Survey (USFWS 2005b) Pre-construction Survey	• Avoid take of individuals and impacts to aquatic habitat • USFWS Take permit through HCP process (no federal nexus) or Section 7 (federal nexus) • Mitigation to protect from indirect impacts
▪ Brown pelican (communal roosts and rookeries)	ESA (USFWS) CESA (CDFW)	Habitat assessment Communal roosting/ breeding bird survey	• Avoid take of individuals and impacts to roosting and nesting habitat • Consultation with USFWS through HCP process (no federal nexus) or Section 7 (federal nexus) • Conduct construction activities outside of nesting season

<u>Other Special-Status Wildlife Species</u> ▪ Monarch butterfly (wintering sites)	City Ordinance CEQA Review	Habitat Assessment Multi-year surveys during winter roosting season	• Avoidance – design plans to avoid take of individuals and habitat • Buffers to maintain suitable habitat conditions • Conduct construction activities outside of winter roosting season or develop appropriate mitigation such as buffers to avoid disturbance such as smoke and fumes Management to protect from indirect impacts
▪ Western pond turtle	CEQA Review (CDFW)	Habitat assessment Focused Surveys	• Avoid take of individuals in aquatic and upland habitat. • Mitigation to protect from indirect impacts such as barrier to movement
<u>Breeding Birds</u> ▪ Double-crested cormorant (rookeries) ▪ Black-crowned night heron (rookeries) ▪ Sharp-shinned hawk ▪ Cooper's hawk ▪ Golden eagle (nesting and/or wintering) ▪ Ferruginous hawk ▪ White-tailed kite (nesting) ▪ Merlin ▪ Black oystercatcher ▪ Long-eared owl ▪ Burrowing owl ▪ Vaux' swift ▪ Black swift ▪ Loggerhead shrike ▪ California horned lark ▪ Oak titmouse ▪ Yellow warbler ▪ Hermit warbler ▪ Saltmarsh common yellowthroat ▪ Yellow-breasted chat ▪ Chipping sparrow ▪ Tricolored blackbird	CEQA Review (CDFW)	Habitat assessment Breeding bird survey Wintering survey for golden eagle, ferruginous hawk, white-tailed kite, merlin, burrowing owl, saltmarsh common yellowthroat, grasshopper sparrow	• Avoid direct impacts to nesting birds, occupied nests, eggs and young • Conduct construction activities outside of nesting season or develop appropriate mitigation, such as buffers • Consultation with USFWS (golden eagle-unoccupied nest)
Special-status bats	CEQA Review (CDFW)	Habitat Assessment Emergence and nighttime acoustic surveys	Avoidance and/or Mitigation
San Francisco dusky-footed woodrat	CEQA Review (CDFW)	Habitat Assessment Nest survey	Avoidance and/or Mitigation

American badger	CEQA Review (CDFW)	Habitat Assessment Focused survey (burrow, sign, and prey base)	Avoidance and/or Mitigation
Nesting raptors & birds	Division of Migratory Birds- MBTA (USFWS) Fish and Game Codes (CDFW)	Habitat assessment Breeding bird survey	Avoidance during nesting season and/or Buffer Mitigation
Dispersal Corridors City of Santa Cruz	CEQA Review Wildlife movement study.	Determine buffer width for corridor utility. • Comply with *Creeks Plan* setback requirements & development standards and guidelines	• Buffer from disturbances such as noise land light,

III-E. DEVELOPMENT

IN THIS SECTION:

Coastal Act Policy Overview

COASTAL ACT POLICIES RELATED TO DEVELOPMENT

- ❑ New Development – Location (30250)
- ❑ Priority Uses
  - Coastal-dependent Uses (30255)
  - Oceanfront Land for Aquaculture (30222.5)
- ❑ Minimize Adverse Effects of Development (30253)
  - Hazards-Geologic, Flood, Fire [30253(1)]
  - Stability, Erosion, Coastal Bluff [30253(2)]
  - Consistency with APCD Plan [30253(3)]
  - Minimize Energy Consumption & Traffic [30253(4)]
  - Protect Special Neighborhoods [30253(5)]
- ❑ Public Works Facilities (30254; 30254.5)

Introduction

Article 6 of the Coastal Act addresses the location of new development in the coastal zone and states that new residential, commercial, or industrial development shall be located within, contiguous with, or in close proximity to existing developed areas with adequate public services. Coastal-dependent development has priority over other developments on or near the shoreline, and oceanfront land suitable for aquaculture shall be protected for that use and given priority, except over other coastal-dependent development or uses. New or expanded public works facilities shall be designed and limited to accommodate needs generated by development. New development shall: minimize adverse effects related to exposure to high geologic, flood and fire hazards; ensure coastal bluff stability (addressed further in Chapters III-C and III-F of this document); be consistent with air quality plans; and minimize energy consumption. This Article of the Coastal Act also requires that the location and amount of new development maintain and enhance public access to the coast, which is discussed in detail in Chapter III-A of this document. Article 6 also addresses scenic and visual qualities of coastal areas, which are included in Chapter III-D of this document.

Background

The City's coastal zone is mostly developed with residential uses. Visitor-serving and commercial uses are concentrated in the beach areas and the lower portions of Ocean Street and the Downtown area. There is a small area of industrially-designated lands in the western portion of the City's coastal zone that is primarily developed with a mix of small light industrial uses, such local cabinet and surfboard makers. There are no existing power plants within the City's coastal zone. There are some public/institutional land uses, such as the Long Marine Lab at the University of California, Santa Cruz's Coastal Campus at western edge of the City, which accommodates some existing coastal-dependent uses. Three State beaches and other parks and open space lands are also located within the coastal zone. There are no vacant oceanfront lands within the coastal zone, except for undeveloped portions of the University's Coastal Campus.

Public Services and Facilities

Properties in the coastal zone are served by a variety of City services and facilities, including water supply, sewage treatment, stormwater drainage, garbage collection, police and fire protection services, and parks and recreation facilities. There are no existing major public service constraints, except for seasonal water shortages during drought years. Public facilities included in the City's coastal zone include the City's wastewater treatment plant and ocean discharge. The Santa Cruz Metropolitan Transit District's Downtown Metro bus station property is also partially located within the coastal zone.

Potential Hazards to Development

Seismic, Geologic and Tsunami Hazards. The City's coastal zone is subject to coastal hazards representative of most of the California coast, including seismic/geologic and tsunami hazards. Geologic hazards are generally divided into two categories: seismically induced hazards including ground shaking, surface rupture, and seismically induced ground failure, settlement, landslides, and water waves; and geologic hazards not seismically induced such as slope instability, cliff retreat, and non-seismic settlement and landslides. Areas of liquefaction hazards are shown on Figure IIIE-1.[1] Coastal bluff retreat with regards to shoreline protection is further addressed in Chapters III-C and III-F of this document. Development projects can typically be designed to minimize exposure to geological hazards through implementation of recommendations from site-specific geotechnical reports.

Tsunamis are large, successional oceanic waves generated by earthquakes, vertical sea floor faulting, submarine volcanic eruptions, or landslides, and travel at speeds up to 450 mph. Tsunamis may be barely perceptible out at sea, but as they move into shallow water near the coast, wave height increases as velocity decreases. Withdrawal of the sea from the shoreline frequently precedes the arrival of a tsunami, but not always. Tsunamis cannot be prevented and are capable of causing massive destruction. The City is vulnerable to tsunami inundation primarily in coastal areas and along coastal watercourses at lower elevations (See Figure IIIE-2). The National Oceanic and Atmospheric Administration (NOAA) operates a

[1] All figures are included in Chapter VIII of this document for ease of reference.

tsunami warning system that gives up to several hours of notice to allow evacuation of people from threatened areas and thereby prevent injuries and loss of life. California experienced significant damage to some stretches of the coastline from a tsunami in 2011. The City of Santa Cruz, and especially the Santa Cruz Small Craft Harbor, was impacted, with damage felt particularly to moored boats, piers and docks, and other infrastructure at the Harbor as well as some damage at the Municipal Wharf. This experience proved a catalyst for the City to develop programs to enhance tsunami awareness and alert systems, including signage, and necessitated some major repairs and upgrade of infrastructure in the Harbor, some of which benefitted from federal disaster funds.

Flood Hazards. Flooding in Santa Cruz has historically occurred primarily along the San Lorenzo River. Areas of flood hazards are shown on Figure IIIE-3. The City, in conjunction with the Army Corps of Engineers (USACE), has greatly improved the flood capacity of the San Lorenzo River following a severe flood event in 1955. Major construction has been completed on the levees and bridges along the river. The Federal Emergency Management Agency (FEMA) recognized the increased flood protection by granting an A-99 flood zone designation for most of the floodplain in the City. New buildings and improvements to structures in the A-99 zone do not need to meet FEMA flood elevation construction requirements unless the property owner wishes to incorporate them. On July 7, 2020, the City received a Notice of Completion and Operation, Maintenance, Repair, Replacement and Rehabilitation Manual from the USACE. The City is currently in the process of certifying the San Lorenzo River flood control project and must do so by July 7, 2023 in order to maintain the National Flood Insurance Program discount for those properties within the A-99 zone.

Sea Level Rise. The ongoing rise in global sea level is generally attributed to the thermal expansion of ocean water and the melting of mountain glaciers and ice sheets around the globe. Sea level rise will result in significant direct and indirect impacts including: increased risk of flooding, storm surges and inundations, erosion, shoreline retreat, and loss of wetlands.[2] Average global sea level has risen between five to nine inches during the 20th century as reported by the International Panel on Climate Change (IPCC), nearly one-tenth of an inch each year (California Environmental Protection Agency, August 2013[3]).

The OPC's *State of California Sea-Level Rise Guidance Document* (*Guidance Document*) *2018 Guidance Document Update*, initially released in 2010 and first updated in 2013, also provides guidance to State agencies for incorporating sea level rise (SLR) projections into planning, permitting, investment, and other decisions. The *2013 Guidance Document* was referenced in the City's Sea Level Rise Vulnerability Assessment. The *2018 Guidance Document Update* was released after the completion of the City's Sea Level Rise Vulnerability Assessment and thus was not integrated into the CAP Update. The *2018 Guidance Document Update* reflects advances in SLR science and addresses the needs of State agencies and local governments as they incorporate SLR into their planning, permitting, and investment decisions.

[2] Committee on Sea Level Rise for the Coasts of California, Oregon and Washington; Past, Present and Future, Washington D.C: The National Academies Press. June 2012.

[3] California Environmental Protection Agency. Office of Environmental Health Hazard Assessment. August 2013. "Indicators of Climate Change in California."

One of the major changes made to the *2018 Guidance Document Update* is providing probabilistic SLR projections versus the scenario-based SLR projections of the *2013 OPC Guidance Document*. According to the *2018 Guidance Document Update*, the *2013 OPC Guidance* was based on scenario-based sea-level rise projections from the 2012 National Research Council report, which produced a set of three scenarios (low, central, and high), with greater weight given to the central scenario. These scenario-based projections were partially but not fully tied to specific emissions scenarios presented in the Intergovernmental Panel on Climate Change's Fourth Assessment Report and do not include a likelihood of occurrence.

Subsequently, in 2013, the IPCC Fifth Assessment Report adopted a probabilistic approach and produced estimates of the likely range of global sea-level rise under different emission scenarios, where 'likely' covers the central 66% of the probability distribution (i.e., the sea levels that fall within the range created by the value that is 17% likely to occur and the value that is 83% likely to occur). The IPCC Fifth Assessment Report did not estimate sea level rise outside these central 66% probability ranges or produce local projections for California. The *2018 Guidance Document Update* thus incorporates probabilistic sea-level rise projections, which associate a likelihood of occurrence (or probability) with sea level rise heights and rates, and are directly tied to a range of emissions scenarios. However, the probabilistic projections may underestimate the likelihood of extreme sea level rise (resulting from loss of the West Antarctic ice sheet), particularly under high emissions scenarios. Therefore, the *2018 Guidance Update* also includes an extreme scenario called the H++ scenario. The probability of this scenario is currently unknown, but its consideration is important, particularly for high-stakes, long-term decisions.

Rising sea levels, storms of increasing intensity, and a projected series of alternating floods and drought threaten the City of Santa Cruz in the coming decades. With funding from FEMA, the City of Santa Cruz prepared its first "Climate Adaptation Plan," adopted in 2012 and subsequently updated the Plan in 2018 with a state of the art sea level rise vulnerability assessment. The objectives of this Plan are to identify and evaluate the potential impacts of climate change on the City of Santa Cruz, analyze the severity of the hazards that the City faces, and develop potential adaptation responses to reduce the risk and exposure of the City to these hazards. Based on the sea level rise vulnerability assessment and updates to all projected City climate hazards, the City has developed action items with priorities to respond to specific risks and hazards related to climate change that will build adaptive capacity into policies, programs, and infrastructure. Moreover, the City has conducted beach-specific analysis of projected coastal hazards and created policy and infrastructure solutions as part of the 2019-2021 Resilient Coast Santa Cruz initiative.

Additionally, in October 2012, the Santa Cruz City Council adopted a Climate Action Plan (CAP) that addresses citywide greenhouse emissions and reduction strategies. The CAP outlines the actions the City and its partners may take pertaining to reduction of greenhouse gas emissions to meet the goals and implement the policies and actions identified in the *General Plan 2030*. The CAP provides City emissions inventories, identifies an emissions reduction target for the year 2020, and includes measures to reduce energy use, reduce vehicle trips, implement water conservation programs, reduce emissions from waste collection, increase solar systems, and develop public partnerships to aide sustainable practices. Measures are outlined for the following sectors: municipal, residential, commercial, and community

programs. The Plan sunset in 2020 and the City is in the process of developing its CAP 2030 with a goal of determining the year and the most equitable pathway to carbon neutrality.

Wildland Fire Hazards. Wildfires are large-scale brush and grass fires in undeveloped areas of the city. As shown on Figure IIIE-4, areas of the coastal zone subject to high fire hazard are limited primarily to several publicly-owned open space lands along vegetated canyons. However, in August 2020, the major wildfire CZU Lightning Complex Fire (CZU Fire) scorched approximately 86,500 acres and destroyed almost 1,500 structures in the Santa Cruz Mountains. A series of thousands of lightning strikes in the County and across the State on the night of August 16, 2020 started five separate fires in Santa Cruz County: the Warnella Fire near the town of Davenport, the Waddell Fire near Waddell Creek, and three fires northwest of the University of California, Santa Cruz campus and the City limits that later exploded in size to become the CZU Fire. While most of the fire damage and destroyed buildings were located in unincorporated Santa Cruz County, the City of Santa Cruz provided many evacuee assistance programs, including coordinating emergency housing options, and other infrastructure support for the fire-fighting efforts. The CZU Fire is only an example of the wildland fires that have become a seasonal hazard reality in California and other parts of the West.

Air Quality

Atmospheric pollution is determined by the amount of pollutants emitted and the atmosphere's ability to transport and dilute it. In Santa Cruz County, coastal mountains exert a strong influence on atmospheric circulation, creating a breezy coastal environment with generally good ambient air quality, except in some small inland valley areas. Air Quality Management Plans are developed for regions throughout the State to meet the air quality requirements and standards for specific pollutants, including ozone, nitrogen oxide and dioxide, sulfur dioxide, carbon monoxide, and suspended particles, as outlined in the federal and State Clean Air Acts. The North Central Coast Air Basin (Monterey, Santa Cruz, and San Benito counties) is currently in attainment for the federal pollutants and is designated non-attainment for the State ozone and PM_{10} standards. The region's Air Quality Management Plan prescribes methods for attaining ozone and particulate matter standards and for maintaining air quality in the region. Attainment of air quality standards is achieved through measures to control emissions from stationary sources (factories, commercial activities, etc.) and mobile sources (cars and trucks). Transportation control measures (TCMs) and land use programs also contribute to improving air quality. In recent years, smoke from Northern California wildfires can be trapped in the atmosphere and lead to reduced air quality within the City and County, generally in the summer and early autumn months.

Development Policies & Actions/Programs

3E-1 New Development

3E-1.1 Infill Development. Infill and intensify land uses in developed areas currently served by municipal services.

a. Support compact mixed-uses along primary transportation corridors and in employment centers to reduce dependence on the automobile and support the use of mass transit and other alternative transportation modes.

b. Develop objective design standards to infill and intensified development within existing neighborhoods.

3E-1.2 Development Intensities. Relate residential, commercial, and industrial land use intensities to the capability and location of the land while ensuring optimum utilization of vacant infill parcels.

a. Assign lesser densities to lands that carry significant development constraints.

b. Maximize land intensity or densities in areas unconstrained by resources or hazards and having adequate service capabilities.

3E-1.3 Urban Boundaries. Maintain the City's western urban development boundary at Moore Creek Preserve (East branch of Creek above Highway 1) and along the City limits below Highway 1.

a. Work with the County to maintain the lands between Moore Creek Preserve (west branch of the Creek), the City's western boundary above and below Highway 1, Younger Lagoon, and Wilder Ranch State Park as open space.

3E-1.4 Open Space Areas. Where development abuts open space land uses, utilize careful site planning to emphasize the natural edges provided by topography and vegetation, and maintain visual and physical access to open space areas.

3E-1.5 Swenson Property. Require a planned development for the 11-acre Swenson-owned parcel adjoining Antonelli Pond (with a land use designated of Low Medium Density Residential/Neighborhood Commercial/Office) pursuant to the following:

- Housing shall be clustered with adequate setbacks from Antonelli Pond to prevent impacts that would significantly degrade the habitat area surrounding the Pond.
- Neighborhood Commercial and Office land uses shall be at least 10 percent but no more than 20 percent of the total net lot area.
- The extent of open space buffers/setbacks to wetland areas on or adjoining the site shall be determined through a site-specific management plan consistent with the 2019 memo from the California Coastal Commission authored by Dr. Lauren Garske-Garcia, as it may be update, which will require approval of a Coastal Permit within the appeal jurisdiction of the California Coastal Commission. Based upon the buffer/setback determination, neighborhood park land shall be considered on the site.
- Parking areas shall be designed to minimize and mitigate impacts to adjacent sensitive habitat, taking into consideration such impacts as parking lot drainage and fugitive light on protected species.
- Landscaping onsite shall include native species and shall avoid the use of invasive species. The property owner or management company shall ensure that any chemicals used in landscape maintenance for pest management, weed prevention, and

fertilization shall remain onsite and not drift, either air- or water-borne, to the sensitive habitat of and surrounding Antonelli Pond.

- Public access to Antonelli Pond shall be preserved.

3E-1.6 Seabright Area Plan. Update the *Seabright Area Plan* to address future infill and intensification impacts from recent State legislation, and consider medium to long range impacts of ongoing sea level rise

3E-1.7 Availability of Public Services. Ensure that facilities and services necessitated by the development anticipated by this Plan are available, proportionate, and appropriate to development densities and use intensities and that new development provides its fair share of the services and infrastructure.

3E-1.8 Affordable Housing. Work with housing developers to ensure that implementation of the City's Inclusionary Housing requirements, Density Bonus provisions, and State regulations including the Fair Housing Act, SB 330, and SB 35 are best utilized to meet the City's Regional Housing Needs Allocation (RHNA), with an emphasis on the provision of Low- and Very-Low-Income housing.

3E-2 Priority Uses and Development

3E-2.1 Coastal-Dependent Uses. Encourage the development of appropriate coastal-dependent uses, and include support for marine research and other activities related to the Monterey Bay National Marine Sanctuary.

3E-2.2 Seabright Area. Within the Seabright/Murray Street neighborhood commercial designations, give priority to commercial uses that also serve visitors to Seabright Beach, such as food markets, eating establishments, and marine-related hardware and other stores.

3E-2.3 Supporting Land Uses. Provide for the development of supporting land uses adjacent to retail areas (e.g., motels/hotels around visitor-shopping areas, and residences and offices around resident-serving shopping areas

3E-3 Minimize Adverse Effects of Development

HAZARDS AND STABILITY

Coastal Hazards

3E-3.1 Coastal Bluff Protection. Protect ocean bluffs and particularly bluff edges from human activity that can create erosion and bluff retreat, and minimize hazards posed by bluff retreat, taking in account the best available scientific information regarding sea level rise available at the time.

a. For development adjacent to or on top of cliffs, require setbacks for buildings equal to 100 years of anticipated cliff retreat.

b. Require site-specific geologic investigations for all new development within 100 feet of coastal bluffs.

3E-3.2 Tsunamis. Implement measures to avoid or reduce the potential for loss of life, injury, and property and economic damage to the City from tsunamis.

3E-3.3 Early Warning Systems. Continue to enhance Emergency Management Systems and develop patrol activities to ensure early warning for evacuation of areas susceptible to natural flooding, tsunami inundation, seiches, or dam failure.

a. Periodically review evacuation plans for flooding, potential dam failures, and tsunami inundation areas.

Geologic and Seismic Hazards

3E-3.4 Reduction of Risks to Hazards. New development shall minimize risks to life and property in areas of high geologic, flood, and fire hazard.

a. New development shall ensure stability and structural integrity, and neither create nor contribute significantly to erosion or geologic instability of the surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

b. Require site-specific geologic/geotechnical investigations by qualified professionals for residential, commercial, industrial, public, and quasi-public development in coastal zone areas of known liquefaction potential and seismic hazards and where steep slopes or slope instability may be an issue, and require developments to incorporate the findings recommended by the investigations.

3E-3.5 Development On/Near Steep Slopes. Limit development and control excavation and grading on and in the vicinity of unstable slopes.

a. Require geotechnical reports for excavation and grading that have the potential for exposure to slope instability or potential to create unstable soil conditions.

b. For development on slopes over 30%, require a site-specific geotechnical and/or engineering geology report that provides setbacks and development criteria, and require developments to incorporate said recommendations.

Flood Hazards

3E-3.6 San Lorenzo River Management. Manage the San Lorenzo River floodway consistent with the requirements of the U.S. Army Corps of Engineers, Coastal Commission, Department of Fish and Wildlife, and other responsible and trustee groups, using the San Lorenzo Urban River-Plan as the basis for this management.

3E-3.7 Flood Control and Storm Drainage. Analyze and design flood control projects and storm drainage facilities on private or public lands to ensure that retention and detention facilities are used where practical and economical, erosion impacts on natural terrain are minimized, and urban runoff pollutants are reduced to the maximum extent possible.

3E-3.8 Development in Flood Areas. Restrict or prohibit uses in undeveloped flood areas and maintain floodplain and floodway regulations in developed flood areas.

3E-3.9 Minimal Alteration of Floodplains and Stream Channels. Minimize the man-made alteration of natural flood plains, stream channels, and natural protective barriers that accommodate or channel floodwaters.

3E-3.10 Grading and Dredging. Control filling, grading, dredging, and other development that may increase flood potential unless recommended in adopted management plans.

3E-3.11 Effects of Global Climate Change. Address the effects of global climate change through changes in land use and building codes for low-lying areas that may be flooded or damaged in the future by increases in sea level and storm violence.

3E-3.12 Sea Level Rise. Minimize impacts of future sea level rise.

a. Continue to review updated information on effects of sea level rise along the City's coast and integrate into the City's climate adaption strategies and/or planning.

b. Due to the ongoing shifts in sea level rise projections, use a reasonably foreseeable projection of sea level rise within the acceptable range established by the best available science.

Fire Hazards

3E-3.13 Development in Fire-Prone Areas. Regulate development in and adjacent to areas with steep canyons, arroyos and fire-prone vegetation to protect from wildfire potential.

3E-3.14 Setbacks and Fire Prevention. Where preservation of fire-prone vegetation in undeveloped areas is desirable and appropriate, require development setbacks as determined by the Fire Department on a project-by-project basis.

a. Require new development in areas susceptible to wildfires to be responsible for fire prevention activities (e.g., visible house numbering and use of fire-resistant and fire-retardant building and landscape materials) and to also provide and maintain a defensible zone to inhibit the spread of wildfires and prevent loss of structures.

3E-3.15 Road Access. Maintain all access roads and driveways so as to ensure the Fire Department safe and expedient passage at all times.

ENERGY

3E-3.16 Energy Conservation Standards. All new development shall comply with the energy conservation standards in the City's most recently adopted Climate Adaptation Plan.

3E-3.17 City Energy Efficiency. Continue to expand municipal energy efficiency programs to reduce building energy use to a defined level per the City's most recently adopted Climate Adaptation Plan. Provide incentives for departments to meet efficiency goals.

3E-3.18 Renewable Energy.

a. Adopt City renewable energy objectives as defined within the Climate Action Plan. -
b. Implement energy strategies to increase the local use and production of renewable energy.

3E-3.19 Local Energy Sources. Encourage development of locally generated and managed energy resources by investigating the uses of methane, solar, wind and wave technologies and others and also seeking funding for pilot projects.

a. Promote privately-owned renewable energy sources where feasible.

3E-3.20 Demonstration Projects. Provide research and demonstration projects related to renewable energy sources or strategies at the Santa Cruz Wharf and elsewhere, and participate in mutually cooperative relationships and ventures with other agencies and organizations.

TRAFFIC & AIR QUALITY

3E-3.21 Alternative Transportation Improvements. Promote alternative transportation improvements with TSM strategies, road improvements, and widening/expansion projects that can achieve an acceptable level of service and/or reduce vehicle miles traveled.

3E-3.22 Alternative Transportation Incentives. Encourage and support efforts of developers or employers to provide incentives to enhance the use of alternative transportation.

a. Consider reducing parking requirements for employers, developments, businesses, and major destination centers that implement effective long-term alternative transportation programs without reducing coastal access opportunities.
b. Investigate ways to mitigate potential parking impacts on neighborhoods, possibly through residential parking permit or management programs.

3E-3.23 Support Air Pollution Control Strategies. Support Monterey Bay Unified Air Pollution Control District (MBUAPCD) air pollution control strategies, air quality monitoring and enforcement activities, and require new development projects to implement applicable MBUAPCD control measures.

3E-4 Public Works Facilities and Infrastructure

3E-4.1 Public Works Projects. Any public works project in a natural area (see 2030 General Plan Land Use Map) shall be consistent with adopted management plans (including approved Public Works Plans) or be limited to the following: maintenance and replacement of existing facilities; maintenance of existing or restoration of previously dredged depths in existing flood control projects and navigation channels; replenishment of beaches using dredged materials placed within the reaches of normal waves; incidental public service projects (including but not limited

to the burying of cables and pipes, inspection of piers, and maintenance of existing intake and outfall lines); and nature studies or similar resource dependent activities.

WATER SUPPLY & FACILITIES

3E-4.2 Wastewater Recycling. Develop and implement wastewater reclamation activities (including the encouragement of private on-site wastewater reclamation) for irrigation and other uses to help conserve the City's water supply.

3E-4.3 Maintain Water System. Enhance the water distribution system by continuing to maintain and upgrade the water lines, pumping stations, and storage tanks as necessary to meet required delivery pressures and fire flow requirements.

WASTEWATER TREATMENT & FACILITIES

3E-4.4 Sewer Line Extension. Extend no sanitary sewer services beyond the eastern branch of Moore Creek Canyon above Highway 1 and the City's western boundaries and Younger Lagoon below Highway 1 except for a leachate line serving the landfill site.

3E-4.5 Prohibit Sewer Connections to Landfill Leachate Line. Prohibit sewer hook-ups to the City's leachate line, with the exception of wastewater from Wilder Ranch State Park if consistent with the policies of and permitted by Santa Cruz County and the Coastal Commission.

3E-4.6 Maintain Wastewater System. Maintain and upgrade the wastewater collection and treatment system in an environmentally sound and fiscally efficient manner, as needed, due to increases in population, unit flows, and changes in land use.

3E-4.7 Wastewater Treatment Capacity. Re-examine and reallocate wastewater treatment capacity allocations between the City and County as the need arises.

3E-4.8 Sewer Line Replacement. Repair or replace sewer lines that have deteriorated past the point of useful service or have been identified as deficient under current flow conditions. New pipelines should be sized to handle future flow for development consistent with the adopted General Plan and certified Local Coastal Program.

Area-Specific Development Policies

IN THIS SECTION:	IN CHAPTER V:	ATTACHED BY REFERENCE:
	⊙ Beach/South of Laurel ⊙ Ocean Street Area Plan ⊙ San Lorenzo Urban River Plan ⊙ Santa Cruz Harbor ⊙ State Parks Plans	

This page intentionally left blank.

III-F. BEACHES AND BLUFFS ADAPTATION

IN THIS SECTION:

Coastal Act Policy and Guidance Overview

COMMISSION GUIDANCE RELATED TO CLIMATE CHANGE AND SEA LEVEL RISE (ADOPTED 8/2015; SCIENCE UPDATE 11/2018)

- ❑ Use science to guide decisions (30006.5; 30335.5)
  - Address sea level rise as necessary in planning and permitting decisions
  - Use best available science to determine locally-relevant and context-specific projections for all stages of planning, project design, and permitting review.
  - Recognize scientific uncertainty by using scenario planning and adaptive management techniques
  - Use a precautionary approach by planning and providing adaptive capacity for the higher range of possible sea level rise
- ❑ Minimize Coastal Hazards through Planning & Development Standards (30253; 30235; 30235; 30001; 30002.5)
  - Avoid significant coastal hazard risks to new development where feasible
  - Minimize hazard risks to new development over the life of authorized structures
  - Minimize coastal hazard risks and resource impacts in redevelopment decisions
  - Use a precautionary approach by planning and providing adaptive capacity for the higher range of possible sea level rise
  - Ensure property owners understand and assume all risks, and mitigate the coastal resource impacts, of new development in hazardous areas
- ❑ Maximize protection of Access, Recreation, and Key Coastal Resources (Chap 3 Policies)
  - Provide maximum protection of coastal resources in planning and regulation
  - Maximize natural shoreline processes; minimize perpetuation of shoreline armoring
  - Recognize sea level rise will move public trust boundary inland; protect trust lands from loss
  - Address other potential coastal resource impacts from hazard mitigation decisions

- Address cumulative impacts and regional context of planning and permitting decisions
- Mitigate unavoidable resource impacts from permitting and shoreline management decisions
- Use best available information on resource valuation when mitigating coastal resource impacts

❑ Maximize Agency Coordination and Public Participation (Chap 5 Policies; 30006, 30339; 30500, 30503; 30711)
- Coordinate planning and regulatory decision-making with other appropriate local, state, and federal agencies; support research and monitoring efforts
- Consider doing vulnerability assessments and adaptation planning at regional level
- Provide for maximum public participation in planning and regulatory processes

❑ Provide coastal access:
- Development shall not interfere with public's right to access to sea (30211)
- Distribute public facilities (including parking) throughout area to mitigate impacts, social and otherwise, of overcrowding or overuse by the public of any single area (30212.5)
- Regulate time, place, manner of public access taking into account topography, sensitive resources and private property rights (30214)

❑ Maintain and enhance public access to coast-transit service, non-auto alternatives (30252)

❑ Use Science to Guide decisions
- Address sea level rise as necessary in planning and permitting decisions
- Use best available science to determine locally-relevant and context-specific projections for all stages of planning, project design, and permitting review.
- Recognize scientific uncertainty by using scenario planning and adaptive management techniques
- Use a precautionary approach by planning and providing adaptive capacity for the higher range of possible sea level rise
- Design adaptation strategies according to local conditions and existing development patterns

Introduction

The primary purpose of this Subchapter in the City's Local Coastal Program is to identify and integrate shoreline adaptation strategies and supportive policies that respond to climate change and sea level rise into land use planning and program requirements for the coastal zone within Santa Cruz city limits. This approach is consistent with the California Coastal Act and the *California Coastal Commission Sea Level Rise Policy Guidance*, first adopted on August 12, 2015, with a subsequent science update adopted on November 7, 2018. To support understanding of the issues regarding shoreline sea level rise hazard adaptation options, this Subchapter provides a brief overview of the background and framework of the City's multi-year effort to understand and respond to climate change, including development of the Climate Adaptation Plan and the Local Hazard Mitigation Plan. Also included is a discussion of the goals, key aspects, and takeaways of the City's most recent effort, the Resilient Coast Santa Cruz Initiative (Resilient Coast Initiative), to assess the effects of sea level rise on its coastline, and take the first steps to develop appropriate climate change adaptation strategies and policies to address those effects. The

results of the Resilient Coast Initiative (2018 to 2021) provide the primary basis for the beaches and bluffs adaptation policies included in this Subchapter.

Following review of the City's ongoing response to climate change and sea level rise, the majority of this Beaches and Bluffs Adaptation Subchapter contains two major elements: 1) new and revised LCP policies to address and incorporate the broad results and adaptation approaches that emerged from the Resilient Coast Santa Cruz Initiative; and 2) policy guidance for future refinement and incorporation of evolving adaptation strategies for individual subareas of the Santa Cruz coastline into the City's LCP, including emerging strategies such as "living shorelines" and "managed retreat". These adaptation strategies are direct outcomes of the Resilient Coast Initiative, partially funded through grants by Caltrans and the California Coastal Commission, and undertaken in partnership with both state agencies. Key staff members in these agencies have expressed strong interest in working together with the local Santa Cruz community over the next few years to develop improved sea level rise monitoring and adaptation policy tools, both for the City of Santa Cruz and to provide an example for other coastal jurisdictions experiencing similar climate-related change in coastal California.

Overview of Climate Adaptation Planning Efforts

The science of climate change and potential policy directives to address it are constantly evolving. For over a decade, the City of Santa Cruz has been proactive in studying and taking steps to reduce impacts from and respond to climate change. The City established its *Climate Action Program* in 2007, hiring a Climate Action Coordinator to focus the City's climate response efforts. In June 2007, key General Plan-level goals and policies on climate change were accepted by the City Council, including a goal to reduce community-wide greenhouse gas emissions by 30% by 2020 (compared to 1990 levels), 80% by 2050, and for all new buildings to be "emissions neutral" by 2030. These goals and policies served as the basis for the City's first Climate Action Plan and other planning documents, which together form the whole of the City's ongoing understanding of climate change and the basis of its response. These plans, discussed below, include: the City's *Climate Action Plan* (adopted in 2012), *Local Hazard Mitigation Plan* (first adopted in 2007, last updated 2018), *General Plan 2030* (adopted 2012), the *Climate Adaptation Plan* (adopted 2018), and the *West Cliff Drive Adaptation & Management Plan* (approved by the City Council in 2021; pending Coastal Commission review in late 2021), as well as this updated Local Coastal Program.

Climate Action Plan

The *Climate Action Plan* is designed to engage and guide sectors of the community to take action to reach the City's climate change goals, and also implements related policies of the City's *2030 General Plan*. The *Climate Action Plan* is managed by the Sustainability and Climate Action Manager, who is also responsible to research municipal level best climate change practices; coordinate volunteer and consultant resources; coordinate City participation in regional climate change initiatives; evaluate proposed actions, programs or strategies; and communicate the City's climate change efforts to City commissions, the City Council, the general public, and other stakeholders. The *Climate Action Plan* was first adopted in 2012 and recommended actions for the City through 2020 and beyond to reduce greenhouse gas (GHG) emissions by 30% from an established 1990 baseline, a reduction that was achieved between 2015 and 2019. The *Climate Action Plan* is a tool to guide the community in responsibly addressing climate change; however, it does not dictate a limit on future development or economic growth within Santa Cruz. The *Climate Action*

Plan is a strategy for sustainable City growth to meet GHG reduction goals while allowing for the public and private development and redevelopment that will keep Santa Cruz a vibrant and livable community.

Santa Cruz has been at the forefront of coastal climate change resiliency planning. While the *Climate Action Plan* focuses on GHG emissions reduction, it acknowledges that the warming of the climate system is indisputable, as is evident from observations of increases in global average air and ocean temperatures, widespread melting of "permanent" snow and ice, and rising global average sea levels. The *Climate Action Plan* further acknowledges that climate change will impact the City's day-to-day weather patterns and likely focus precipitation into shorter and more extreme bursts, increasing chances of flash flooding and storm-caused erosion along the coastal bluffs in the coming decades. Sea level rise is of particular concern for the Local Coastal Program. Since 1900, the average global sea level has risen about three inches. Over the next 100 years, sea level is projected to rise significantly more, and at an accelerating rate, with a range of scenarios of up to 10 feet, as provided in the Coastal Commission's *Sea Level Rise Guidance* and the City's *Climate Adaptation Plan*. This does not mean Santa Cruz will necessarily experience the maximum projected sea level rise. Many factors, including local geography, play a role in the specific effects and hazards of sea level rise that will be experienced by a community. But projected sea level rise will likely cause increasingly severe impacts on coastal homes, businesses, and bluffs, as well as potentially in the downtown and the City's other low-lying areas.

In January 2021, the City, led by the Sustainability and Climate Action Manager, embarked on a year-long, equitable, community-driven process to develop *Climate Action Plan 2030* as a guide for the next ten years.

General Plan 2030

During the same timeframe as development of the original *Climate Action Plan* (2012), the City's General Plan was updated from the combined *General Plan and Local Coastal Program 1995*. This stand-alone *City of Santa Cruz 2030 General Plan* was also approved by the City Council in 2012, just as City's significant and focused consideration of climate change adaptation was getting underway. Policy language in the *2030 General Plan* particularly relevant to this LCP Subchapter includes Policy NRC4.5, stating the City's intention to minimize impacts of future sea level rise, and Policy NRC4.5.1, directing completion of a future vulnerability study and climate change risk assessment. Broadly, this language supports the ongoing climate adaptation planning process, the Resilient Coast Initiative, and future development of detailed City shoreline adaptation strategies. Also of particular importance is General Plan Policy PR3.3, "Protect, maintain and enhance accessible coastal and open space areas," including the following sub-policies:

> PR3.3.1 Protect coastal bluffs and beaches from intrusion by non-recreational structures and incompatible uses.
>
> PR3.3.2 Ensure that development does not interfere with the public's right to access the ocean (when acquired through use or other legislative authorization).

PR3.3.3 Require new development and public works projects to provide access from the nearest public roadway to the shoreline and along the coast, except where it is inconsistent with public safety or protection of fragile coastal resources or where adequate access exists nearby.

PR3.3.4 Maximize public access and enjoyment of recreation areas along the coastline.

While the City's *2030 General Plan* has been approved by the City Council and in place for almost a decade, the companion effort to restructure and fully update the Local Coastal Program portion of the combined *General Plan and Local Coastal Program 1995* has been subject to delays, due in part to necessary scientific data collection and other City priorities. The development of this Beaches and Bluffs Adaptation Subchapter, an outgrowth of the Resilient Coast Initiative, served as a catalyst for renewed efforts to update and finalize a 2018 Administrative Draft Local Coastal Program document. The *Administrative Draft LCP* incorporated policy direction from the *2030 General Plan,* as well as comments and suggestions from earlier detailed review by City and local Coastal Commission staff; however, the extended review period has provided an excellent opportunity to include and highlight the City's recent progress in climate and sea level rise adaptation planning and insights gained through the Resilient Coast Initiative. This Initiative resulted in the initial development of adaptation strategies for the City's coastline which have provided the basis for policies included below through a collaborative process that included two scientific consultant teams, state and local Coastal Commission staff, state and local government staff, key stakeholders, and the community, from 2019 through the end of 2021.

Work on the City's next General Plan update is anticipated to begin in approximately 2025, following availability of detailed local level data from the 2020 United State Census. During that process, the City will also review and likely amend this Local Coastal Program as needed, including to be consistent with any changes in climate policy established by the General Plan update effort, as well as through any intermediate updates of the *Climate Action*, *Local Hazard Mitigation,* or *Climate Adaptation Plans*. These integrated planning documents must all respond to improving science, increased data availability, and changing regulatory requirements. Federal and State climate change and sea level rise policies are still relatively early in development. Within the next ten to twenty years, federal and State law may impose a variety of new requirements on local jurisdictions, and it will benefit the City to be positioned to respond quickly.

Local Hazard Mitigation Plan

In 2007, the City completed and adopted its first *Local Hazard Mitigation Plan (2007-2012).* Local hazard mitigation planning is an ongoing effort to evaluate the risks posed by different types of hazards and engage the City and the community to identify steps to reduce these risks. In 2009, new hazard maps were generated by the Pacific Institute based on updated projections of climate change and sea level rise, and the City initiated an effort to integrate this information into City plans, well ahead of the FEMA requirements for the City's first *Local Hazard Mitigation Plan (LMHP)* to be updated after 5 years in 2012. With a FEMA planning grant, the City initiated the first LHMP update in the State of California to include sea level rise projections and adaptation strategies. With a consultant team, scientists, and staff at the University of California, Santa Cruz, the City completed a *Climate Change Vulnerability Assessment* in 2011. Using this *Assessment*, strategies to respond to identified risks were developed as part of the 2012 *Climate Adaptation Plan* process (discussed below) and integrated into the *LMHP* 5-year update. This *Local Hazard Mitigation Plan Update (2012-2017)* was formally adopted by the City Council on June

24, 2014, two years after the approval of the City's *2030 General Plan* in 2012, although it had already been approved by the California Office of Emergency Services and FEMA.

In 2017, with new scientific data, modeling, and methods, the City updated its Climate Vulnerability Study and contracted for the City's first Sea Level Rise (SLR) Vulnerability Analysis. This SLR Vulnerability Analysis would inform the next 5-year update of *the Local Hazard Mitigation Plan* as well as the *Climate Adaptation Plan* and form a basis for the Resilient Coast Initiative (described below). The *LMHP (2017-2022),* approved by the City Council on October 9, 2018, has several primary goals for reducing disaster risk in Santa Cruz: 1) Avoid or reduce the potential for loss of life, injury, and economic damage to Santa Cruz residents from earthquakes, wildfires, floods, drought, tsunami, coastal erosion, landslide, and dam failure; 2) Increase the ability of the city government to serve the community during and after hazard events; 3) Protect the City's unique character, scenic beauty, and values from being compromised by hazard events; 4) Encourage mitigation activities to increase the disaster resilience of institutions, private companies, and systems essential to a functioning Santa Cruz; and 5) Continue to monitor effects of climate change as outlined in the City's *Climate Adaptation Plan*.

Hazard mitigation measures in the City's *LHMP (2017-2022)* that are particularly relevant to this Beaches and Bluffs Adaptation Subchapter include: Measure B-2: "Protect and preserve coastline infrastructure through permit review;" and Measure B-3: "Protect and preserve coastline and infrastructure through coastal restoration efforts - West Cliff Drive." These measures, in part, reflect the *LHMP's* Coastal Erosion Goal 3: to "protect and preserve current infrastructure." In the near term, the City's general adaptation policies for its beaches and bluffs will be focused on this Coastal Erosion Goal. However, an emerging objective of future coastal adaptation planning is to move the City away from emergency response designed primarily to protect existing development and toward planned and coordinated adaptation strategies (e.g., redesign of existing infrastructure, relocation of development).

In the future, the *LHMP* and *Climate Adaptation Plan* must be integrated and consistent (as per CA SB 37). In 2015, CA SB 379 also required a City's General Plan Safety Element to be reviewed and updated as necessary to address climate adaptation and resiliency strategies applicable to the local jurisdiction whenever the LHMP is adopted or updated. Projects to preserve coastline and infrastructure in place (i.e., armoring) may not be consistent with future, longer-term coastline adaptation policies. The next five-year update of the *LHMP* (likely to be developed concurrently with the *Climate Adaptation Plan* update process planned to start in 2022) should reflect policies in this LCP Update as informed by the Resilient Coast Initiative outcomes, including new and revised objectives and measures related to coastal flooding and erosion, and any new State guidance or regulations. As noted below, future hazard mapping and data collection for the *LHMP* Update could be effectively coordinated with efforts to develop medium- to long-term coastal adaptation strategies to include in a future Resilient Coast Adaptation Plan (RCAP). Development of the RCAP (detailed below), is included as one of this Chapter's key policies and should be based on the City's most recent understanding and direction on coastal resilience and be based on the best available science. To support these efforts, the City expanded its GIS database mapping of critical facilities, hazard risk areas, and sensitive habitat areas. Data from these mapping efforts and other coastal monitoring programs now under development will be used to reassess hazards that present the greatest risk to the City in the future, including sea level rise.

Climate Adaptation Plan

Santa Cruz will experience impacts of nearly all known effects of climate change, including more severe weather, sea level rise, depletion of fresh water resources, increased wildfire risk, and erosion of the coastline. In 2011, the City outlined its municipal response to significant potential impacts from a changing climate and began to actively coordinate regional adaptation planning. After extensive public outreach, the City adopted its first *Climate Adaptation Plan* in December 2011 to identify and quantify the most significant climate change risks and vulnerabilities and provide a guide for decision-makers in protecting the City's natural and built environments, residents and visitors, economic base, and overall quality of life. This *Plan* was coordinated with the five-year update of the *2007 LHMP,* and the scientific data, analysis, and community outreach informed both; however; the *LHMP Update (2012-2017),* including the *Climate Adaptation Plan* as an Appendix, was not formally approved by the Council until 2014.

In early 2017 as extensive new scientific data, modeling, and methods became available, the City began preparation of a *Climate Adaptation Plan* Update together with the 5-year update of the *Local Hazard Mitigation Plan (2012-2017)*. A Climate Vulnerability Study update was prepared by City staff for all non-coastal impacts, and a consultant team was contracted to conduct the City's first Sea Level Rise Vulnerability Analysis with three key objectives:

- Identify critical coastal infrastructure (municipal, residential, and commercial) vulnerable to sea level rise and estimating when those risks may occur;
- Identify specific hazards (coastal flooding, sea level rise, erosion) that pose risks to various infrastructure; and
- Define appropriate strategies to address these risks.

In an innovative part of the *2017 Climate Adaptation Plan Update*, the City also worked with an academic collaborator to assess social vulnerability to climate change, building a score through key indicators such as presence and degree of: crime; elderly, disabled, and low income populations; and those for whom English is a secondary language. The overlay of social vulnerability study results with potential sea level rise impact hazard zones provided additional insight into appropriate adaptation strategies for areas based on both social vulnerability and coastal geography.

The City's Climate Adaptation outreach campaign was launched in November 2017 at a "City Hall to YOU!" event in the Seabright area. Public concerns included coastal and river flooding, erosion and landslides, and saltwater intrusion, all of which are projected to be exacerbated by future climate change and sea level rise. Both flooding and extreme storms are predicted to occur more frequently due to climate change and may combine synergistically with sea level rise. Extreme coastal storms can create storm surges that increase tidal elevations and coastal flooding levels. Details of intense storm events combined with predicted sea level rise scenarios are fully described in the *2017 Sea Level Rise Vulnerability Analysis*, part of the *Climate Adaptation Plan Update,* and in the *LHMP (2018-2023),* both adopted in 2018. The *Climate Adaptation Plan* update of 2017-18 included several new features:

- The City's first Sea Level Rise vulnerability assessment, producing climate hazard map projections at years 2030, 2060, and 2100.
- The City's first social vulnerability assessment, producing maps with census blocks deemed the most socially vulnerable as they intersect with climate hazard map projections.

- Updated non-coastal impacts and progress since adoption of 2011 Climate Adaptation Plan.
- Updated and prioritized adaptation strategies.
- Tailoring of adaptation strategies around three time scenarios/time horizons.

The *Climate Adaptation Plan Update (2018-2023)* was adopted by the City Council on October 9, 2018 and contains significant detailed information regarding the various scenarios and risks related to sea level rise in several timeframes, particularly detailed based on the *2018 Sea Level Rise Vulnerability Assessment*. The coastal climate vulnerability maps identified hazard zones for each climate scenario for three planning time horizons (2030, 2060, and 2100) which respond to California Coastal Commission Guidance issued in 2015 that the evaluation of sea level rise (SLR) impacts should be scenario-based analyses, and that coastal communities should evaluate the impacts of the highest water level conditions that are projected to occur in the area. While sea levels are modeled to reach specific levels in three time horizons, these horizons serve to create an "envelope of impacts" and are used as general guidelines for planning purposes. Both the *LHMP Update 2018-2023* and the *Climate Adaptation Plan Update 2018-2023* are "living plans," regularly reviewed and updated to include the City's progress.
As SLR rates continue to increase and modeling techniques become more accurate, sea level rise must be periodically monitored and projected changes incorporated into future *Climate Adaptation Plan* updates.

As of 2021, the *Climate Adaptation Plan Update 2018-2023* remains an appendix to the latest *LHMP Update 2018-2023*. This allows the City to integrate all the City's climate adaptation policy language and ensures that the *Local Hazard Mitigation Plan* meets State requirements and that all the City's climate adaptation efforts are fully aligned.

Overview of the Resilient Coast Initiative

In late 2018, following the updates of the City's *Climate Adaptation* and *Local Hazard Mitigation Plan* sand supported by the results of the 2017 *Sea Level Rise Vulnerability Analysis*, the City embarked on the Resilient Coast Santa Cruz initiative. This Initiative included two separate but integrated projects to address the impacts of sea level rise on the City's coastline and inform Santa Cruz residents and visitors about the coastal vulnerabilities of worsening storms, flooding, and cliff erosion on shoreline infrastructure and development. A particular focus was to engage the public, other stakeholders, and traditionally underrepresented groups on these issues to identify priorities and create a community vision for resilient coastal management. The first project was to define near-term coastal access maintenance and improvement projects for the City's West Cliff area and develop an initial sea level rise adaptation and management plan along West Cliff Drive between Cowell Beach and Natural Bridges State Beach. The companion project was to develop longer term adaptation strategies to support protection of beaches and public access along the City's entire coastline to incorporate as policies into this Local Coastal Program.

The West Cliff planning effort was focused on the impacts of sea level rise on transportation, coastal access, and shoreline infrastructure on West Cliff Drive and its parallel, multi-use recreational trail on the seaward side of the roadway. The emphasis was on immediate and near-term project proposals to respond to existing and ongoing maintenance and erosion issues. The second project had a similar scope, but one that both included and extended beyond the West Cliff bluffs to all of the City's beaches

and shoreline development and also explored the full range of near, medium, and long-term adaptation strategies for different identified sections of the City's coastline (e.g., West Cliff pocket beaches, Natural Bridges State Beach, Main and Cowell beaches, and Seabright Beach (Twin Lakes State Beach).

The West Cliff Drive planning work was funded in part by a grant from Caltrans, while the broader effort of the Resilient Coast Santa Cruz Initiative was funded in part by a grant from the Coastal Commission. It should be noted that the West Cliff Drive adaptation and management plan, in particular, was considered a long-awaited response to a key policy in the 1995 *General Plan/Local Coastal Program*:

- *PR 1.7.6 Develop and implement an integrated design, land use, recreation, cliff stabilization, and landscaping plan for West Cliff and East Cliff Drives to enhance public access, safety and recreational enjoyment in these areas.*

The dual nature of the scope of the Resilient Coast initiative provided a broad, integrated look at the City's entire coastline, but also built upon the City staff and public's experiences with bluff top erosion and maintenance, emergency repair, and the effects of climate change and sea level rise on coastal access locations along West Cliff Drive, which served as real world case studies. This section discusses several key components of the multi-year Resilient Coast Initiative (2018-2021) that provide critical background information for the Adaptation Policies found below in this Subchapter. These include: Objectives, Adaptation Strategies, Adaptation Pathways, Triggers and Monitoring, Results and Next Steps, and Funding Strategies. Full information, project analyses and interim reports can be found on the City's Resilient Coast Santa Cruz website.

Resilient Coast Initiative Objectives

The City's proposal for the Resilient Coast Initiative identified five objectives:

1) Document how decisions regarding protection and/or managed retreat can alter coastal resources and impact residents and visitors exposed to risk, particularly socially vulnerable communities.

2) Identify fiscal, policy, and engineering strategies to mitigate any secondary consequences and establish "triggers" upon which strategies should be implemented.

3) Use 21st Century tools to engage the community to visualize past and future coastline alignments and coastal resources to evaluate the tradeoffs of programmatic and policy options.

4) Integrate the results into recommendations for policies and actions the City should undertake as part of an LCP update, to ensure sustainable coastal access and beaches.

5) Complete and adopt an LCP update with near term climate change and sea level rise adaptation policies, and an approach to develop adaptation strategies for the medium to long term.

From the start, the City's Resilient Coast Initiative project team committed to work in close consultation with the local Coastal Commission staff in the Central Coast office as well as a Sea Level Rise Coordinator at the State level, a technical advisory group, and members of the public throughout the multi-year effort with special focus on historically under-served and underrepresented community groups, to best identify and incorporate appropriate policies and programs for sea level rise and coastal adaptation into

the Local Coastal Program through a targeted LCP Amendment. Early outreach with the community and other stakeholders highlighted new hazard mapping of projected tidal impacts from sea level rise in three planning horizons (near-, medium-, and long-term), and the array of adaptation planning strategy tools available to tailor community response in different coastal situations (e.g., broad, low-lying sandy beach or 30-foot high coastal bluffs). Some of these are summarized below, with greater detail in a wide range of technical documents available on the Resilient Coast Santa Cruz webpage).

Adaptation Strategies

In recent years, adaptation guidance documents have been developed to help local communities better understand current and future climate change hazards and the array of alternative adaptation strategies. Adaptation strategies are often classified as being within one of three main categories (Accommodate, Protect, or Retreat) with many strategies to help achieve these different objectives.

Accommodate: Require existing development or new development to be designed or redesigned to become more resilient to the projected hazard. For example, designing new houses to be built on a raised foundation or with a non-habitable first floor to allow flow-through of sea flood waters in high tide or storm conditions, and accommodate sea level rise.

Protect: Use engineered structures or other measures to protect and defend developments (or other manmade or natural resources) in their current locations. For example, concrete and soil nail wall armoring of coastal bluffs and rip-rap revetments at the base of shoreline cliffs provide protection against cliff erosion by storm waves of increasing force, allowing bluff top visitor amenities like trails and benches, and private development such as houses, to remain in place on the bluff tops for longer than would have been likely without these engineered structures. Many areas of both soil nail wall armoring and rip-rap revetments currently exist along West Cliff Drive beaches and bluffs.

Managed Retreat: Require relocation or removal of existing infrastructure and development, and limit new construction within defined hazard areas. Managed retreat is also known as planned relocation and can involve both public and private property. While the City is not actively pursuing managed retreat in the near term, managed retreat may be considered along some portions of the City's coastline in the medium to long term, and would most likely consist of relocation of some public facilities and infrastructure inland. For example, Natural Bridges State Beach is under State Parks Department jurisdiction and is an area where there is support for managed retreat, consistent with State Parks coastal guidance. A bluff top parking area with overlook on the seaward side of the roadway is at risk of coastal erosion in the long term, and inland relocation of that infrastructure is likely the appropriate strategy. Also, preliminary discussions regarding possible long-term hazards during the Resilient Coast Initiative highlighted the possible future need to proactively relocate the Lighthouse at Lighthouse Point further inland at some point in the future, if erosion of the Point continues to progress and if an existing sea cave within the Point further erodes the cliff under the Lighthouse. The *West Cliff Drive Adaptation and Management Plan*, approved by the City Council in 2021, includes evaluation of Lighthouse Point for geotechnical soundness and assess adaptation approaches, including managed retreat, in 2026.

Adaptation Pathways

The Resilient Coast Initiative process identified near and longer term adaptation strategies for coast and clifftop amenities and the West Cliff Drive transportation corridor, as well as other beach segments, based on community input, technical committee guidance, and City priorities. These strategies were

organized into "decision tree" frameworks to guide selection of individual adaptation strategies and several alternative adaptation pathways for each area. An adaptation pathway provides a vision and logical progression from one strategy to the next for managing climate risks and sea level rise through a sequence of adaptation strategies over time, with transitions triggered by passing identified thresholds for potential impacts; the move from one strategy to another is initiated by a "trigger" such as a change in social, environmental, or local hazard conditions. By defining a trigger (e.g., reduced beach depth measurement) as a condition to spur planning rather than a fixed time horizon (e.g., the year 2050), an adaptation pathway can better manage the uncertainty sea level rise effects, consider any secondary consequences, and change the approach if needed, as actual coastal erosion impacts occur.

Adaptation pathways can be phased incrementally, or in some cases concurrently, where appropriate for a given location. Multi-year adaptation pathways also have the important benefit of an extended timeframe for extensive community dialogue on refinement of individual strategies, in contrast to mitigation of emergency hazards as they occur (e.g., storm-eroded coastal pathway requires narrowing or even closure). Adaptation pathway planning also allows the community the opportunity to express a preferred long-term future for the coastline that may change with new information, scientific data, and regulatory requirements. Meanwhile, the City can work to identify funding needs, explore policies and programs needed to implement adaptation strategies, and design effective monitoring programs to support identified potential triggers. This approach is flexible so the City is not locked in to a single approach but can adapt with new information and data to address likely future impacts.

Triggers and Monitoring

A trigger represents a point when action must be taken to address coastal hazard-related vulnerabilities before impacts reach a state of emergency and should be based on measurable indicators that can be monitored to initiate planning, permitting, and/or the implementation of adaptive measures. Therefore, selection of an appropriate trigger should provide enough lead time to plan for and implement an adaptation strategy before projected vulnerabilities become severe. Triggers are an important component of the implementation of adaptation pathways and climate adaptation plans. Adaptation plans that utilize triggers support a planning process that incorporates the inherent uncertainty surrounding the effects of climate change on coastal areas. For example, conditions at individual beach segments must be monitored to inform future adaptation decisions, and triggers may need to be reevaluated to capture advances in sea level rise science and changing conditions. Clearly, such a monitoring program can play an important role in the implementation of adaptation pathways to best limit risks to the community. Planning-level adaptation triggers can be included in a monitoring program and incorporated into this LCP. Initial identification of possible adaptation pathways and triggers in the Resilient Coast Initiative included consideration of the benefits and other consequences of each pathway, any possible disproportionate impacts to historically under-represented user groups, the relative costs and possible funding strategies, as well as mitigation measures to reduce any disproportionate impacts. These coastal area-specific adaptation pathways and review of some possible triggers are incorporated into the Beaches and Bluffs Adaptation Policies and Actions section below.

Results and Next Steps

Significant progress was made in clarifying the community's goals in adaptation planning through the Resilient Coast effort. A particular finding showed that recreation-focused actions to maintain and enhance walking, biking, surfing, and beach recreation access along the City's coastline is highly valued by both

residents and visitors, especially along the multi-use recreational trail on West Cliff Drive. With a long history and documented records of maintenance and ongoing infrastructure upgrades of the West Cliff area trail and coastal access points, and also of storm event damage over decades, a high level of specificity was possible for preferred adaptation strategies and a set of individual maintenance and construction projects for different zones along West Cliff Drive in the near term (approximately 10-12 years). These near-term actions and key projects to enhance West Cliff Drive as a visitor accessway to the coast and ocean were included in the *West Cliff Drive Adaptation and Management Plan: A Public Works Plan (WCD PWP)*, approved by the City Council in April 2021.

The *WCD PWP,* a key planning tool identified as an early objective of the Resilient Coast initiative, also served as a catalyst for discussion regarding future adaptation strategies along West Cliff bluffs for the medium to long term. A key focus for the West Cliff area was to consider how to address future erosion impacts on both the roadway and the Recreational Trail, and include completion of alternative conceptual roadway designs to maintain the Recreational Trail, potentially requiring some significant road realignment. The *WCD PWP* also incorporates detailed background information and detailed coastal condition surveys for four West Cliff sub-zones, providing the basis for initial consideration of several medium- to long-term adaptation pathway options for these areas, as described in the Adaptation Policies section below.

Some broad policies for sea level rise adaptation along the City's entire coastline were also clear and readily adoptable by the City as new or modest revisions to existing LCP policies within this Chapter. In other cases, there was not sufficient detailed data, even along West Cliff Drive, or a full enough understanding of the views of the local community and coastal visitors to determine the preferred or most cost-effective adaptation pathways at some locations, particularly in the medium to long term. Many of these situations at specific coastal locations require further scientific studies and/or tracking of information over a multi-year period to better inform the preferred adaptation pathways for these sections of the City's bluffs or beaches.

In these instances, certain aspects of the City's ongoing adaptation strategy must be rolled forward to a future date through policies that require the City to undertake further planning and community engagement. For example, identified adaptation pathways for some beach segments suggest beach sand replenishment as a strategy for maintaining beach width for coastal access; however, the precise details of this strategy (e.g., individual locations to target for replenishment, frequency of sand deposit, and preferred sources of sand materials) still need to be determined by further study. Ultimately, details of this adaptation pathway would need to identify specific triggers for when, how, and where sand would be distributed, as well as future monitoring requirements to be implemented to assure future coastal resource protection. For now, this LCP includes policies to explore funding and perform a sand replenishment study within the next few years (possibly in conjunction with scheduled updates to the *Local Hazard Mitigation* or *Climate Adaptation Plans* in 2022/23*)* to inform development of a detailed adaptation strategy. Following those efforts, the LCP could ultimately include policy language including specific minimum beach width criteria at some locations that would trigger sand replenishment actions. Alternatively, a more detailed adaptation strategy plan (see further discussion below) could be developed that might then be adopted into the LCP as an attachment or appendix.

This type of staged review and implementation of some adaptation pathways for some beach or bluff areas also allows further consideration and refinement of how the City's climate change adaptation strategy can work as a whole along the City's entire coastline. If part of the City's strategy is to rely on

continued shoreline armoring for some bluff areas in the near term, increased loss of visitor-accessible sand beach area at the foot of those bluffs may result as sea level rises over time, as is the case with some bluffs backing existing pocket beaches along West Cliff Drive. The City's evolving adaptation strategy could propose to balance the armoring pathway at that location with adaptation pathways selected elsewhere on its shoreline that promote beach depth protection and enhancement, such as an area selected for managed retreat to allow the natural ongoing erosion of the bluffs to help maintain beach depth for coastal recreation. Selection of a variety of pathways for different portions of the coastline should allow coastal access, recreational opportunities, cliff top access, and environmental benefits to be maintained as much as possible, while prioritizing the protection of critical habitat, environment processes, as well as buildings, infrastructure, and other resources needed to retain community identity, diversity, and economic vitality.

This balancing of sea level rise response adaptation pathways along the City's coastline is proposed to be coordinated through the development of a specific adaptation strategy plan, a concept included below in the Adaptation Policies section of this Chapter as the recommended Resilient Coast Adaptation Plan. Development of this policy document in the next several years will provide an opportunity for continued partnership with the Coastal Commission and continued dialogue with and education of coastal visitors and local residents, including coastal property owners, regarding the risks of sea level rise and the need for long-term adaptation planning.

Funding Strategies

The effects of climate change and sea level rise will increasingly be felt along the City's coastline and cannot be reversed. Therefore, the goal of adaptation planning is to prepare for and slow down the impacts to allow the City, property owners, and the community time to prepare and adjust. While different possible adaptation pathways will incur different costs, all will have associated costs, some of which may be quite expensive and will require focused investment to achieve the desired result. Construction of protective structures and the long-term management of sand on selected beaches have large initial construction costs and ongoing operational costs. Pathways that allow for incremental retreat of cliffs will benefit beach and ocean resources but will impact the cliff top infrastructure that is highly valued by both visitors and residents. Some infrastructure may need to be relocated and replaced at additional cost to retain coastal resources important to the local and visiting community. Many long-term adaptation strategies (such as an ongoing beach nourishment program or relocation of significant infrastructure) will have both significant construction or implementation costs and long-term maintenance expenditures.

Developing funding strategies for coastal resilience will be vital to the City's ability to appropriately respond to changing climate conditions and impacts of sea level rise. Some funding strategies especially well-suited to individual adaptation pathways were reviewed through the Resilient Coast effort. However, funding options should not be considered to be limited and further consideration should be granted to any and all possible funding sources. Funding resilience measures at the broadest scale can minimize the administrative complexity involved with multiple funds. For instance, a special district for coastal areas might be able to fund multiple necessary adaptive actions. Additionally, it is likely beneficial to coordinate with other agencies charged with ensuring and enhancing public coastal access such as the State Parks Department, Santa Cruz County, and the Port District to spread costs of projects that build resilience and provide benefits across multiple jurisdictions.

Beaches and Bluffs Adaptation Policies & Actions/Programs

This section contains policies that incorporate core components of the City's ongoing climate adaptation planning and Resilient Coast Initiative in order to address sea level rise and broad aspects of adaptation planning along the City's beaches and bluffs. First, the City's coastal goals developed through the Resilient Coast initiative are set forth. Second, adaptation policies that apply generally to the City's entire coastline and are sufficiently supported by existing science and collected data are included as updates in this LCP. Third is a review of different adaptation policy options that were considered in developing conceptual adaptation pathways for the different segments of the coast as identified and used throughout the Resilient Coast effort. Some of these policies may be addressed in this LCP or another plan (e.g., the *West Cliff Drive Adaptation and Management Plan)* and some will require additional scientific study and data collection for an appropriate policy and/or adaptation pathway to be identified, as well as implementation timeframe, triggers, and monitoring requirements. Last is a discussion of the key elements and process for development of the Resilient Coast Adaptation Plan, described briefly above, which will be the critical planning tool for staged adaptation strategies for portions of the coast with different existing and changing conditions, as informed and prioritized by public outreach and ongoing coordination with the City's coastal partners including the County of Santa Cruz, the State Parks Department, and the Coastal Commission.

Coastal Resource and Management Goals

Over the past decades, the City has made significant strides in understanding climate change and adaptation planning. New policy language in this Chapter has been added to support the goals and objectives of the City's *Climate Adaptation Program* also incorporated into the City's *2030 General Plan*, the *Climate Action Plan,* and *Local Hazard Mitigation Plan*. Also, coastal resource and management goals identified by the City, community, and the Coastal Commission during the Resilient Coast initiative (2108-2021) form the basis for overarching policies within this Subchapter, and are incorporated into other relevant sections of this LCP. These goals were developed and refined in December 2019 by the Resilient Coast project team, a partnership including the City of Santa Cruz and the California Coastal Commission, a technical advisory committee of stakeholders and the community, as part of the Resilient Coast Santa Cruz planning effort, and are included below.

COASTAL RESOURCE GOALS

1. Maintain/protect beach width where feasible.

2. Ensure some beaches distributed along the length of the City coastline remain accessible and preserve public and private visitor serving facilities in order to minimize increases in visitor densities on specific beaches and in collaboration with other agencies holding jurisdiction.

3. Maintain a distribution of beach access points by encouraging a variety of transportation options along the entire city coastline.

4. Minimize coastal habitat loss and maintain ecological connectivity.

5. Address needs of underserved people of the community, both local residents and visitors with respect to accommodation, little to no cost access and recreation, day use parking, transportation, and cultural and spiritual uses.

6. Maintain public safety on beaches and when accessing beaches. Work with marine safety staff to upgrade priority marine rescue egress locations.

7. Accommodate diversity of recreational activities for a wide range of users with differing abilities.

8. Maintain and enhance water quality to the extent feasible.

9. Encourage, enhance, and maintain regional sediment supply to the coast including sand management programs that enhance beach and coastal recreation while partially mitigating some impacts from coastal armoring.

COASTAL MANAGEMENT GOALS

1. Minimize coastal armoring consistent with Coastal Act section 30235 and other policies of the safety element and subarea plans.

2. Reduce beach area loss from placement footprint of shoreline protection structures.

3. Prioritize living shoreline adaptations.

4. Monitor coastal access infrastructure and beach width routinely in the long-term, and in response to extreme storm events, monitor how coastal change is impacting coastal use.

These goals formed the basis for the Resilient Coast Initiative, and are now the foundation for this Chapter's policies. Further, they incorporate the City's direction for adaptation planning to address the effects of climate change and sea level rise, and have informed the adaptation pathways development and *West Cliff Drive Adaptation & Management Plan* project recommendations. This LCP contains guidance to identify a preference for adaptation strategies that prioritize preservation of coastal access and coastal-dependent recreation. This is initially achieved by inclusion of overarching policy language in support of the above-listed goals, and also by establishing parameters and a timeframe for subsequent development of a more detailed and more location-specific and data-driven Resilient Coast Adaptation Plan (RCAP?). The Resilient Coast Adaptation Plan will serve as the vehicle to further develop preferred adaptation pathways and trigger mechanisms for individual beach and bluff locations along the City's coastline.

The extent to which coastal hazard adaptation actions are not specified in this Chapter but are instead addressed in future planning efforts has been thoroughly discussed and will continue to be coordinated with local and state Coastal Commission staff. Through the ongoing adaptation planning efforts described in this Chapter, the Coastal Commission remains a valued partner in the City's response to sea level rise. Both local and state level Coastal Commission staff have concurred with the City's approach to extend the timeframe for consideration of the appropriate adaptation pathways for several of the City's coastal locations, especially in the longer term, to allow for more targeted scientific data collection,

analysis, deliberation and additional public engagement to inform more detailed and precise adaptation pathway decisions.

It should be noted that many elements of the City's overall Resilient Coast adaptation strategy of respecting coastal resource and management goals are already incorporated in this LCP, including broad policies, many of which have been in place for decades. The Resilient Coast Initiative conceptualized that in addition to adaptation policies in this LCP, more specific implementation policies to promote individual adopted strategies for specific coastal locations within the City would ultimately be included in two interrelated plans: 1) the *West Cliff Drive Adaptation and Management Plan: A Public Works Plan* focused on City projects and maintenance work along West Cliff Drive for the near term (approved by the City Council in Spring 2021), and 2) a Resilient Coast Adaptation Plan to outline and establish preferred Adaptation Pathways for critical locations along the City's coastline identified as vulnerable to climate change and sea level rise to be completed within the next few years. While recognizing the detailed near-term adaptation pathways initially established for West Cliff Drive through the *West Cliff Drive Adaptation and Management Plan: A Public Works Plan*, the Resilient Coast Adaptation Plan is anticipated to begin development (assuming availability of funding) with a wide array of identified scientific data collection and study, potentially coordinated in conjunction with data collection for the required update of the City's *Local Hazard Mitigation Program,* next due in 2022/23. These Plans are discussed further below.

Resilient Coast Beaches and Bluffs Adaptation Policies

This section includes general Resilient Coast policies that, with other adopted Plans previously described, and future implementation of the *West Cliff Drive Adaptation and Management Plan: A Public Works Plan,* form the basis of the City's coastal climate adaptation efforts along its coastline beaches and bluffs. Some policies reference programs or actions which are included within the *Public Works Plan* or are planned to be included in a future Resilient Coast Adaptation Plan planning document as noted above, to provide consistency and help ensure those plans and any related monitoring programs or other elements are fully implemented.

3F-1. Sea Level Rise Coordination: Study and develop policies and actions to respond to climate change and adapt to sea level rise, and undertake projects to more comprehensively identify and coordinated coastline-specific adaptation strategies. Future LCP updates may include recommendations for programs, policies, and actions that can achieve resilient coastal access, use, and beach management. It is not anticipated that any of the future recommendations will affect the ongoing recreational activities covered within the Beach Management Plan's five-year timeframe as updated in 2020.

3F-2. Best Available Science: For planning and development review, use, as applicable, the best available science about projected sea level rise and other climate-change related environmental changes when addressing coastal erosion, bluff failure, flooding, and other coastal hazards.

3F-3 New Development in Hazard Zones: Design and site new development in shoreline coastal hazard zones, including substantial improvement of existing structures, to be safe from erosion, bluff failure, wave run-up, flooding, and other coastal hazards for at least 100 years without existing or new shoreline protection, considering projected sea level rise and other climate

change effect. Permit approvals shall prohibit shoreline protection for the authorized development, require the property owner to record an acknowledgement that the development does not qualify as a structure entitled to shoreline protection under Coastal Act Section 30235, and a waiver of any rights to such protection, and, where necessary, require a removal and restoration plan, including bonding for large projects, to avoid future shoreline protection or project failure.

3F-4. Coastal Repair and Upgrades: Review all coastal infrastructure repair, protective upgrades, and other adaptation projects through the lens of the preferred future adaptation pathway, and with reference to project descriptions in the West Cliff Drive Public Works Plan to determine if alternative approaches are warranted

3F-5. Plans of Neighboring Jurisdictions and Authorities: Review and integrate existing City plans, with attention to plans and policies of adjacent jurisdictions and authorities. Specifically, the City should consult with Santa Cruz County and the City of Capitola wherever possible to create partnerships to implement beach management planning to retain public access. For example, long-term public beach access planning could benefit from a county-wide assessment of the supply and demand for beach access, including beaches in the County and the City of Capitola. In addition, sand management and dredging practices could be a collaborative effort to help ensure equitable preservation and distribution of beaches countywide.

3F-6. State Parks Department Coordination: Coordinate coastal adaptation planning with the State Parks Department as the manager for Natural Bridges, Seabright (Twin Lakes) State Beaches, and Lighthouse Field State Park within the City. Respect and build upon beach-specific management plans for both Seabright and Natural Bridges beaches. Policies that provide coastal resource management guidance for these areas should be developed in partnership with the State Parks and reflect the priorities within these management plans. During the Resilient Coast effort, State Parks staff expressed interest in future collaboration with the City. In the near term, for example, development of a consistent "look" for street accessories (e.g., benches, trash receptacles) or a consistent signage program for areas under both the City's or the State Parks Department's jurisdiction could result in a seamless, uniform atmosphere for coastal visitors.

3F-7. Permitted New Shoreline Structures: Unless a waiver of rights to shoreline protection applies on the property, new shoreline protection structures, including revetments, breakwaters, groins, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes should be recommended for approval by the Coastal Commission only when consistent with the LCP's policies and when required to serve coastal-dependent recreation uses or protect existing principal development structures or public beaches in danger from erosion; when designed to eliminate or mitigate adverse impacts on local shoreline sand supply; minimize the footprint of the structure on the beach; and when there is no less environmentally damaging feasible alternative such as beach nourishment, non-structural drainage, and native landscape improvements, or other similar non-structural options. Developer payment of "in lieu" fees into a fund to support coastal adaptation in the City could be considered. For purposes of this policy, "existing principal structures" means shoreline structures that were legally authorized prior to January 1, 1977.

3F-8. Adaptation Infrastructure Funding**:** Actively pursue feasible grant funding sources or new funding mechanisms such as the formation of special districts including Geologic Hazard Abatement Districts (GHADs), Conservancy Districts and / or securing FEMA and other federal or state adaptation and hazard mitigation funds to finance adaptation strategies for public infrastructure.

3F-9. Dredged Materials for Beach Replenishment: Use suitable dredged materials from the San Lorenzo River for beach replenishment, where appropriate, as identified as feasible through scientific beach sand movement studies to address new beach replenishment strategies along preferred adaptation pathways, and particularly to support implementation of a sand management program to support pocket beaches as recommended in the *West Cliff Drive Adaptation and Management Plan,* if determined to be feasible.

3F-10. Adaptation Measures in CIP: Incorporate resilience measures and adaptation strategies as necessary infrastructure improvements into capital improvement planning and other investment decisions and consider prioritizing those projects for funding. Use this annual CIP process to allow decision-makers to reevaluate adaptation actions and consider if transition towards an alternate strategy is appropriate (as described within the preferred pathways and triggers contained within the future Resilient Coast Adaptation Plan).

3F-11. Resilient Coast Adaptation Plan: Begin development of Resilient Coast Adaptation Plan (RCAP) to define beach-specific adaptation actions, strategies, and long-term pathways that best meet multiple resource management goals for identified beach segments with important coastal access within three to five years. The Plan should identify short-term actions and future environmental triggers to signal timing for potential consideration of alternate adaptation approaches. The *Adaptation Plan* should include monitoring program scope, access and infrastructure upgrades required to maximize public use by community members and visitors of all abilities, and a funding strategy. Implementation of the Resilient Coast Adaptation Plan should strengthen public safety, prioritize coastal dependent recreation, engage neighborhoods, assure local economic vitality, respond to climate change, promote environmental justice, implement the Coastal Act, and protect the public trust.

3F-12. Shoreline Change Monitoring**:** Implement a monitoring program for sea-level rise, beach width, bluff offset, flooding and storm damage, traffic patterns, recreational uses, and other potential measures or triggers for guiding implementation of sea-level rise and climate change adaptation policies. The monitoring program should include post-storm as well as yearly (minimum) shoreline and bluff edge observations surveys, document annual maintenance costs, and establish adaptation action thresholds. The nature of a comprehensive monitoring program will be explored in greater detail during development of the RCAP. Any monitoring results should be reported periodically to City Council.

3F-13. Resilient Coast Adaptation Plan (RCAP) Update: Within ten years of adoption, and in conjunction with the City's preparation of a Climate Adaptation Plan update, review and update the Resilient Coast Adaptation Plan to reassess its implementation as expressed in the LCP, or sooner The RCAP reassessment should consider the following:

- Status and degree of various coastal change triggers monitored
- Efficacy of Adaptation Plan and implemented measures
- Updated sea level rise projections, coastal hazard projections, and risks.
- Potential need to revise adaptation measures and/or pathways or implement new measures, including review of emerging engineering, science, and technologies.
- Review of equity considerations
- Funding needs and potential funding sources.

3F-14: Consistency Review of Adaptation Policies: Review coastal climate change adaptation policies during future updates of the Resilient Coast Adaptation Plan, or of other coastal or climate change policies (and corresponding Implementation Plan sections) to reflect progress in the City's adaptation planning and to remain consistent throughout all City climate change documents. These areas of review include, but may not be limited to:

- Environmental Quality
- Water Quality (Stormwater infrastructure issues)
- Soils (potentially concerning erosion control and site stability)
- Biotic Diversity and Stability (p31-34) (Beach and shoreline ecology, living shoreline)
- Community Design (Urban form/setting, adaptation pathways)
- Land Use (Adaptation pathways, land use circulation, PW coastal access
- Circulation
- Housing (housing density, height, accessory units, parking)
- Economic Development (shoreline recreation and tourism)
- Community Facilities and Services (wastewater/water infrastructure)
- Parks and Recreation (shoreline recreation, access and design, parks)
- Cultural (tribal/spiritual practice, sacred sites, and cultural resources)
- Archaeology, Paleontological, Historical Resource Updates
- Surfing (City surfing history/world surfing reserve)

Following the Resilient Coast Initiative, this LCP has been updated to the degree of technical and planning analysis then available to support the ability to draft clear and meaningful policy language. To the extent significant technical, engineering, or feasibility questions remained to be understood and addressed to implement other sea level rise adaptation strategies, and to facilitate integration, communication, and implementation of preferred adaptation pathways for specific vulnerable locations, these policies also include *Policy 3F-11*, the requirement to develop a new coastal adaptation-focused implementation document, the Resilient Coast Adaptation Plan. This *Adaptation Plan* would include the core coastal resilience and management goals as listed above and related policies to address the preferred adaptation pathways for identified coastal locations as they can be determined with further scientific data collection and analysis, and stakeholder and public engagement.

The extent to which future adaptation actions are not currently specified in this LCP Chapter, but will be addressed by this future *Adaptation Plan* effort, has been an important policy consideration closely coordinated with the Coastal Commission staff, both at the state and local level. The Resilient Coast team has concurred that in many instances, more focused information and additional studies are needed for the City, its partners, and the public to be best informed to make a preferred adaptation pathway decision at

many vulnerable coastal locations. Santa Cruz has the advantage that considerable information is available and some detailed conceptual adaptation planning has already over occurred over the past decade (as described in the beginning sections of this Chapter) to update the LCP in certain areas, while identifying a future information gathering and planning process for other areas. As previously noted, a *Public Works Plan* was adopted for the 2.7 mile long West Cliff Drive section of the City's coastline, identifying specific maintenance and small infrastructure projects to support the City's adaptation strategy, primarily protection, for the near term, but also including a few "red flags" for where different adaptation pathway choices may be necessary in the coming decades.

Beach and Coastline Segment Adaptation Pathways

Throughout the Resilient Coast effort, the City of Santa Cruz coastline and beaches were divided into four segments to assist planning and identify specific adaptation strategies. These segments are: 1) Natural Bridges State Beach, 2) the "pocket beaches" and bluffs of West Cliff (further divided into 4 zones), 3) Main and Cowell Beaches spanning from the San Lorenzo River to Bay Avenue, and 4) Seabright Beach, between the Santa Cruz Small Craft Harbor and the San Lorenzo River. For each beach segment, the Resilient Coast team developed beach descriptions, lists of amenities, recreational use (including by traditionally underrepresented groups), range of activities, and the historical and existing site conditions. Each of these segments has experienced the effects of sea level rise, storm wave, coastal flooding, and erosion differently. And projected future hazards as identified in the City's Sea Level Rise Vulnerability Analysis pose unique challenges to each area. While this Chapter discusses some universal adaptation policies and strategies, some strategies must be tailored to specific beach and bluffs subareas.

The extensive background information collected and analyzed on each beach segment in the Resilient Coast documentation will help to assess future alternative adaptation pathway options and their impacts on the various coastal visitor and user groups, including those who are often underrepresented. Based on this information, the work of the technical teams, and with public input, this LCP section includes key elements of the results of that analysis and the initial adaptation pathways that were derived for these four coastal segments as the initial adaptation policy direction for these locations. (Much more detail on the full array of adaptation response options considered through the Resilient Coast Initiative is available in the "City of Santa Cruz Beaches: Urban Climate Adaptation Policy Implication and Response Strategy Evaluation Technical Report "(June 2020) available on the Resilient Coast Santa Cruz webpage).

NATURAL BRIDGES STATE BEACH

At the western end of the City's most visited coastline is Natural Bridges State Beach, a 65-acre California State Park. The City's Local Coastal Program has long included a wide range of policies for the Natural Bridges area covering environmental quality, land use, circulation, parks and recreation, cultural resources, and safety, generally by integrating goals and policies of the *Natural Bridges State Beach General Plan* as adopted and maintained by the California Department of State Parks. Additional programs and policies may be added to help achieve identified Natural Bridges coastal resource goals and support a preferred adaptation pathway. These policies will be reviewed for consistency with any proposed adaptation strategy adopted through development of the Resilient Coast Adaptation Plan, in consultation with the State Parks Department. For example, the existing 1984 *Natural Bridges State*

Beach General Plan shows the future relocation of the park entrance to a point along Delaware Avenue. The City's coastal adaptation policies should facilitate that future transition.

Key Policy Goals for Natural Bridges**:**

- Maintain or increase beach area for public recreation.
- Work with State Parks on a managed retreat plan that meets beach width goals, considers unique aquatic habitat (e.g., tidepools, lagoon, etc.), supports habitat restoration objectives, and maintains multi-modal visitor access.
- Investigate alternative accessways to Natural Bridges outside of erosion and flood hazard zones so as to maintain multimodal visitor access.
- Focus on living shoreline adaptations.

Adaptation Pathway and Policies for Natural Bridges

The Resilient Coast planning process for the Natural Bridges area focused on aligning with and building upon existing plans and guidelines for Natural Bridges State Beach to develop an adaptation pathway that emphasizes the use of a living shoreline program and managed retreat of some park resources, particularly along the existing West Cliff Drive park entrance. This includes beach and wetland areas and park infrastructure. The pathway focuses on expanding living shoreline efforts and ultimately managed retreat with realignment of public visitor services as sea levels rise. The area is within the jurisdiction of State Parks, which currently restricts the use of armoring, even to protect infrastructure. This Natural Bridges pathway aligns with many aspects of the *State Beach Plan* and supports coordination with the adaptation strategies for City beaches and West Cliff Drive. By supporting natural retreat processes, State Parks will support the incremental relocation of visitor-serving amenities and coastal access opportunities while also supporting the continued migration of the beach and lagoon inland. These natural processes will help to maintain the presence of a valuable broad, accessible sandy beach area and possible future development of new "natural bridges" or other geologic structures. This pathway should also ensure that the community continues to have beach access and recreational opportunities on the west end of town.

- **RCAP-NB Policy Concept**. Living Shoreline Expansion: Support State Parks Department efforts to expand living shoreline restoration program to increase wave resiliency of the backshore habitat. Include Natural Bridges restoration actions within the Resilient Coast Adaptation Plan.

- **RCAP-NB Policy Concept**. Revegetated Dunes: Support State Parks Department efforts to expand revegetated dunes program for all appropriate City beaches including working with an organized volunteer force to provide ongoing maintenance, and include surveyed public interest in "nature based solutions" for sea level rise response and this public-government partnership into grant proposals to increase odds of success.

- **RCAP-NB Policy Concept.** Managed Retreat of Park Infrastructure: Support managed retreat and infrastructure relocation efforts contained in the *Natural Bridges State Beach General Plan* including strategies to prioritize preservation of certain public infrastructure such as restrooms, parking, access roads, etc. Prioritize beach width and low impact visitor access into the Park

(e.g., realignment of access road and relocation of parking and vehicle access locations as informed by the *West Cliff Drive Public Works Plan)*.

- **RCAP-NB Policy Concept**. Implementation Funding: Support State Parks Department efforts to implement actions to relocate infrastructure out of hazard areas but generally to plan for managed retreat of cliff erosion to allow the City to prioritize infrastructure needed to maintain visitor coastal access, particularly for disadvantaged and underrepresented groups.

- **RCAP-NB Policy Concept**. Coordination on Natural Bridges Adaptation Strategies: Support the State Parks Department's efforts to implement living shoreline projects and managed retreat strategies (including future relocation of main entrance from West Cliff Drive to Delaware Street) to retain natural resource benefits and sufficient sand beach area to meet ongoing coastal visitor needs.

In line with the City's ongoing commitment to social equity, specific efforts were made during the Resilient Coast initiative to identify and begin a dialogue with many historically underrepresented groups in order to better understand their relationship to and usage of the City's coastal area access and available recreational activities. Initial comments and input received from outreach event participants provided some initial policy direction for Natural Bridges Beach area and the City's entire coastline. With implementation of a managed retreat adaptation pathway and new measures to upgrade specific recreational park services, the overall level of service for unique user groups could be enhanced within Natural Bridges State Beach. A more robust partnership between the City and State Parks Department should be developed, specifically to help identify and secure funding to make upgrades prioritized by underrepresented groups within the community. Measures to support community equity and access opportunities for all groups might include:

- **RCAP-NB Policy Concept**. Signage improvements Underrepresented Groups: New or upgraded signage or signage programs should include multi-lingual and gender neutral signage for safety, informational, and educational signage. Such signage should consistent with any signage program implemented through the West Cliff Drive Public Works Plan.
- **RCAP-NB Policy Concept**. Lateral Trail Access Improvements: Understanding that lateral access along Main and Cowell beaches could be reduced through transition of some recreational sand area to living shoreline/habitat, consider development of lateral trails through the living shoreline (if implemented) to enhance access and be useable by visitors with a wide range of ability and mobility. Such trails should be angled to the east to reduce winter wave run up "funneling" action.

- **RCAP-NB Policy Concept**. Gender Neutral New Restrooms: Construct any new or relocated restrooms in Natural Bridges State Park to be gender neutral facilities.

- **RCAP-NB Policy Concept**. Evening Access and Fire Pits: Expand general visitor access into some evening hours and consider addition of fire pits to attract visitors who might be unable to access Park during typical daylight working hours. Work with local indigenous tribes to consider ways to provide some limited exclusive tribal access for purposes.

- **RCAP-NB Policy Concept**. Expand ADA visitor parking and viewpoint access: If the West Cliff Drive parking lot at Natural Bridges State Beach entrance is decommissioned during adaptation efforts within Natural Bridges State Park, reconfigure parking on-site or near Swanton Blvd and Delaware Avenue to ensure ADA accessibility to the State Beach and coastal overlooks.

- **RCAP-NB Policy Concept**: Cliff top Visitor Access and Viewpoints: Prioritize the retention of cliff top public infrastructure (walkways and bike paths) and minimize the loss of public access and viewing opportunities during adaptation efforts within Natural Bridges State Beach to ensure that any loss of services (e.g., roadway and parking) and cliff top infrastructure will not disproportionally impact user groups who rely on ADA amenities.

- **RCAP-NB Policy Concept**. Integrated Coastal Trail Park Access. Upgrade/integrate coastal trail with Natural Bridges park access to reduce existing awkward entrance configuration where pedestrians and cyclists must cross into the road and parking area to continue from the West Cliff Drive Recreational Trail onto the paths and trails in the Park.

WEST CLIFF DRIVE, BEACHES AND BLUFFS

West Cliff Drive: The West Cliff Drive coastline consists primarily of 25- to 40-foot high bluffs that front an uplifted marine terrace. This bluff face coastline of Santa Cruz is broken up by a number of small to mid-sized "pocket" beaches distributed along the 2.7 miles of the West Cliff coast. Beaches of note include from large to small, Its (Lighthouse) Beach, Mitchell's Cove, several smaller beaches between Fair and Swift Streets, and Pyramid Beach, close to Natural Bridges State Beach. Its Beach is a south-facing beach below the bluff on the west side of Lighthouse Field. The California State Parks Department manages the beach and the adjacent open space park across West Cliff Drive from the beach. Stairs at Its Beach and Mitchell's Cove provide easy access to the beach and are frequented by a range of recreational users.

Restoration opportunities within these smaller pocket beaches along West Cliff are somewhat limited due to intense winter swell, and because many of the smaller pocket beaches are backed by rip rap revetments so that as sea level continues to rise, the sandy width of these beaches will gradually narrow even further. However, small restoration projects have been implemented along the first terrace of the bluff on several locations along West Cliff. The Resilient Coast Initiative identified that many of the smallest pocket beaches have been lost, at least seasonally due to winter swells, as rip rap has been deposited to protect the West Cliff Drive Recreational Trail and roadway. Recent data suggests some beaches will be completely submerged and lost within the next decade. This documentation highlighted the urgency for the City to immediately put in place strategies and programs for the near term (about 8-10 years) to begin to address adaptation goals for the West Cliff Drive coast. While proceeding first through development of LCP policies and the previously noted Resilient Coast Adaptation Plan would perhaps have been preferred, the Resilient Coast project team closely coordinated identification of the stages and potential timing of different adaptation pathway choices so that near-term projects and maintenance actions identified in the *West Cliff Drive Public Works Plan* would not preclude full review and discussion of future adaptation pathway options for the medium to long term during the development of the RCAP *Adaptation Plan*.

A single approach cannot address the projected erosion hazards or support the priority coastal access management goals for all West Cliff beaches. Results of an early cost-benefit analysis for West Cliff Drive conducted as part of the Resilient Coast effort in 2020 showed that the most cost effective approach over time for successful adaptation along West Cliff Drive would be a focus on coastal recreation-enhancing strategies. This adaptation approach includes a combination of sand management, reduction in coastal armoring footprints through upgraded armoring from revetments to vertical seawall/soil nail walls, and potential consideration of sand retention structures along with structural adaptation such as bluff top seawalls and cave fills in high hazard areas. The identified policy goals also support the near-term coastal management policies and upgrade and maintenance projects included in the *West Cliff Drive Public Works Plan* approved by the City Council in April 2021.

Because significant planning and identification of physical and natural assets along West Cliff Drive has been conducted to date, as well as a long history and record of routine maintenance projects, some specific policies, triggers, and actions have already been incorporated into this LCP to address the existing and potential future coastal armoring needs along West Cliff Drive, also included in greater detail in the *West Cliff Drive Public Works Plan*. Development of the *Public Works Plan* occurred in coordination with the Resilient Coast efforts to identify those longer timeframe issues and adaptation pathway options that are anticipated to be addressed through the proposed Resilient Coast Adaptation Plan. The state of the City's beaches, including the pocket beaches along West Cliff Drive, is one of the particular "triggers" that may put into motion other policies or actions along the City's coastline.

Key Policy Goals for West Cliff Drive Beaches and Bluffs

- Prioritize adaptation and erosion management approaches that support maximizing beach recreational uses and preserving surfing resources.
- Prioritize adaptation strategies that maintain or enhance existing surf breaks.
- To the extent possible, retain, maintain, and expand vertical access to pocket beaches with a high priority on Its Beach and Mitchell's Cove through 2100.
- Support development of a sand management program that could pass sand from the Santa Cruz Harbor or other areas to Pyramid Beach, based on findings of scientific sand management studies to improve coastal recreational uses as it drifts back to the Harbor.
- Manage public safety and education (on beach and bluff) with respect to erosion, sea cave and bluff failure, and accessways.
- Retain and prioritize lateral multi-modal recreation and beach access along the cliff top and bedrock platforms over the accommodation of vehicular traffic or parking.
- Reduce human influence on erosion rates through public access and stormwater improvements.
- Encourage usage by disadvantaged populations of West Cliff Drive by upgrading signage on restrooms and interpretive installations.
- Identify options for continued access along the coast where beaches are frequently underwater.
- Utilize native habitats to reduce erosion and manage informal access location.

Adaptation Pathway and Policies for West Cliff Drive Beaches and Bluffs

No single adaptation strategy or pathway will address the full range of different expected hazards or support all the priority management goals for West Cliff beaches. Identification of priority beach and coastal management objectives for beaches in each of four zones was developed through the Resilient Coast Initiative, with an array of different adaptation pathways to support a strategic adaptation plan that maintains access and use of priority beaches, protects lateral access and recreational opportunities, retains vehicular access to visitors, residents, and services in the near term, enhances ecosystems and amenities and invests in managed retreat where such strategies will prioritize investments of limited funds to best achieve the City's coastal goals. These pathways are intended to work in conjunction with the *West Cliff Drive Adaptation and Management Plan: A Public Works Plan (2021)* which is focused primarily on projects and maintenance anticipated to be completed in the near term (approximately 10-12 years) but document community preferences and technical feasibility of adaptation pathway options. The City's ability to implement key adaptation projects remains dependent on limited financial resources, and the City is committed to explore all potential sources of funding, including grant program participation opportunities.

Through the Resilient Coast Initiative's extensive studies and analysis of sea level rise data, it appears reclamation of lost pocket beaches is highly unlikely; however, preservation of key pocket beaches including Pyramid Beach, Mitchell's Cove, and Its Beach may be feasible, at least in the near to medium term, through the transition of rip-rap/revetments to vertical sea walls (to reduce the footprint of the coastal armoring structure and reclaim sand beach area), a West Cliff Drive sand management program, and removal of rip-rap to support natural coastal erosion processes at Its beach. The integration of lateral access along terraces within seawall upgrades can improve coastal viewing, access, and recreational and fishing opportunities in places where pocket beach reclamation is unlikely. The integration of natural habitat features along terraces within any seawall upgrades can enhance ecosystem functionality and support diversity and connectivity of habitats throughout the corridor. Allowing natural coastal erosion processes at Its beach and Lighthouse Point could benefit natural coastline processes and be integrated with other bluff top visitor-serving upgrades. Public input regarding future Santa Cruz beach adaptation, received during the Resilient Coast Program, highlighted the values of using Living Shoreline strategies whenever possible. The replacement of non-native ice plant with native plants and integration of habitat enhancement actions with cliff stabilization can also reduce the need for new armoring and enhance public use of the coastline.

- **RCAP-WC Policy Concept.** New shoreline protective devices: Utilize new shoreline protective devices only if no other feasible, less environmentally damaging alternative is available, such as relocation, beach nourishment, non-structural drainage, and native landscape improvements, or other similar nonstructural options. Such non-structural options shall be used and prioritized wherever possible to protect coastal resources, including coastal habitats, public recreational uses, and public access to the coast. If necessary, new shoreline protective structures shall be designed to occupy the smallest possible footprint and minimize reflective wave energy.

- **RCAP-WC Policy Concept:** Revetment Replacement/Hard Structure (Cave Fill or Bedrock Platform): Selectively remove revetment that hinders access, reduces beach area and lateral access, and reduces coastal views, and replace with soil nail walls to expand beach area. This action continues to hold the line and help preserve the WCD Recreational Trail and bluff top visitor areas for as long as possible and invests in new and/or repurposed infrastructure to

maintain the shoreline in place. There are several options to be considered at various locations along the West Cliff Drive corridor. One, include a soil nail wall or vertical seawall replacing rip rap to increase the usable recreational beach by reducing the footprint of the protective structure on the beach while maintaining vertical access. Two, use an artificial bedrock platform as replacement for removed or repurposed revetments to allow for enhanced shore protection over a 30-50 year timeframe while promoting lateral access along the existing bedrock platform. Three, deposit new material or repurposed revetment to construct cave fill and entrance caps to reduce future risk of cave roof failure and resulting loss of coastal infrastructure. Prioritize which caves to reinforce based on 1) likelihood of failure, 2) clifftop resources at risk, 3) impacts to lateral access by pedestrians, bicycles and autos, and the risk to utilities or private infrastructure. Armoring enhancement strategies should be reviewed along the whole of the City's coastline through development of the Resilient Coast Adaptation Plan which can review opportunities and assess how to provide mitigation for unavoidable impacts. The RCAP should establish indicators to determine when the upgraded structures would no longer provide intended functions and thus trigger long term alternative actions.

- **RCAP-WC Policy Concept**. Cost Allocation Strategy: Explore funding strategies that allocate costs among the City, West Cliff Drive property owners, and City residents and visitors, all of whom would benefit from shoreline armoring strategies, including consideration of a possible Community Facilities or "conservancy district."

- **RCAP-WC Policy Concept**. Private Development Investment: Explore funding strategies and financial incentives to support private redevelopment investments. Consider integrating public infrastructure upgrades and realignments into existing or future special tax districts.

- **RCAP-WC Policy Concept**. Managed Retreat Areas: Through the Resilient Coast Adaptation Plan, outline future conditions for medium- to long-term armoring restrictions and potential future armoring removal strategies along sections of West Cliff Drive coastline. This transition would require descriptions of equitable strategies to transition property at risk to other land uses that reduce these risks. These strategies could include special districts to fund this transition, and legal procedures and policies to incrementally implement redevelopment or retreat programs. Also support the removal of infrastructure determined to be unsafe and redesign those areas to support public cliff top and beach access opportunities needed to retain, restore, or enhance existing 2020 amenities and level of service.

Its Beach: Removal and repurposing of rip-rap placed on Its Beach to protect the parking lot above is a high priority opportunity to allow future cliff erosion and managed retreat of cliff top infrastructure. Removal of rock on Its Beach would expand the beach area and eliminate some lateral access obstruction. Restrictions on new and removal of old armoring at Its Beach could be appropriate support for an area where the City may explore a managed retreat strategy to benefit beach resources and limit impacts to coastal resources, access, infrastructure, and private property. Policies could include:

- **RCAP-WC Policy Concept**. Bluff Top Parking: Relocate parking inland of West Cliff Drive if needed to preferentially retain bike and pedestrian pathways and minimize need for new bluff armoring.

- **RCAP-WC Policy Concept**. New armoring: Prohibit new armoring or revetments along Its Beach subsequent to the full implementation of near term projects included in the *West Cliff Drive*

Public Works Plan (approximately 2035). Any repurposing of this revetment material in the coastal zone should be consistent with all applicable *LCP* and *Public Works Plan* policies.

- **RCAP-WC Policy Concept**. Its Beach Armoring Restriction: Establish a new armoring restriction zone along Its Beach to allow natural cliff erosion where feasible into public property to support resilient beach goals. Shoreline revetment rock on Its Beach may be restacked to design grade in the near term and/or repurposed to repair other existing structures or for use to fill sea caves.

Lighthouse Point: The sea caves at Lighthouse Point pose a high risk of collapse in the medium to long term, jeopardizing cliff top recreation, surf access, Lighthouse integrity, beach width at Its Beach, and surf conditions at Steamer Lane. Filling the cave or placing armor riprap at the toe of the sea caves at Lighthouse Point may help reduce erosion and extend the timeframe to the eventual predicted collapse of these sea caves.

- **RCAP-WC Policy Concept**. Lighthouse Point Managed Retreat: Develop a managed retreat strategy for Lighthouse Point to prioritize retention of the bike and pedestrian trail and its possible realignment over retention of parking and two-way traffic. Plan for and require the future relocation of parking inland and the reduction of West Cliff Drive automobile traffic lanes to enable preferred managed retreat strategy and multi-modal Recreational Trail.

- **RCAP-WC Policy Concept**. Lighthouse Point Sea Caves: Evaluate the potential of partially armoring or filling the Lighthouse Point sea cave to protect coastal resources, surf breaks, and visitor coastal access opportunities.

Revetments: Where revetments have been built to protect cliff top infrastructure, those structures should be maintained as needed to provide their intended protection, at least in the near term, or replaced with sea walls. Actions to monitor infrastructure integrity and prioritize repairs and upgrades for the near term have been included in the *West Cliff Drive Public Works Plan* and supported within the policies of this LCP Chapter.

- **RCAP-WC Policy Concept.** Revetment Monitoring: Existing revetments shall be monitored frequently (in the near term as outlined in the *West Cliff Drive Public Works Plan*) and necessary repairs and upgrades will periodically be reported to City Council and the Coastal Commission.

- **RCAP-WC Policy Concept.** Revetment Maintenance and Removal: Any maintenance of existing revetments shall prioritize recreational benefits by removing or restacking fugitive rocks from beach area, enhancing vertical access opportunities, and removing or repurposing unnecessary rip rap for possible use elsewhere along the West Cliff Drive corridor.

- **RCAP-WC Policy Concept.** Revetment Maintenance and Repair: The *West Cliff Drive Adaptation and Management Plan: A Public Works Plan* identifies near-term priorities for revetment maintenance to protect public and private buildings and infrastructure along West Cliff Drive. This strategy holds the line in the near term by investing in securing the shoreline in place. Medium to longer term projects to upgrade existing and design new structures to enhance beach and terrace access and coastal viewing opportunities beyond what is called for the WCD PWP can be explored through the Resilient Coast Adaptation Plan. This *Plan* could establish

indicators to determine when these upgraded structures may no longer provide intended functions and therefore trigger long term alternative actions.

Sand Management: Sand management and placement may help to mitigate secondary impacts to recreational resources from existing revetments including surf breaks, beach width, and continued loss of narrow pocket beach access for all West Cliff beaches, dependent on in depth study of this phenomena.

- **RCAP-WC Policy Concept.** Sand Management/Beach Nourishment Program: Evaluate results of scientific sand management study and develop a sand management strategy to deposit sand on selected West Cliff beaches (e.g., Pyramid Beach) to support local pocket beach expansion, increase sand supply for the West Cliff littoral zone, and protect shoreline from erosion, lessening the need for shoreline protection devices, and consistent with the policies of this Local Coastal Program and the *West Cliff Drive Adaptation and Management Plan: A Public Works Plan*.
- **RCAP-WC Policy Concept.** Beach Nourishment Materials: Permit placement of sediments sourced from the San Lorenzo River and Harbor maintenance efforts at appropriate points as determined through a sand management study along the shoreline for the purpose of beach nourishment to enhance beach and surf recreation, if the source material proposed for deposition contains the physical (e.g., grain size and type), chemical, color, particle shape, debris, and compatibility characteristics appropriate for beach replenishment and does not cause significant down-coast sand limitations.
- **RCAP-WC Policy Concept.** Sand Retention Structure/Groin: Consider construction of a sand retention structure or groin as an investment in new infrastructure to retain sand within priority beach areas if shown to be an appropriate strategy if a sand management study demonstrated that selective placement of groins in coordination with a beach nourishment or sand management program could potentially increase beach area and lateral access and reduce coastal cliff erosion within these beach areas.
- **RCAP-WC Policy Concept.** Equitable Beach Nourishment Funding: Explore funding strategies to equitably allocate the costs of beach nourishment among the City, West Cliff property owners, business interests, and coastal visitors who benefit and enjoy recreational activities on West Cliff beaches.

Preferred adaptation pathways for beaches and bluffs along West Cliff, some of which are partially described in the *Public Works Plan*, will be more thoroughly explored and analyzed during the development of the Resilient Coast Adaptation Plan. While the *Public Works Plan* establishes near-term maintenance and project objectives, longer term transitions from City maintenance of existing infrastructure to upgrading rip-rap to sea walls may require additional policy changes or site specific permitting. For example, monitoring of beach width at Mitchell's Cove beach could be as a trigger to transition to mid and long term actions.

Actions to monitor beach area and use to aid timing of future cliff upgrades are in development will need to be approved through the Resilient Coast Adaptation Plan, and may then require updates to the *Public Works Plan* to ensure compatibility and consistency of all of the City's interrelated adaptation strategies.

- **RCAP-WC Policy Concept.** Sea Level Rise Monitoring Program: The City shall implement a monitoring program for sea level rise, beach width, bluff offset, flooding and storm damage, and other potential measures or triggers to guide implementation of the Coastal Resilience policies. The monitoring program shall include yearly (minimum) shoreline and bluff edge surveys and also establish thresholds for reassessing the City's Adaptation Plan.

- **RCAP-WC Policy Concept.** Beach Profile and Use Monitoring: Monitor the beach profiles and recreational activities and users of beaches to obtain baseline information for considering adaptation pathway triggers and thresholds, analyzing riprap proposals and their recreational impacts and establishing criteria for a maximum permitted coverage of sandy beaches by seawalls.

Stormwater Management: To ensure that storm drain-related erosion problems are minimized along West Cliff and to reduce the need for new armoring, explore inclusion of Resilient Coast program assessment of stormwater infrastructure in need of replacement within the City's Stormwater Management Program priority projects and a develop a schedule for needed upgrades adopted.

- **RCAP-WC Policy Concept.** Stormwater Management: Prioritize, and include within related cliff top repair projects, the maintenance and improvement of West Cliff storm drain discharge infrastructure to ensure its function as a critical flood prevention device to limit discharge impacts (e.g., erosion) to coastal resources, coastal access, public infrastructure and facilities, and existing development.

- **RCAP-WC Policy Concept.** Stormwater Infrastructure Upgrade and Informal Trails Management: Further develop near-term (*West Cliff Drive Public Works Plan*) and a medium to long term (Resilient Coast Adaptation Plan*)* to outline stormwater and dirt path access upgrades needed to reduce cliff erosion and failure caused by erosive foot traffic and poorly managed or failing storm drain infrastructure. Include revegetation of eroded areas with native plants in the *Plans*.
- **RCAP-WC Policy Concept.** Storm Drain infrastructure Funding: Explore ways to expand funding for coastal storm drain infrastructure upgrades that address cliff failure and erosion, stormwater quality, and other infrastructure damage and investigate ways to share costs with the larger Santa Cruz community as part of funding an enhanced Citywide stormwater management program.

In line with the City's ongoing commitment to social equity, specific efforts were made during the Resilient Coast program to identify, reach out to, and begin or continue a dialogue with many historically underrepresented groups in order to better understand their relationship to and usage of the City's coastal area access and available recreational activities. Initial comments and input received from outreach event participants has provided some initial policy direction along West Cliff Drive and the City's entire coastline.

- **RCAP-WC Policy Concept.** Signage improvements: New or upgraded signage or signage programs should include multi-lingual and gender neutral signage for safety, informational, and educational signage.

- **RCAP-WC Policy Concept.** Diverse User Upgrades: Upgrade seawalls and rock terrace infrastructure to help support and integrate user groups who value access to the water (e.g., fishing from the beach and bedrock platforms), and ADA cliff top infrastructure to help provide access for disabled coastal visitors, with consideration to maintaining views. Ensure that new armoring does not unduly impact those who prefer to fish from mid-level terraces along cliffs by including design elements that enhance public use of the roadway, bike and pedestrian pathways, and access points to the beach and terrace. Implementation of beach nourishment programs in conjunction with construction of hard armoring could also help to mitigate the loss of beach area below these structures.

- **RCAP-WC Policy Concept.** Public Recreational Infrastructure and Amenities: Prioritize the retention of public recreational infrastructure (walkways and bike paths) and amenities and minimize the loss of public vertical access over maintenance of two-lane vehicular access and parking areas. The potential loss of services (roadway and parking) due to adopting a managed retreat strategy may impact user groups who rely on ADA amenities and cliff top infrastructure.
- **RCAP-WC Policy Concept.** Partnership with Coastal Commission and State Parks: Work with the Coastal Commission and State Parks Department to develop measures to support community equity and access opportunities for all while adapting to sea level rise. Such measures could include but are not limited to the installation, maintenance, and upgrades to beach stairways; inclusion of cliff top fishing spots; expanded ADA parking locations; removal of rocks impeding access to the sea; upgrade of stormwater and surface drainage infrastructure; replacement of bluff top overlooks as they fail; maintenance of the coastal Recreational Trail; upgrade and/or replacement of benches; provision of a gender neutral/late night bathroom; and integration of grassland/wetland restoration into maintenance.

Public Works Plan for West Cliff Drive Corridor: As described above, although proceeding first through development of the Resilient Coast Adaptation Plan prior to drafting a public works plan would have been the sequential and logical course of action, the Resilient Coast project team closely coordinated identification of the stages and potential timing of different adaptation pathway choices as work was proceeding concurrently on the *West Cliff Drive Adaptation and Management Plan: A Public Works Plan.* This close coordination ensures that projects and maintenance actions identified in the *Public Works Plan* would not preclude full review and discussion of future adaptation pathway options for the medium to long term during the development of the *Adaptation Plan*. The *Adaptation Plan* should potentially include a policy to implement and periodically update this type of more detailed, project-focused plan for the West Cliff beaches. For example:

- **RCAP-WC Policy Concept.** Public Works Plan for West Cliff Drive Beaches and Bluffs: Implement a West Cliff Public Works Plan focused on short-term maintenance, planning and engineering studies, and upgrades to West Cliff Drive infrastructure. Near term projects included within the *Public Works Plan* may include: revetment repairs and upgrades, repairs, upgrades ~~upgrade of~~ bike and pedestrian path, emergency repairs to failing armoring and caves, and sand management program feasibility studies. Such a Plan should address key points:

- West Cliff Drive Priority Near Term Projects:
    - Sand Management Feasibility Study: Study placement of sand at Pyramid Beach for downcoast sand movement to fill pocket beaches; do feasibility study to examine costs, sand volume, permitting, sand transport, and engineering.
    - Revetment Maintenance: Consider retrieval of fugitive rocks as feasible: restack and repair existing revetment: Preempt emergency repairs.
    - Access Improvements: replace deteriorated fencing/railings; repair stairs at Lane Memorial; Design overlooks and trail pull off points; Improve transportation and cliff safety signage, design/install bathrooms at Bethany Curve
    - Maintenance of habitats and landscape
- Transportation Improvements and future roadway and recreational trial conceptual design
- Coastal Armoring Maintenance
- Monitoring programs
- Vertical and lateral access improvements
- Stormwater drainage improvements
- Improvements and upgrades to habitats and landscape
- Proposals to expand public engagement, education and inclusiveness
- Financing Mechanism and Funding Plan

The specific near-term infrastructure and planning projects detailed for each coastal area in the *West Cliff Drive Public Works Plan* are anticipated to be completed in the 10 to 15-year timeframe. Completion and City Council approval of the *PWP* enables Coastal Commission approval of this set of near-term projects with the exact details to be determined. Other larger scale, medium-term adaptations (about 20-40 years) would require further community engagement, studies, design, and environmental review before implementation or construction. Project design and funding must also be available for each step in the process. Longer term coastal resiliency planning is closer to the end of the century, about 50-60 years from now, and the City is just at the beginning of coordinated coastal resiliency planning. Plans and policies will continue to evolve over time as science advances, identified trigger points are approached, regulatory requirements change, and public priorities and input evolves.

Through the Resilient Coast Initiative program, the *West Cliff Drive Public Works Plan (WCD PWP)* has already been developed as an implementation mechanism under the Coastal Act for the West Cliff area of the City. Although the planning involved in creating the public works plan is similar to the planning process for a Local Coastal Program, and it must be consistent with the broader policy language in the LCP, there are some key differences.

A key reason to pursue a public works plan is to allow for upfront consideration and conceptual approval of specific strategies or projects to implement an adaptation pathway. For example, the *WCD PWP* identifies specific armoring repair, technical studies, and coastal access enhancement projects to meet current Coastal Act and joint City priorities in the near term (approximately 10 years). It also lays out the need to begin to research, plan, and implement a preferred set of adaptation pathways for the different zones along West Cliff for the medium and longer term (10+ years). Projects included in the *WCD PWP,* approved by the City Council in 2021 and awaiting review by the Coastal Commission, are

considered "pre-authorized," if they are implemented consistently with all other requirements of the *Public Works Plan*. Under the adopted *Plan*, the Coastal Commission can require permits for major projects, but cannot deny those permits. Repair and maintenance and minor projects would not require separate permits. This City's *Local Coastal Program* and the *Public Works Plan* should function as an integrated resiliency planning framework for West Cliff Drive, with supportive overarching policies in the *LCP*, and the *PWP* identifying priority projects for near term, with updates to respond to new information and any changing conditions as needed.

MAIN AND COWELL BEACHES.

Cowell Beach is located west of the City's Municipal Wharf pier and is popular with locals and tourists. Cowell Beach is accessed from a stairway along West Cliff Drive adjacent to the Dream Inn hotel or by the entrance to the Wharf. On the other side of the pier is the larger Santa Cruz Main Beach, also known as Boardwalk Beach because of the Santa Cruz Beach Boardwalk amusement park that spans most of the length of the beach. The entire 3,700 foot length of Main Beach from the Municipal Wharf to the San Lorenzo River mouth, along the Boardwalk, has been protected for decades with a low concrete support wall and sheet pile wall.

While the beach itself will gradually narrow as sea level rises in the decades ahead, erosion risk is lessened because of the presence of the concrete support wall and the elevation of the property and infrastructure located behind (inland) of it. A significant change in the storm wave climate and the rate of sea level rise could lead to the overtopping of these walls leading to wave and flood impacts. During the summer, seasonal natural sand bar closure of the San Lorenzo River Lagoon often causes flooding to the Boardwalk, low areas of roadways near the San Lorenzo River Levee, and sometimes portions of the Downtown, Lower Ocean, and Beach Flat communities. The San Lorenzo Culvert project to address the storm surge and water flow issues at the mouth of the San Lorenzo River has been engineered with construction anticipated to begin in 2022. The Municipal Wharf deck is approximately 11 feet above mean sea level. The Wharf Master Plan document adopted in 2020 calls out infrastructure improvements that could bolster the Wharf's resiliency to sea level rise and coastal storms.

Key Policy Goals for Main and Cowell Beaches:

- Work to maintain existing beach depth, but at a minimum, retain pre-harbor beach width (approximately 220 feet) through 2100, if feasible.
- Ensure risks to residents and visitor-serving businesses are considered when developing climate change and sea level rise adaptation alternatives.
- Maintain diverse recreational opportunities (e.g., swimming, picnicking, beach volleyball, surfing, kayaking, etc.) at Main and Cowell beaches for visitors of all abilities and all socioeconomic levels.
- Retain and enhance easy access via multimodal transportation to the coast for use by residents and visitors of all socioeconomic levels to beaches, wharf, and Boardwalk.

- Maintain and, where feasible, improve flood protection infrastructure (e.g., pumps, levee and river mouth culvert) within Beach Flats and lower Ocean Street areas to safeguard residents, visitors, and infrastructure.
- Retain safe access to the Santa Cruz Wharf and beaches through upgrades to access infrastructure by increasing their resiliency to winter storm events.
- Maintain structure of Santa Cruz Wharf as an important means of coastal access for residents and visitors.
- Coordinate management of the San Lorenzo River and the City's beaches.
- Complete and maintain the San Lorenzo River culvert at the river mouth.
- Support management of the San Lorenzo River mouth to balance multiple objectives including protection of endangered species, marine safety, beach recreation, water quality, and controlling community flooding.

Adaptation Pathway and Policies for Main and Cowell

Short term actions to reduce impacts from winter wave damage to Main and Cowell beaches and the surrounding area include possible adoption of a living shoreline program, similar to the State Parks Department's efforts at Seabright and Natural Bridges Beaches, implemented as a partnership between the City, the Santa Cruz Boardwalk, and other area businesses. During the Resilient Coast efforts, representatives of the Boardwalk indicated initial interest in further study of a living shoreline and enhanced back beach dunes on the beach area near the San Lorenzo River mouth and adjacent to the eastern end of the Boardwalk. Cost savings could potentially be realized by partnering with the existing living shoreline community partnership program at Seabright Beach.

Implementation of a living shoreline solution would require ongoing adaptive management and possibly a change in the use of driftwood and woody debris discharged from the San Lorenzo River. Dune improvement projects could include the reuse of driftwood, rather than off-hauling or the permitting of driftwood harvesting. The use of this wood and possibly other materials into living shore/dune solutions should be explored as a City priority to develop dunes and enhance protection from rising tides and future storm surges along Main, Cowell, and Seabright Beaches.

- **RCAP-MC Policy Concept:** Living Shoreline. Prepare a Resilient Coast Adaptation Plan that includes a Beach Nourishment/Living Shoreline implementation strategy to support increased resiliency to wave action on Main and Cowell Beach back shore habitat. Integrate natural wood or cobbles or other hard structures within the dunes to increase longevity and protective capacity of living dune habitats.
- **RCAP-MC Policy Concept:** Hip Walls. For other portions of Main and Cowell Beaches, new hip walls (e.g., similar to those along the beachfront in Capitola village), or increased height of the existing wall at the back beach on Main Beach, or other coastal upgrades could help reduce future winter storm damage while retaining or enhancing coastal public access and views.
- **RCAP-MC Policy Concept**: Beach Flats area planning. The City should continue to engage in planning efforts for the Beach Flats area that identify specific land use programs, zoning

regulations, and other necessary measures, including adaptation triggers for action, to minimize and avoid flood risks to life and property and address social equity impacts.

- **RCAP-MC Policy Concept:** Short-term armoring upgrade strategy. Prepare a Resilient Coast Adaptation Plan that includes short- and medium-term armoring upgrade and replacement strategies to protect public and private visitor-serving buildings and infrastructure along Beach Street. Policies and programs should incorporate how to design upgraded structures to protect and enhance lateral beach public access and coastal viewing opportunities needed to retain or enhance existing amenities identified in the 2020 Resilient Coast effort. The *Adaptation Plan* should establish indicators to determine when these upgraded structures would no longer provide intended protective functions and, therefore, trigger longer-term adaptation pathway actions.

- **RCAP-MC Policy Concept:** Armoring to support future height. Within the parameters of adopted adaptation pathways, projects for any significant repair or new armoring structures should "overbuild" the foundational supports to accommodate an additional 3-4 feet of elevation on the curb/hip walls at the back of the beaches.

- **RCAP-MC Policy Concept**: New visitor-serving development standards. Along Beach Street, new visitor-serving development should be designed and constructed to be resilient to predicted wave and flood impacts. These future impacts should be studied and the City should consider applying FEMA V zone construction standards to development in the area, and adding 3.5 feet of likely sea level rise to the base flood elevations, while also increasing future building heights to accommodate the sea level rise.

- **RCAP-MC Policy Concept:** Resiliency measures for planning and investment decisions. Incorporate resiliency measures and adaptation strategies into capital improvement planning and other investment decisions. Resiliency measures could include, but are not limited to: increasing the height of public infrastructure and other buildings and structures, establishing temporary or permanent alternate routes for public transit and bikeways, developing "green" infrastructure that reduces flooding, and repairing or upgrading stormwater and wastewater systems to handle future conditions.

- **RCAP-MC Policy Concept:** Siting of New Development. Using best available science, new development, including substantial redevelopment of existing structures, should be sited and designed to accommodate projected flood elevations and other coastal storm hazards for a 100-year storm event for the life of the development. Development authorization and permits should be conditioned to provide for potential relocation or removal of structures as may be required by near- or medium–term triggers, and by longer-term adaptation pathways. Permits for new or improvements to existing structures should also include appropriate "disclaimer" information for property owner regarding the City's inability to guarantee future provision of access and City services such as road or sewer.

Once hazards become too great to maintain City infrastructure in the current location, or when loss of beach depth has become significant and results in loss of sufficient coastal access and recreational opportunities, relocation of some vulnerable infrastructure may be necessary. One option could be to

tax incentives, to assist businesses in planning to adapt to the long term relocation of infrastructure with some certainty of success.

- **RCAP-MC Policy Concept:** Infrastructure Relocation. To minimize the loss of other beach resources, encourage the relocation of existing vulnerable infrastructure to adjacent locations with streamlined redevelopment to prioritize the resiliency of visitor-serving businesses and Main and Cowell beaches.
- **RCAP-MC Policy Concept:** Small Footprint Revetments. To minimize the loss of other beach resources, prohibit revetments or other structures with large base footprints and require any limited new or upgraded armoring as approved by the Coastal Commission to be small-footprint recurved sea walls.

In line with the City's ongoing commitment to social equity, specific efforts were made during the Resilient Coast initiative to identify and begin or continue a dialogue with many historically underrepresented groups in order to better understand their relationship to and usage of the City's coastal area access and available recreational activities. Initial comments and input received from outreach event participants has provided some initial policy direction but additional and sustained outreach to the Downtown, Lower Ocean Street, and the Beach Flats areas communities should be undertaken.

- **RCAP-MC Policy Concept:** Signage improvements Underrepresented Groups. New or upgraded signage or signage programs should include multi-lingual and gender neutral signage for safety, informational, and educational signage.
- **RCAP-MC Policy Concept:** Lateral Trail Access Improvements. Understanding that lateral access along Main and Cowell beaches could be reduced through transition of some recreational sand area to living shoreline/habitat, consider development of lateral trails through the living shoreline (if implemented) to enhance access and be useable by visitors with a wide range of ability and mobility. Such trails should be angled to the east to reduce winter wave run up "funneling" action.

It should be noted that the City of Santa Cruz actively manages Cowell and Main beaches pursuant to a *Beach Management Plan (BMP)* as permitted by the Coastal Commission. This *Plan*, discussed in an earlier section of this Local Coastal Program, is not part of this LCP, but rather a document that outlines a variety of maintenance, management, and recreational activities for the beaches approved by the Coastal Commission through a Coastal Development Permit (CDP) with a typical term of five years. It could become necessary to amend the *Beach Management Plan* and associated CDP to reflect any adopted LCP updates, including an approved Resilient Coast Adaptation Plan, containing adopted medium to long-term adaptation strategies such as a living shoreline projects or sand management program. However, the *BMP* was recently renewed in March 2020; no changes to the *Beach Management Plan* related to sea level rise adaptation planning are anticipated in the near term (next five years). It may be possible to maintain the existing *BMP* at the time the RCAP is adopted and to address any potential changes in the next iteration of the *BMP.*

SEABRIGHT BEACH.

Seabright Beach (located within Twin Lakes State Beach) is the deepest beach within the City of Santa Cruz largely because sand accumulates behind (to the eastern, downcoast side) the Santa Cruz Small Craft Harbor Jetty. In the medium to long term, winter waves are predicted to eventually impact the Seabright cliff face, jeopardizing remaining portions of East Cliff Drive and associated sidewalk and pedestrian pathway. Cliff erosion and potential loss of adjacent habitat, houses, and transportation access could result from this impact. Decisions regarding how to retain certain levels of access will need to consider the protection of private property and maintenance of the full range of coastal access methods (e.g., auto, bike, pedestrians), as well as parking. Retaining sufficient parking to support visitor access and recreation at Seabright Beach has long been a subject of Local Coastal Program policy, and several Amendments, including clarification of parking policy implementation in Spring 2021. Any new cliff protective structures or alternative adaptations strategies that prioritize beach resources may require revisions to inland infrastructure alignment in the longer term.

Key Policy Goals for Seabright Beach:

- Work to maintain existing beach depth, but at a minimum, retain pre-harbor beach depth (approximately 220 feet) through 2100, if feasible.
- Maintain and enhance native back beach and dune vegetation.
- Prioritize development of living shoreline adaptation pathways.
- Retain lateral coastal access and viewshed along the bluff top backing Seabright Beach (California Coastal Trail segment) for multi-modal transportation where beach sand can be considered as a secondary access.
- Retain or enhance beach amenities including restrooms and fire pits.
- Establish beach management goals and bluff erosion strategies through the year 2100.
- Coordinate with the Santa Cruz Harbor Port District on dredge management and jetty maintenance and ensure that future coastal adaptation strategies and harbor adaptation strategies are integrated.
- Study and address storm drainage issues causing bluff erosion.

Adaptation Pathway and Policies for Seabright Beach

A preliminary preferred adaptation pathway for Seabright Beach focuses on retaining the sand beach area and beach habitat through living shoreline restoration programs. In the longer term, once lateral beach access and beach area are compromised and bluff erosion becomes a problem, bluff top retreat of public infrastructure could need to be implemented. During the City's Resilient Coast program efforts, community participants indicated that preservation of public lateral bluff top access was a priority. The area is within the jurisdictions of State Parks which currently restricts the use of armoring. This Seabright Beach pathway aligns with many aspects of the State *Beach Plan* (Twin Lakes) and supports coordination between the City and State Parks on future adaptation strategies in the future.

Initial community input regarding appropriate adaptation pathways also prioritized enhancement of natural beach habitats and development of living shorelines to benefit both coastal environments and public enjoyment. Pilot efforts were underway through community and State Parks State coordination in 2020-2021 to enhance backshore habitat and increase planting of native vegetation. This program could potentially be expanded and even subsidized through grant funding to increase bluff protective capacity of the back beach dune area.

- **RCAP-SB Policy Concept:** "Soft" Adaptation Strategies. The Resilient Coast Adaptation Plan should prioritize "soft" adaptation strategies such as beach nourishment, living shorelines, dune restoration, and ultimately managed retreat, over "hard" adaptation strategies such as new seawalls. Implementation of such soft strategies should be coordinated with key coastal area stakeholders including State Parks Department, and the Santa Cruz Small Craft Harbor Port District to establish baseline funding and explore grants to maintain and expand the existing dune enhancement effort on Seabright Beach, and potentially to other priority areas of the City's coastline.

- **RCAP-SB Policy Concept:** Lateral Public Access Protection. The Resilient Coast Adaptation Plan should prioritize protection of public right-of-way (e.g., sidewalk) over retention of parking or two-way traffic. The RCAP should support the removal of existing deteriorated infrastructure determined to be unsafe and redesign those areas to support lateral public access and coastal viewing opportunities. Options for reestablishing a continuous East Cliff Drive public right-of-way to enhance and complete a bicycle or, at minimum, a lateral pedestrian right-of-way should also be prioritized to ensure maintenance of lateral public access right-of-way along the cliff top.

Because the width of Seabright Beach is enhanced by sand accumulation behind the Harbor jetty, there could be a period in the future where the summer season beach remains wide and deep, but winter wave impacts could threaten private property. Policies could be adopted that allow some private property armoring to be constructed and maintained until the future beach width in front of the private property structure is less than established minimum widths.

- **RCAP-SB Policy Concept:** Use Limits on Private Property Protective Devices. Limit the use of protective devices and armoring to the minimum necessary to protect private properties in the short and medium term. Protective devices should be permitted only when required to protect existing private structures foreseeably in danger from cliff erosion, and should be designed to avoid, or mitigate where unavoidable, any impacts on public access or recreation, habitat, scenic views, beach width and other coastal resources, as reviewed and approved by the Coastal Commission. Structures should only be allowed for an agreed upon duration and should be removed when there is a significant loss of beach width, or the structure substantially impairs public trust resources or access to them, or as may be required by the City's adopted adaptation pathways

The long-term resiliency of Seabright Beach is dependent on the continued operation of the Harbor and the maintenance of the Harbor entrance jetty. The City and the California State Parks Department should coordinate and work with the Harbor Port District on any future upgrades to the jetty, the Harbor's ongoing dredging and sand placement activities, and exploring the future reuse of dredge

spoils and materials for a sand placement program that transports sand to nourish the City's West Cliff Drive beaches.

- **RCAP-SB Policy Concept:** City and Port District Coordination. The Resilient Coast Adaptation Plan should acknowledge and require City coordination with future efforts by the Port District to increase Harbor resiliency. Opportunities should be identified which allow for upgraded jetty infrastructure (including increased elevation in the longer term) as may be determined by sand management studies of the City's coastline including analysis of Seabright Beach sand accretion and any interaction with living shoreline expansion efforts and future adopted adaptation pathways.

In line with the City's ongoing commitment to social equity, specific efforts were made during the Resilient Coast initiative to identify, and begin a dialogue with many historically underrepresented groups in order to better understand their relationship to and usage of the City's coastal area access and available recreational activities. Initial comments and input received from outreach event participants has provided some initial policy direction

- **RCAP-SB Policy Concep**t: Signage improvements Underrepresented Groups. New or upgraded signage or signage programs should include multi-lingual and gender neutral signage for safety, informational, and educational signage.

- **RCAP-SB Policy Concept.** Lateral Trail Access Improvements. Understanding that lateral access along Seabright Beach could be reduced through transition of some recreational sand area to living shoreline/habitat, consider development of lateral trails through the living shoreline (if implemented) to enhance access, and be useable by visitors with a range of ability and mobility. Such trails should be angled to the east to reduce winter wave run up "funneling" action.

Resilient Coast Adaptation Plan (RCAP)

One strategy to increase the City's ability to adapt to environmental changes and benefit from best available science and data regarding the success of existing adaptation projects within the City and in other jurisdictions is to first target adaptation pathways to specific areas of the coastline beaches and bluffs coastline, and then identify programs and policies needed to implement them. A Resilient Coast Adaptation Plan approach enables the City to consider the unique adaptation challenges and selected strategies of each of the City's beaches and the length of West Cliff Drive (as divided into four sub-zones in the Resilient Coast Effort and *Public Works Plan*) and determine how these beach-specific adaptation strategies help meet the City and Coastal Commission's coastal access and recreation goals, as well as shoreline habitat conservation priorities. Identifying unique pathways for each beach segment, working with staff from the Coastal Commission for consistency with the Coastal Act, would provide a City coast-wide mechanism to consider trade-offs between different beach areas allowing, for example, the maintenance of armoring and resultant loss of beach area along West Cliff that could be offset by protection and enhancement beaches elsewhere in the City. The Resilient Coast Adaptation Plan approach also enables the City to consider the relationship of all of the City's beaches vis-à-vis access and recreation goals, as well as shoreline ecology.

The City and Coastal Commission staff, working closely together during the Resilient Coast projects, determined that the proposed Resilient Coast Adaptation Plan could be best drafted as a separate document, which could then be included as a future appendix or attachment to the City's Local Coastal Program. The RCAP would be updated periodically to best reflect future monitoring results, changes in existing conditions, updated community priorities, and the best available scientific data. Policies within this LCP guide the range of adaptation strategies to be included within the RCAP and ensure that programs and actions needed to achieve these strategies (e.g., coastal monitoring programs) are implemented.

As also included in the Resilient Coast Beaches and Bluffs Policies section above, this LCP includes the following policy requiring that the City draft and implement a Resilient Coast Adaptation Plan:

3F-11 Resilient Coast Adaptation Plan. Begin development of a Resilient Coast Adaptation Plan to define beach-specific adaptation actions, strategies, and long-term pathways that best meet multiple resource management goals for identified beach segments with important coastal access within three to five years. The Adaptation Plan should identify short-term actions and future environmental triggers to signal timing for potential consideration of alternate adaptation approaches. The RCAP should include monitoring program scope, access and infrastructure upgrades required to maximize public use by community members and visitors of all abilities, and a funding strategy. Implementation of the RCAP should strengthen public safety, prioritize coastal-dependent recreation, engage neighborhoods, assure local economic vitality, respond to climate change, promote environmental justice, implement the Coastal Act, and protect the public trust.

The RCAP is the appropriate instrument to fully explore and guide adaptation strategies for particular coastal sub-areas once required scientific studies and analysis are completed. Generally, the RCAP should:

1. Identify priority beaches for long-term preservation in face of sea level rise.
2. Select beaches that are good candidates for nourishment that benefit downcoast beaches.
3. Identify possible local sand sources (e.g., Harbor dredge, San Lorenzo River, etc.).
4. Develop Beach Nourishment/Living Shoreline implementation and funding strategies.
5. Employ long-term public access strategy to ensure access is provided for all user groups, including historically underrepresented groups.
6. Develop monitoring program and triggers for moving from one adaptation strategy to the next within a beach-specific adaptation pathway.
7. Link City Council approval of funding for coastal infrastructure upgrade and repair with review of monitoring data and trigger exceedances.
8. Review ability of publicly-owned land to accommodate adaptation pathway measures at different coastal locations.
9. Define Adaptation Plan implementation oversight and funding mechanisms.

10. Identify which areas to prioritize for removal, maintenance, upgrades, redesign of armoring.
11. Establish an equitable, dependable long-term funding strategy
12. Define maintenance, catastrophic repair, and removal strategies for armoring.
13. Include "Managed Retreat" guidelines describing: 1) implementation triggers, 2) monitoring protocol, 3) strategies to support incremental transition of public roads to pedestrian priority use, and 4) strategies to address catastrophic cliff failure that threatens priority public and private uses.
14. Require Real Estate Disclosures to acknowledge existing and future coastal hazards and abdicate City responsibility for ongoing or future access to properties, and advise that retreat of coastal public rights-of-way, including West Cliff Drive, may require future acquisition of inland easements and/or acquisition of property by the City or State to support maintenance of coastal access per the Coastal Act.
15. Potentially Develop a Coastal Hazard overlay which would require additional technical studies for property development/redevelopment.
16. Develop a process to explore potential Coastal Construction standards to respond to sea level rise and coastal hazards (e.g., use of FEMA V-zone construction standards if in a low lying area of the Coastal Hazard overlay district, construction standards for foundations that allow for relocation on cliff tops).
17. Explore future options to respect vulnerable marine resources, potentially including identified historically recognized surf breaks, when considering coastal adaptation actions.
18. Consider development of information regarding identified surf breaks along the City's coastline, possibly in coordination with mapping of coastal access routes and points.
19. Establish future planning processes to review and consider cost effective, long-term adaptation options for vulnerable subareas of the City's coastal areas such as the Beach Flats area, the Seabright neighborhood, and West Cliff Drive, to best reflect changing coastal resource priorities and predicted future hazards.
20. In addition to the policy updates, the City's Local Coastal Program background text sections, maps, tables, diagrams, and public access plan should be updated as necessary to reflect new information and policy direction developed through the adaptation planning process.

The RCAP can potentially help focus the subarea adaptation strategies for adoption by the City. This could also include being a catalyst for recommendations to and coordination with other agencies (e.g., State Parks Department) for possible geographic area updates of existing plans (e.g., *Natural Bridges State Beach General Plan*) or revised area plans following the drafting and approval of the *Adaptation Plan* (e.g., *Seabright Area Plan*)to be undertaken by the State Parks Department which holds jurisdiction for both maintenance and future planning work Within each subarea, policy goals, objectives, performance standards, monitoring needs, triggers and potential actions should be identified that will best shape future climate change and sea level rise adaptation in support of the community's preferred longer term coastal vision.

Policies within this LCP include some short- to mid-term adaptation strategies that reflect a preferred pathway for each beach segment based on City and community initial priorities identified during the Resilient Coast planning process. Mid- to long-term adaptation pathway options can be identified in the RCAP with triggers to start planning for or implementing these strategies. They can be better integrated into the City's LCP at a later date as science improves and examples of various adaptation actions are adopted and implemented within other California coastal communities. Adaptation strategies, once initially established, should be revisited at 10-20 year intervals, which would require community outreach and review by appropriate regulatory agencies. Coastal monitoring data and analysis of recent project success, longevity, and resiliency will aid discussions regarding which long-term options are implemented, and when.

Where there is already strong support for a specific preferred adaptation pathway for a beach segment, such as some areas along West Cliff Drive, more specific policies are included within this LCP to guide future development and inform the community of intended future adaptation pathways. As discussed above, for West Cliff Drive beaches and bluffs, the policies and identified future near term projects and actions included in the *West Cliff Drive Public Works Plan* will greatly reduce uncertainty and future conflicts, and enable the City and the community to develop programs and partnerships needed to implement future medium and long-term strategies at a later date. By identifying some initial coastal adaptation pathways now, the City will be able to reduce investments in short term or emergency actions that are counter to future long-term strategy implementation.

Area-Specific Beaches and Bluffs Adaptation Policies

IN THIS SECTION:	IN CHAPTER V:	ATTACHED BY REFERENCE:
	⊙ Beach/South of Laurel Area ⊙ San Lorenzo Urban River Plan ⊙ Harbor Development Plan ⊙ State Parks Plans	⊙ B/SOL Design Guidelines ⊙ City-wide Creeks & Wetlands Management Plan ⊙ West Cliff Drive Adaptation and Management Plan

This page left intentionally blank.

IV. LAND USE MAP & DESIGNATIONS

IN THIS SECTION:

- Land Use Map Overview
- Land Use Designations and Density
- Summary of Land Use Changes

Land Use Map Overview

The land use designations within the coastal zone are the same as those included in the City's *General Plan 2030,* adopted by the City Council in June 2012. The General Plan land use designations within the coastal zone are shown on Figure IV-1[1]. These land use designations are generally described below, and then summarized in Table IV-1.

The Land Use Map depicts the geographic distribution and location of land uses and supplements land use policies in the City's General Plan and the Local Coastal Program (LCP). See Table IV-2 for guidelines in interpreting the Land Use Map. Table IV-2 also shows applicable residential densities, zoning districts, and overlay zones associated with each land use designation. After each land use update or change in the General Plan and LCP, the Zoning Map must be brought into conformance with the Land Use Map.

Land Use Designations

Density and Floor Area Ratio

RESIDENTIAL DENSITY

The allowable development density for residential land use is defined as the minimum and maximum number of permanent dwelling units per acre (du/ac) over the entire project or development site. The density of development within each residential designation must be at least the lower and no more than the upper limit of the density range. When environmental analysis suggests the existence of constraints associated with the land features, natural resources, or characteristics of existing development, densities below the lower limit may potentially be approved.

The General Plan, Local Coastal Program, and Zoning Ordinance provide for five circumstances when established density ranges may be exceeded:

[1] All figures are included in Chapter VIII of this document for ease of reference.

1. Development at currently nonconforming residential densities may be maintained or replaced at those previous densities under certain circumstances.

2. Density of a project's residential component within the Downtown Plan area is limited only by its Floor Area Ratio (FAR).

3. General Plan density designations apply to "traditional" housing development or dwelling units for independent households. Residential development not subject to the General Plan density requirement include: single-room-occupancy units (SRO), small ownership units (SOUs), small studio and one-bedroom units, residential hotels, boarding, and lodging homes, and institutional uses. While the General Plan density standards do not apply, these development types are subject to the height and setback requirements of the districts in which they are located, Building Code requirements, and, for SROs and SOUs, the minimum and maximum size criteria as established in the Zoning Ordinance.

4. Accessory dwelling units (ADUs) and junior accessory dwelling units (JADUs) that are permitted in all single-family and multi-family districts and in some non-residential districts specifically permitting residential uses are not included for the purpose of calculating residential density. Recent State legislation also allows second units on all single-family zoned properties as well as the potential to subdivide such parcels to create two parcels as long as each would have an area of no less than 1,200 square feet. Each of these new parcels could have two units.

5. Projects utilizing State and local density bonus regulations that allow incentives including additional units for providing affordable housing as part of a project. The State of California requires that all jurisdictions process projects proposing up to 50% additional density as long as those projects provide additional below market-rate units in the "base" portion of the project. Additional bonus options are available for 100% affordable projects. The base portion of a project is what the project density would be prior to the bonus units and any additional affordable units needed to achieve the bonus unit requirement. The percentage of density bonus for which a project qualifies is predicated on the number of affordable units proposed and their affordability level. Jurisdictions may also utilize local density bonus regulations so long as they provide greater housing development incentives than the State requirement. Additional information on the State Density Bonus requirements can be found in Government Code Section 65915.

Planned Developments allow flexibility to preserve a development site's particular natural or built features and resources, such as topography, trees, watercourses, or historical structures. Where environmental constraints are evident, planned developments can allow a cluster or concentration of development on one part of a site to preserve other areas as free of development. Planned developments allow innovative and creative site planning to more fully pursue public objectives than is sometimes possible under conventional zoning regulations. Therefore, on occasion, some planned developments may not achieve the density range of the site's General Plan land use designation.

NON-RESIDENTIAL FLOOR AREA RATIO (FAR)

For non-residential uses, (e.g., commercial, office, and industrial uses), development intensity is expressed as an average Floor Area Ratio (FAR) for a development site or parcel. This FAR is a measure of the total building floor area in proportion to the area of the building site. For example, a 10,000 square foot lot with an upper FAR limit of 1.75 in the General Plan land use designation, could support a 17,500 square foot building. Some General Plan land use designations also include a minimum FAR requirement to ensure an appropriate scale and massing of development in some areas of the City (e.g., the Downtown).

Land Use Designations

RESIDENTIAL DESIGNATIONS

The residential designations of Very-Low, Low-, Low-Medium, Medium-, and High-Density Residential indicate where residential development may occur at particular densities. These designations are intended to indicate allowable densities and do not prescribe building type. Thus, cluster developments may be allowed even in lower density designations, providing flexibility to accommodate proposed development in response to a variety of site terrain characteristics, topography, and habitats. A number of non-residential uses such as churches, home day care facilities, and small home-based businesses may also be accommodated in the residential designations.

- **Very-Low Density Residential (VL), 0.1 to 1 du/ac:** Provides a rural transition area between undeveloped land and single-family residential neighborhoods. Also applied to areas with significant environmental constraints. Large-lot, single-family homes are typically developed in this designation.
- **Low-Density Residential (L), 1.1 to 10 du/ac:** Provides for single-family residential neighborhoods typically comprised of detached homes. Santa Cruz's low-density residential areas include a wide variety of architectural styles.
- **Low-Medium Density Residential (LM), 10.1 to 20 du/ac:** Provides for moderately higher densities in areas with an existing mix of single-family and multifamily residential uses. Accommodates a variety of residential building types that can fit within a mixed housing type residential neighborhood, including low-rise apartments, condominiums, and townhomes. This designation can also include areas with historic boarding houses that have been converted to multifamily residential use.
- **Medium-Density Residential (M), 20.1 to 30 du/ac:** Accommodates a mix of single-family and multifamily residential uses, including low-rise apartments, condominiums, and townhomes. This land use category has been designated for some single-family neighborhoods with a historic pattern of small lots. It is the broad intent of the General Plan that, in areas designated Medium-Density Residential where detached single-family homes are prevalent, new development should reflect the scale and character of the then-existing homes. With new State regulations requiring local jurisdictions to approve housing development ministerially based on objective standards, the City has less control over the design and scale of new development that meets the standards of the zoning district.

- **High-Density Residential (H), 30.1 to 55 du/ac:** Accommodates mid-rise multifamily buildings, typically apartments, in areas where increased densities and building heights are appropriate. This designation is typically used in locations where the City's goal is to provide for intensive infill housing to increase the housing supply (e.g., the Downtown).

COMMERCIAL DESIGNATIONS

The City of Santa Cruz *General Plan 2030* commercial designations accommodate a variety of retail and office development, including neighborhood-serving uses, as well as businesses that serve the entire region. All commercial designations allow mixed-use developments that can also provide permanent residential dwelling units.

- **Neighborhood Commercial (NC), 0.25 to 1.5 FAR:** Accommodates small-scale commercial uses that serve residential neighborhoods, such as laundromats, grocery stores, and convenience stores. These uses can provide a focal point for the immediate neighborhood, and also help reduce the number of automobile trips by nearby residents.
- **Community Commercial (CM), 0.25 to 1.75 FAR:** Accommodates businesses that serve the general needs of the community, including retail, service, and office establishments. Allowable uses in these areas include restaurants, grocery stores, furniture stores, general retail, legal offices, and auto parts stores, as well as mixed-use projects (e.g., apartments stacked above ground floor commercial).
- **Regional Visitor Commercial (RVC), 0.25 to 3.5 FAR:** Applied to areas that emphasize a variety of commercial uses that serve Santa Cruz residents as well as area visitors. Mixed-use development is strongly encouraged in RVC districts. Areas designated as Regional Visitor Commercial include:

    - **Downtown Santa Cruz:** Emphasizes of a mix of regional office and retail uses, residential and mixed-use developments, restaurants, and visitor attractions such as entertainment venues. The Downtown Plan provides detailed requirements for this area.
    - **South of Laurel:** Emphasizes mixed-use and residential development along with visitor-serving and neighborhood commercial uses to help connect the Beach Area with Downtown Santa Cruz. The *Beach and South of Laurel Area Plan (BSOL)* provides detailed requirements for this area.
    - **Beach Area:** Emphasizes visitor-serving commercial uses such as hotels, motels, restaurants, and amusement parks and facilities, as well as residential and mixed-use development in the Beach Area neighborhoods. The *Beach and South of Laurel Area Plan (BSOL)* provides detailed requirements for this area.

    For most areas designated RVC, the minimum and maximum development intensity is specified in the *Downtown Plan* or the *Beach and South of Laurel Area Plan*. In areas that are designated RVC but are not addressed in an area plan, the minimum development FAR is 0.25 and the maximum FAR is 1.75.

- **Office (OF), 0.25 to 1.75 FAR:** Provides for small-scale office uses and mixed-use projects. Typical uses include dental offices, limited-hour medical clinics, and insurance offices

MIXED-USE DESIGNATIONS

Mixed-use development is allowed in all commercial, office, and industrial land use designations. Uses within this designation may include residential, office, service, retail, recreation, light industrial, and others. Mixed-use development is projected to become more typical in the future given the limited amount of developable land in the City, and also because commercial and industrial land uses are being developed in directions that make them more compatible with residential uses. Mixed-use development also helps support the City's commitment to reduce reliance on the automobile for trips residents make amongst uses as such uses may be provided in closer proximity, allowing residents to walk or bike to a variety of uses.

The General Plan Land Use Map designates multi-use focal centers along Santa Cruz's major transit corridors where mixed-use development is generally required. The mixed-use designations support the General Plan's goals and policies by encouraging new housing in places well served by transit. Each mixed-use designation specifies the infill areas along Santa Cruz's transit corridors where the designation may be applied. Because these transit corridors also supply much of the City's commercial land, the mixed-use designations afford additional opportunities for the City's residents to live nearer to their workplace. Any site that is within one of these infill areas and that also has a Community Commercial (CM) designation may apply for a General Plan amendment to obtain a mixed-use land use designation. The City may choose to approve the mixed-use designation if it would otherwise support the General Plan's goals, policies, and actions.

- **Mixed-Use Medium Density (MXMD), 0.75 to 1.75 FAR, 10 to 30 du/ac:** Applied to sites along the Ocean Street corridor and the Mission Street corridor between Swift Street and Laurel Street. This designation accommodates mixed-use development at a scale that is similar to existing multi-story buildings along the corridor. The typical commercial uses are similar to those in the Community Commercial (CM) designation, with pedestrian-oriented commercial uses encouraged on the ground floor.
- **Mixed-Use High Density (MXHD), 1.0 to 2.75 FAR, 10 to 55 du/ac:** Applied to sites along the Water Street and Soquel Avenue corridors. The typical commercial uses are similar to those in the Community Commercial (CM) designation, with pedestrian-oriented commercial uses encouraged on the ground floor.

  The MXHD designation allows a maximum FAR of 1.75 by right, including a maximum of 30 dwelling units per acre. However, a project that meets a number of specific criteria (e.g., more affordable units or affordable units at a lower income level), as determined by the Planning Commission, may be granted a maximum FAR of up to 2.75, and include up to 55 dwelling units per acre.
- **Mixed-Use Visitor Commercial (MXVC), 1.0 to 2.75 FAR, 0 to 55 du/ac:** Applied to sites along the Ocean Street corridor, as well as sites within 1,000 feet of Ocean Street's centerline that front on Water Street, Soquel Avenue, May Avenue, or Broadway. This designation is intended to encourage high-quality visitor-serving commercial development along Ocean Street, particularly hotels and motels. However, the designation also accommodates other multi-story commercial development, such as office buildings.

  The MXVC designation allows a maximum FAR of 2.75, but does not allow any dwelling units by right. However, a project that meets a number of specific criteria (e.g., more affordable units or

affordable units at a lower income level), as determined by the Planning Commission, may include up to 55 dwelling units per acre within this FAR limit.

INDUSTRIAL DESIGNATIONS

Industrial designations include both general industrial and coastal-dependent designations and allow for varying densities and types of industrial uses.

- **Industrial (IND), 0.25 to 2.0 FAR:** Applied to lands reserved for the City's most employment-intensive uses, including industrial. Typical industrial uses include food and beverage manufacturing, warehousing, metalworking, and woodworking. These businesses may include accessory retail uses (e.g., to sell products that are manufactured onsite).

  This land use designation also allows for other employment-intensive uses, such as office parks or incubator spaces for new businesses that are likely to provide high-quality jobs for residents of the community. Although residential uses are discouraged in lands designated IND, this designation nevertheless allows for limited development of live-work units that can accommodate combined residential and commercial use in a single unit.

- **Coastal Dependent (CD), 0 to 0.1 FAR:** Applied to lands along or near the coastline that are used by industries that require direct proximity to the ocean, such as small craft harbors, fisheries, boating, and aquaculture. Harbor-related uses are limited to areas within the jurisdiction of the Santa Cruz Port District. A federally-owned property within the UCSC Coastal Marine Science campus is also designated as Coastal Dependent.

PUBLIC AND INSTITUTIONAL DESIGNATIONS

- **Community Facilities (CF), 0 to 2.5 FAR:** Applied to existing and potential community facilities, including schools, government offices, community buildings (e.g., the Civic Auditorium), sewer and water facilities, and the City landfill. This designation is also applied to land used by State highways.

- **UCSC Lands (UC):** Applied to land that is owned by the University of California, including the UCSC campus and the University's off-campus research facilities and residential sites. The City does not have jurisdiction over new development within these areas; however, any new proposed development is governed by UCSC's Long Range Development Plan (LRDP) and/or any specific University facility plans, such as the Marine Science Campus Coastal LRDP.

PARKS AND OPEN SPACE DESIGNATIONS

- **Coastal Recreation (CR), 0 to 0.1 FAR:** Applied to beaches and other lands along the coastline that are used for outdoor recreation such as swimming, boating, fishing, surfing, and picnicking. This land use designation also includes limited development of structures and vehicle parking to support these recreational uses.

- **Parks (PR), 0 to 0.1 FAR:** Applied to neighborhood, community, and regional parks that are owned by the City, County, or State, and that are used by residents and visitors for passive or active recreation. This designation also allows limited development of structures to support these recreational uses.

- **Natural Areas (NA), 0 to 0.1 FAR:** Applied to lands that should generally remain in an undeveloped state in order to protect vegetation or wildlife habitat, ensure public safety, or

provide for public recreation. Areas designated NA may include public recreational and educational uses. The suitability of these uses within this designation is determined by the Planning Commission on a case-by-case basis, and any such uses must be consistent with the Natural Resources and Conservation chapter of the City's General Plan.

- **Agriculture/Grazing (AG), 1 du/20 acres:** Applied primarily to grazing land on the western edge of the City. The AG designation is applied only to areas that are used predominantly for large-scale agriculture or grazing. It is not applied to community gardens or other small-scale agricultural uses.

TABLE IV-1: *General Plan 2030* – Local Coastal Plan Land Use Designations

Land Use Designations:	Within Coastal Zone	Allowable Zone Districts[1]
RESIDENTIAL DESIGNATIONS[2]		
▪ Very-Low-Density Residential (VL), 0.1 to 1 dwelling unit per acre (du/ac)	✓	R-S-1A, R-S-2A, R-S-5A, R-S-10A
▪ Low-Density Residential (L), 1.1 to 10 du/ac	✓	R-1-5 R-1-7 R-1-10
▪ Low-Medium Density Residential (LM), 10.1 to 20 du/ac	✓	R-L
▪ Medium-Density Residential (M), 20.1 to 30 du/ac	✓	R-M R-T(A) (B) (D)
▪ High-Density Residential (H), 30.1 to 55 du/ac	✓	R-H R-T(A) (B) (D)
COMMERCIAL DESIGNATIONS		
▪ Neighborhood Commercial (NC), 0.25 to 1.5 FAR	✓	C-N
▪ Community Commercial (CC), 0.25 to 1.75 FAR		C-C
▪ Regional Visitor Commercial (RVC), 0.25 to 3.5 FAR	✓	C-B, CB-D, R-T(C)
▪ Office (OF), 0.25 to 1.75 FAR	✓	P-A
MIXED USE DESIGNATIONS		
▪ Mixed-Use Medium Density (), 0.75 to 1.75 FAR, 10 to 30 du/ac	✓	
▪ Mixed-Use High Density (MXHD), 1.0 to 2.75 FAR, 10 to 55 du/ac		
▪ Mixed-Use Visitor Commercial (MXVC), 1.0 to 2.75 FAR, 0.1 to 55 du/ac		
INDUSTRIAL DESIGNATIONS		
▪ Industrial (IND), 0.25 to 2.0 FAR	✓	I-G
▪ Coastal Dependent (CD), 0 to 0.1 FAR	✓	C-D/R
PUBLIC AND INSTITUTIONAL DESIGNATIONS		
▪ Community Facilities (CF), 0 to 2.5 FAR	✓	PF
▪ UCSC Lands (UC)	✓	PF
PARKS AND OPEN SPACE DESIGNATIONS		
▪ Coastal Recreation (CR), 0 to 0.1 FAR	✓	OF-R, P-K
▪ Parks (PK), 0 to 0.1 FAR	✓	P-K
▪ Natural Areas (NA), 0 to 0.1 FAR	✓	F-P, P-K
▪ Agriculture/Grazing (AG), 0.5 du/ac (1 du per 20 acres)		E-A

[1] Coastal Zone (CZ-O), Flood Plan (FP-O), Shoreline Protection (SP-O), and Historic (H-O) Overlay Zones are potentially applicable to any land use designation.

[2] Allow the following residential uses to exceed the maximum densities:

- Single-room occupancy (SRO) units;
- Small ownership units (SOU);
- Small one-bedroom and studio units;
- Accessory dwelling units (ADU) and junior accessory dwelling units (JADU); and
- Density bonus units.

TABLE IV-2: Guidelines for Interpreting the Land Use Map

1. Land use boundaries following features such as streets, alleys, creeks, and cliffs shall fall within the street or at the actual physical boundary of a creek or cliff.
2. Land use boundaries at the transition between residential, commercial, or industrial areas shall occur at the property line between the uses, except where it may be modified by specific instances.
3. Land use designations in areas proposed for specific or area plans shall be general, pending the adoption of such plans. General Plan policies may be better indicators of expected land-use patterns in these areas.
4. Natural areas are depicted in their general location; their exact location is determined prior to development by a qualified biologist under a process established by the Zoning Ordinance (Conservation Regulations).
5. Area plans, specific plans, management plans, or other more detailed plans that have been adopted as part of the General Plan take precedence over the land use designations shown on the Land Use Map.
6. The Land Use Diagram is at an overall level of detail where it may be impractical to delineate small pockets of higher densities in areas of lower densities. For example, the Zoning Map will show different densities in the vicinity of: Almar/Rankin, Laurel/California, California/Bay, and Forest/Mentel streets.

Key Changes in Land Use Designations in *General Plan 2030*

The Land Use Map and land use designations in the City's *2030 General Plan* applicable to the coastal zone are largely unchanged from the *1990-2005 General Plan and Local Coastal Program*, except for the following:

- **NEW DESIGNATIONS & APPLICATION:** Three new mixed-use land designations were developed as part of the City's *General Plan 2030*. However, within the coastal zone, the only area where a mixed-use designation was newly applied is along a segment of Ocean Street, which is designated Mixed-Use Medium Density (MXMD). The MXMD designation is applied to lots along Ocean Street that were designated Low Medium Density Residential in the previous *1990-2005 General Plan*.

- **NEW FLOOR AREA RATIOS (FAR) AND NEW DENSITY:** The City's *General Plan 2030* provides specific Floor Area Ratios for non-residential designations that were not included in the previous combined LCP and General Plan. Additionally, residential densities broadly permitted in commercial and general industrial designations (0-30 units/acre) have been eliminated in *General Plan 2030* as the underlying land use designations generally permit residential uses under specified conditions. Allowable residential density is also specified for the new mixed-use land use designations.

- **LAND USE MAP CHANGES:** Land Use Map changes are anticipated for three properties in the coastal zone, consistent with land use designations adopted under the City's *General Plan 2030*.

1. **Swenson Property:** The LCP land use designation in 2021 is Low Density Residential (1.1-10 du/ac). The *General Plan 2030* recommends a change in designation to allow a mix of land use designations including Low-Medium Density Residential (10.1-20 du/ac), Neighborhood Commercial, and Office following preparation of a Specific Plan. As the requirement for a Specific Plan was originally enacted for a much larger area that included what is now the UCSC Genome Institute as well as the Antonelli Pond properties, the LCP now requires the remaining Swenson property to be developed as a planned development and does not include the requirement for a Specific Plan. The particular requirements for future development for the Swenson property are set forth in Policy/Program 3E-1.5 in Subchapter III-E of this document.
2. **Dimeo Lane Landfill and Resource Recovery Center:** A 5.5-acre property adjacent to the Dimeo Lane Landfill facility's entrance was acquired by the City in 2010. While the landfill site is within the City limits, this separate parcel has not been annexed into the City. Anticipated future uses would be ancillary to the landfill and Resource Recovery Center uses and would be determined at a later date. Development on the site would require either annexation of the parcel into the City or permitting through the County.
3. **UCSC Coastal Science Campus:** The UCSC Coastal Science Campus, located on an approximately 100-acre, federally-owned property on the site of the National Marine Fisheries/Southwest Fisheries Science Center, Fisheries Ecology Division, has been designated as Coastal Dependent (CD). The UCSC Coastal Science Campus also encompasses Younger Lagoon Reserve, UCSC research and education facilities (the Coastal Biology building, completed and occupied in 2017), and State and federal research laboratories. Facilities currently located at the Coastal Science Campus include UCSC's Joseph M. Long Marine Laboratory and associated Seymour Marine Discovery Center, and the Ocean Health building; Fisheries Ecology Division; and a California Department of Fish and Wildlife laboratory (the Marine Wildlife Veterinary Care and Research Center). An additional location adjacent to Antonelli Pond has also been acquired and developed by the University as the Genome Institute. The 2030 General Plan designation for both these properties is UCSC Lands; however, the zoning designations are Exclusive Agriculture for the Coastal Science Campus and General Industrial District/Performance District (IG/Per2) for the Genome Institute. It would be appropriate to rezone each of these properties to Public Facilities.

V. AREA PLAN COASTAL POLICIES

IN THIS SECTION:

Introduction

Over the past more than forty years, the City of Santa Cruz has adopted various area and resource management plans as discussed and summarized on Table I-1 in Chapter I. Some of these plans were initially adopted as part of the City's Local Coastal Program and were approved by the California Coastal Commission as amendments to the City's certified LCP. Table II-1 in Chapter II summarizes dates of approval of these plans. Some of these plans were prepared as area plans, which provide a more focused review of and guidance for future development and uses in a specific area than provided in the General Plan. In addition to area plans, several resource management plans were adopted for some of the City's open space properties.

While some areas within the City limits are under the land use jurisdiction of other agencies such as the State of California, they are also subject to the Coastal Act and must obtain coastal development permits for new uses or development in these areas. For the City to issue coastal permits, it must have a basis for review and action on a permit application. Accordingly, the land use plans adopted by the California State Department of Parks and Recreation for Natural Bridges State Beach, Twin Lakes State Beach, and Lighthouse Field State Beach were incorporated into the City's *1990-2005 LCP*, as was the *Santa Cruz Harbor Development Plan* for the Santa Cruz Small Craft Harbor, operated by the Santa Cruz Port District. The policies, programs, and maps contained in these plans provide the basis for required coastal permits and changes to these plans could constitute amendments to the City's Local Coastal Program.

As noted, a brief summary of the status of adopted plans is provided in Chapter II. The table below summarizes where within this document the coastal policies of the still-active adopted plans are addressed.

Beach and South of Laurel Area Plan

Introduction

In October 1980, the Santa Cruz City Council adopted the *Beach Area Plan*, which only included specific policies pertaining to the City's Main Beach area. Subsequently, broader coastal policies for this area were identified and included in Volume II of the City's *1990-2005 LCP*. In 2002, the Coastal Commission approved an LCP amendment (STC-MAJ-1-01-8) that formally replaced the *Beach Area Plan* coastal policies with new policies developed from recommendations of and provisions in the *Beach and South of Laurel Comprehensive Area Plan (B/SOL Plan)*. The boundaries of the *B/SOL Plan* and subareas are shown on Figure V-BSOL-1[1].

The LCP Land Use Amendment approved by the Coastal Commission in 2002 also contained the Design Guidelines that are part of the *B/SOL Plan*, which are included in this LCP by reference and available on the City's website. The *B/SOL Guidelines* address streetscapes; site planning; architecture; landscaping; screening, lighting, and security; signage; and conservation districts, as well as specific guidelines for each of the four subareas covered by the *B/SOL Plan*. The site planning guidelines generally address the arrangement, design, and scale of new buildings, as well design of building entries, driveways, parking areas, and outdoor pedestrian areas. The architectural guidelines address general design elements to enhance compatibility with surrounding areas, as well as building proportions, texture and detail of materials, and window placement and openings. The architecture section also provides guidelines for two distinct architectural styles: Spanish Colonial Revival and Victorian. The landscaping guidelines address general planting parameters, as well as specific elements for hotels.

Policies and Programs

PUBLIC ACCESS

5-BSOL-1.1 System of Alternative Transportation Modes and Routes to Beach Area. Create a transportation system that encourages alternative forms of transportation and alternative routes to the Beach, reduces visitor intrusion into neighborhoods, links the Beach Area with the Downtown, and provides alternative transit modes and parking to accommodate anticipated recreational and commercial improvements.

5-BSOL-1.2 New Beach Routes. Maintain Front Street as a connection to the Main Beach area, providing a secondary route to the beach and providing more visitor exposure to the Downtown.

5-BSOL-1.3 Access and Circulation Improvements. Develop an appropriate combination of circulation improvements, transit/rail, parking, pricing, and pedestrian/bicycle strategies that will:

[1] All figures are included in Chapter VIII of this document for ease of reference.

- Support new development and expand the operational season;
- Protect existing neighborhoods; and
- Encourage transit, rail, pedestrian, and bicycle access.

5-BSOL-1.4 Pedestrian Connection Improvements.

a. Improve pedestrian pathways in the South of Laurel area.

b. Improve the pedestrian connection to Downtown by upgrading and maintaining the existing pedestrian stairways.

c. Improve and maintain safe pedestrian and bicycle access across the San Lorenzo River railroad trestle bridge per Policy 6-SLR-1.1.

d. Provide pedestrian enhancements along the Front Street and Pacific Avenue corridor as opportunity building sites are developed, including appropriate urban design elements such as lighting and plantings.

5-BSOL-1.5 Multi-Modal Circulation Program. Develop a comprehensive, multi-modal circulation planning program that takes as its highest priority reduction of automobile trips by the creation of viable alternative transportation modes, effective transportation systems management programs, and integration of land-use and circulation planning.

a. Promote pedestrian travel as a viable transportation mode by developing and maintaining a safe, comprehensive, convenient, accessible, and aesthetically pleasing pedestrian system.

b. Develop a safe, convenient, and effective bikeway system that promotes bicycle travel as a viable transportation mode and connects work, shopping, schools, residential, and recreational areas.

c. Promote a comprehensive and integrated mass transit system including buses, paratransit, and rail transit/fixed guideways to provide increased mobility in the community.

d. Promote rail access to the Beach.

e. Maintain the Depot site as a focal point of community activity by maintaining parking and recreational uses, and by providing a small-scale multi-modal transit facility.

f. Pursue outside funding sources for alternative transportation projects.

5-BSOL-1.6 Public Parking. Maintain a minimum of 3,690 public parking spaces in the overall Beach and South of Laurel Area and approve no projects that would reduce public parking below this amount.

5-BSOL-1.7 Public Access Amenities. Provide public amenities such as benches, planters, lighting, street name and traffic sign posts, trash receptacles, public restrooms, and bicycle racks that are functionally and aesthetically integrated into the streetscape for pedestrian comfort, convenience, and safety.

a. Improve lighting for pedestrian stairway at Cliff Street for linking the heights of Beach Hill with the South of Laurel area.

RECREATIONAL & VISITOR-SERVING USES

5-BSOL-2.1 Wharf Master Plan. Implement recommendations developed in the Wharf Master Plan that address:

- Pedestrian and vehicular access, circulation, and parking;
- Additional maritime access and recreational potential; and
- Educational, environmental, and scientific initiatives connected with the Monterey Bay National Marine Sanctuary.

5-BSOL-2.2 Potential Off-Season Beach Area Activities. Examine the potential of joint marketing/programming between the Boardwalk, Beach area businesses, and the Wharf targeting local Santa Cruz residents for both mid-week and off-season activities.

5-BSOL-2.3 Provide Broad Range of Lodging. Examine the potential to provide a broad array of lodging experiences to an expanding visitor base, and encourage Bed and Breakfasts and small inns.

5-BSOL-2.4 Upgrade Beach Area Lodging. Develop comprehensive program to ensure general upgrading of entire Beach area lodging inventory.

5-BSOL-2.5 Preserving Beach Visitor Accommodations. If beach area motels are converted to visitor-serving condominiums, restrict use of the condominiums by individual owners to no more than 45 days per year.

5-BSOL-2.6 Dream Inn Site. Future development of the existing Dream Inn overflow parking lot may consist of residential use, bed and breakfast use, or ancillary hotel/motel uses. Hotel/motel development is not allowed.

LAND RESOURCES

Scenic Resources and Design

5-BSOL-3.1 General Design Guidelines. Maintain General Design Guidelines to promote development that respects the physical and environmental characteristics of the community and the site, reflecting functional and attractive site planning and high quality design.

5-BSOL-3.2 Gateways. Enhance entryways to neighborhoods at definable intersections and encourage distinctive architectural treatment at major intersections to accentuate community gateways.

5-BSOL-3.3 Street Tree Program. Implement a street tree program to give scale and definition to the public walkways and promote visually attractive and shaded streets.

5-BSOL-3.4 Underground Utilities. Underground utilities to eliminate visual clutter and provide a more aesthetic streetscape.

Cultural and Other Resources

5-BSOL-3.5 Protect Historic Features. Protect historic resources such as existing rock walls and stairs. Use existing historic resources as a basis for streetscape design.

5-BSOL-3.6 Historic Conservation Districts. Protect and enhance the unique historic and architectural qualities that are present by establishing/maintaining historic conservation districts.

5-BSOL-3.7 Designate Beach Hill Historic Preservation District. Formally designate the Beach Hill area as an Historic District.

DEVELOPMENT

5-BSOL-4.1 Zone Districts.

a. Maintain the RTD – Beach Residential zone district and a Neighborhood Conservation Overlay in the Conservation Area, which requires conformance with specific design guidelines.

b. Maintain the RTE – Beach Medium/High Density Residential zone district for the "New Development Area" residential zone in which the density may range from 30 to 36 units an acre, with reduced parking requirements, flexible setbacks, no specified lot size for planned developments, and subject to specific design guidelines.

5-BSOL-4.2 Beach Hill Neighborhood. Establish a stronger definition of where the Beach Hill neighborhood begins and ends to help protect it from tourist-related effects such as increased traffic along Third Street.

5-BSOL-4.3 Beach Commercial Area Redevelopment. Provide significant opportunities for Beach Commercial area redevelopment of underutilized land and encourage attractive retail, entertainment, lodging, and support uses to appropriately extend the seasonal operational activities of the Beach.

V-BSOL-4.4 Main Beach Parking Lot Site Development. Complete a community-based planning process to determine the ultimate future development parameters for the Main Beach parking lot site.

5-BSOL-4.5 South of Laurel Residential Neighborhoods. Protect and enhance the small-scale residential neighborhoods in the South of Laurel while encouraging the significant development opportunities presented by vacant and underutilized parcels.

5-BSOL-4.6 Mixed-Use Development.

a. Encourage mixed-use development on major arterials in the residential sections of the South of Laurel area by overlaying the Mixed-Use Zoning District on appropriate areas.

b. Encourage mixed-use projects along Front Street.

5-BSOL-4.7 Circulation System Efficiency and Safety. Balance the needs of automobiles, pedestrians, and bicyclists within the existing right-of-way and provide bicycle routes, accessible sidewalks, street trees, and at-grade crossings.

5-BSOL-4.8 Limit Beach Hill Traffic Impacts. Limit impacts of traffic circulation and parking on Beach Hill and its residents as the Beach Commercial area develops by maintaining the permit parking program to limit visitor parking and by implementing proposed neighborhood gateways to help define entries to the residential area and calm traffic.

5-BSOL-4.9 Traffic Calming Measures. Implement traffic calming measures such street width chokers in Conservation Areas.

a. Implement the traffic calming and urban design recommendations for neighborhood entryways into Beach Hill and Beach Flats.)

5-BSOL-4.10 Future Boardwalk/Main Beach Parking Lot Project Transportation Management. Implement transportation management measures concurrent with any future Boardwalk expansion or commercial expansion on the Main Beach parking lot.

5-BSOL-4.11 Employee Parking

a. Develop employee off-site parking programs to encourage employee ridesharing and consider a levy of parking transfer fees on employers.

b. Develop and implement a comprehensive, peak season employee off-site parking program to address the needs of both large and small employers in the Beach area.

5-BSOL-4.12 Parking District. Evaluate creation of a parking assessment district in the Beach and South of Laurel to provide new financial resources to fund construction of additional parking.

Ocean Street Area Plan

The *Ocean Street Area Plan* was adopted by the City Council in January 2014. The *Area Plan* describes and illustrates a community-driven 20-year vision along Ocean Street through the year 2030, and provides a framework for creating a more welcoming environment along the corridor. The *Plan* includes policy guidance, development and design standards and guidelines, and implementation steps to ensure high quality new buildings along Ocean Street. The Plan includes the land use designations of the City's adopted *General Plan 2030*, and also includes additional policies and actions to supplement the policies in the *General Plan*. The lower portion of the *Ocean Street Plan* area is located within the coastal zone. The boundaries of the *Ocean Street Area Plan* and the area within the coastal zone are shown on Figure V-OSAP-1.

PUBLIC ACCESS

5-OSAP-1.1 Pedestrian Safety. Improve mid-block pedestrian crossings to provide safety enhancements. When intersections must be redesigned to maintain vehicle level of service, ensure that safe pedestrian crossings are maintained.

5-OSAP-1.2 Bicycle Access. Promote a safe and well-connected bicycle network between Ocean Street and other parts of the City.

a. Between Water Street and San Lorenzo Boulevard, include northbound and southbound bicycle lanes as part of any street widening project.

b. Where bike lanes are not provided on Ocean Street, add a shared lane marking to the rightmost traffic lane, indicating that the roadway is shared by vehicles and bicyclists.

5-OSAP-1.3 Alternative Transportation Modes. Encourage use of alternative modes of transit.

a. Encourage the Santa Cruz Metropolitan Transit District to provide more frequent bus service on Ocean Street.

b. Seek permanent funding for a visitor shuttle service that connects Ocean Street to Downtown, the Boardwalk, beaches, and other popular destinations.

5-OSAP-1.4 Visitor Parking. Encourage the construction of centralized parking facilities that could serve multiple properties and provide parking for visitors.

a. Work with the City's Economic Development Department and the County of Santa Cruz to build a parking garage, or multiple parking garages, at the County Government Center on Ocean Street.

b. Encourage the use of the Tannery remote parking lot as remote and overflow parking for visitors by including it in any future beach shuttle route and by promoting the new bicycle and pedestrian improvements linking it to the beach area.

5-OSAP-1.5 San Lorenzo River Access. Maintain existing agreements to provide access to the River levee through private property.

5-OSAP-1.6 Visitor Signs. Provide clear directional signs to visitor destinations.

5-OSAP-1.7 Visitor Traffic. Direct visitor traffic toward routes that minimize impacts on residential neighborhoods.

RECREATION & VISITOR-SERVING USES

5-OSAP-2.1 Visitor Lodging. Attract hotel and motel development that provides a variety of different lodging options.

5-OSAP-2.2 Improvement of Existing Lodging. Encourage the improvement of existing hotels and motels.

LAND USE

5-OSAP-3.1 Pedestrian-Oriented Development. Encourage pedestrian-oriented development that will enhance the overall architectural quality of buildings along Ocean Street.

5-OSAP-3.2 Protect Historic Resources. Where feasible, preserve existing homes and other buildings that have been identified as historic resources.

DEVELOPMENT

5-OSAP-4.1 Mix of Uses. Promote a mixture of retail shops, offices, residential uses, and visitor services that complement one another and contribute to an active pedestrian environment.

a. On the ground floor of buildings along Ocean Street, encourage retail shops, personal services, and other uses that foster pedestrian activity.

b. Promote the establishment of restaurants, cafés, drugstores, neighborhood markets, and other businesses that serve the needs of visitors as well as nearby residents.

5-OSAP-4.2 Assembly of Small Land Parcels. Encourage assembly of small land parcels into larger sites that allow for high-quality development.

a. Consider amending the Zoning Ordinance to implement graduated density zoning in the Plan Area to encourage assembly of small parcels.

5-OSAP-4.3 Neighborhood Transition. Require new development on Ocean Street to incorporate transitions to the smaller scale of the adjacent residential neighborhoods.

5-OSAP-4.4 New Development. Require new development to minimize impacts relating to parking, loading, traffic, noise, mechanical equipment, and lighting on adjacent residential neighborhoods to the greatest extent possible.

a. Amend the Zoning Ordinance to establish new performance standards for commercial and mixed-use development located adjacent to single-family homes.

5-OSAP-4.5 Planned Developments. Planned Developments within the Plan area may not be approved for any project that deviates from the standards specifically called out in the Plan, including maximum building height, setbacks, and use, unless required by State law or through the density bonus process, or allowed through other State or local regulations.

San Lorenzo Urban River Plan

Introduction

The San Lorenzo River runs through the City for approximately 2.7 miles out to the Pacific Ocean. The lower approximately one mile is within the coastal zone. The river drains a 138 square mile watershed, featuring forested and urbanized areas within both the City and Santa Cruz County. Inside the City limits, the lower San Lorenzo River flows southward from the Sycamore Grove area of Pogonip, through the center of Downtown Santa Cruz, to Monterey Bay. This lower reach of the San Lorenzo River encompasses much of the river's historic floodplain. Branciforte Creek and Jessie Street Marsh are tributaries to the San Lorenzo River. The lower 2.2-mile reach was channelized in 1958 for flood-control purposes by construction of a levee system, dredging of the riverbed and removal of vegetation. The San Lorenzo River effectively divides the City in half and is a key element defining the City's sense of place. The river supports a wide variety of birds, land animals, and aquatic species. Fish resources found in the river include steelhead trout, which is a federally-listed threatened species and a state-listed sensitive species.

The full length of the San Lorenzo River flows approximately 25 miles from a steep forested watershed high in the Santa Cruz Mountains to the broad floodplain at its mouth, draining about 138 square miles of area into the Monterey Bay and Pacific Ocean. The drainage basin is relatively short and steep and experiences dramatic changes in flow rates, from summertime lows of less than 30 cubic feet per second (cfs) to over 30,000 cfs during peak winter floods. The estimated 100-year flood level in Santa Cruz is approximately 50,000 cfs. Upstream flow diversions for municipal and domestic water use reduce summer inflows to the river and the typical summer lagoon near the river mouth.

Before the flood control project in the 1950s, the San Lorenzo River was a biologically diverse and productive habitat supporting a wide variety of birds and other animals. The river itself was one of the most fished in the state and represented the only major steelhead trout fishery south of the Russian River. The river supports two federally endangered anadromous fish: the coho salmon and the steelhead trout. In 1996, the National Marine Fisheries Service (NMFS) listed coho salmon in the Central Coast Evolutionary Significant Unit (ESU) as "endangered" under the federal Endangered Species Act. In 1997, NMFS listed the Central California Coastal ESU steelhead as "threatened" under the federal Endangered Species Act. These designations significantly affect management decisions and give more impetus to restoring salmonids habitat in the river. The river offers potential habitat for many important species of plants and animals. The restoration of the river for improved aquatic habitat is a primary focus of the City's plans and policies for the San Lorenzo River over the next 20 years.

In 2000, the City of Santa Cruz, in cooperation with the U.S. Army Corps of Engineers, completed construction of the San Lorenzo River Flood Control Improvement Project, a multi-million dollar project to raise the levees through the downtown area to provide for 100-year flood protection. The project provides new levees, a bicycle and pedestrian path on top of the levees, and landscaped areas along the outer levee slopes. Over 3,000 native riparian trees and shrubs were planted along the levee, providing a new public park for the community.

An unintended consequence of the levee system is that the river is now separated from the land on either side, no longer visible as a landmark and visual amenity. The unrealized potential of the San Lorenzo River continues to be a focus of community interest and there is a strong commitment to its future improvement and re-integration with the City. The San Lorenzo River represents one of the most important and undervalued open spaces within the City and is centrally located with respect to the downtown, surrounding residential neighborhoods, and the Boardwalk and Main Beach area. The River and its levee system continue to be used for recreational purposes and connect many major public parks and recreational areas. In addition, there are opportunity sites for redevelopment adjacent to the River which could help create a more positive relationship between the City and its river.

Background

The *San Lorenzo Urban River Plan (SLURP)* was the outcome of a planning process initiated by City Council in 1999 to update the previous plans for the San Lorenzo River, Jessie Street Marsh, and Branciforte Creek. The *SLURP* provided an update to the 1987 *San Lorenzo River Design Concept Plan* and the 1989 *San Lorenzo River Enhancement Plan*. These earlier plans guided flood control, vegetation restoration, and public access improvements along the San Lorenzo River and Jessie Street Marsh from 1989 through the late 1990s. In 1999, the Santa Cruz City Council requested that these plans be updated due to several factors: the initiation of the U.S. Army Corps of Engineers flood control improvement project; the federal listing of the steelhead trout and coho salmon as threatened and endangered species respectively; and federal designation of the San Lorenzo River as critical habitat for these species. The City Council appointed a citizen task force to help update the plan, emphasizing community involvement as the foundation for plan development. The City Council adopted the *SLURP* in 2003.

The *SLURP* articulates a community vision for the corridor encompassing the lower San Lorenzo River, Branciforte Creek, and Jessie Street Marsh as both a wildlife area and a community recreation and public open space amenity. The *SLURP* contains recommendations for habitat enhancement, public access and trail improvements, and public art and community programs focused on river-oriented development to guide the City in re-establishing and improving its management of and relationship to this major landscape feature over coming decades.

The *SLURP* includes conceptual plans for areas adjacent to the San Lorenzo River, which are provided only to stimulate potential design ideas and are not intended as requirements for particular properties with regard to development applications. In general, the *SLURP* promotes river-oriented development to highlight the river as an amenity, and contains conceptual ideas, as well as site-specific recommendations, for accomplishing the goals that guided the Plan's development.

In January 2004, the California Coastal Commission took action on City of Santa Cruz LCP Amendment No. STC-MAJ-2-03, which replaced the certified Land Use plan policies of the 1989 *San Lorenzo River Enhancement and Design Plan* with new policies in the *San Lorenzo Urban River Plan*. The Commission certified the proposed Amendment with four suggested modifications, all of which were subsequently adopted by the City Council. The final amendment certification by the Coastal Commission was on May 12, 2004. In 2017, the City updated policies in the *SLURP* as part of the update of the Downtown

Recovery Plan. The California Coast Commission approved the update of the Downtown Recovery Plan, renamed the Downtown Plan, including the updated *SLURP* policies on March 8, 2018 as LCP-3-STC-17-0073-2-Part A. The boundaries of the *SLURP* and the area in the coastal zone are shown on Figure V-SLR-1.

GOALS

Acknowledging the validity of previous efforts to improve the San Lorenzo River while recognizing the nature of those efforts as ongoing, the San Lorenzo Urban River Task force readopted the goals from the 1987 and 1989 plans to guide their work. First and foremost was the Task Force's interest in restoring the San Lorenzo River as a functional riverine ecosystem. The *Lower San Lorenzo River and Lagoon Management Plan* comprises the biological restoration plan for the River and Lagoon and is included in the *San Lorenzo Urban River Plan* as Appendix A.

The *Lower San Lorenzo River and Lagoon Management Plan* provides resource management and restoration recommendations within the constraints of providing flood protection. One of the key goals of the plan is to enhance and restore biotic values of the river, creek, and marsh fish and wildlife habitat. Management and restoration recommendations address: annual vegetation management; summer lagoon water level management; enhancement of the aquatic, shoreline, and riparian habitats; and marsh restoration. The primary management and restoration recommendations of the *Lower San Lorenzo River and Lagoon Management Plan* are to:

- ❒ Develop annual vegetation and sediment management plans for flood control maintenance;
- ❒ Develop a plan to manage summer lagoon water levels;
- ❒ Establish a streamflow standard for inflow into the lagoon and maintenance of a low flow channel;
- ❒ Enhance streambed aquatic cover and substrate in estuarine and transitional reaches;
- ❒ Enhance shoreline habitat in transitional and estuarine reaches;
- ❒ Enhance shoreline and riparian corridor vegetation; and
- ❒ Develop planning for floodplain and marsh restoration in special planning areas.

RELATIONSHIP TO OTHER CITY PLANS

The *San Lorenzo Urban River Plan* is the City's guide for restoring, managing, and maintaining natural resources and riverfront development, as well as recreation and public access improvements for the lower San Lorenzo River, Jessie Street Marsh, and Branciforte Creek. (Note: Branciforte Creek is not located within the coastal zone.)

Several other plans adopted by the City of Santa Cruz also address the planning area for the *SLURP*. Described below, these include the 1991 *Downtown Recovery Plan/2017 Downtown Plan* and the 1998 *Jessie Street Marsh Management Plan*. The *SLURP* reflects the intent of these other plans with consistent goals and policies. The 1991 *Downtown Recovery Plan (DRP)* provided a framework for public and private actions related to rebuilding the downtown after the 1989 Loma Prieta earthquake. The *DRP* identifies the River as a major downtown open space and recognizes its potential "as a

naturalistic open space, wildlife habitat, and recreational amenity: a 'garden promenade' that can provide a more contemplative and reflective experience to the hustle and bustle of Pacific Avenue." It recommended riverfront improvement and creation of linkages to downtown as a top priority in rebuilding downtown. As mentioned previously, the *DRP* was amended by the City in 2017 and is now called the *Downtown Plan*; see description in Chapter II.

The *Jessie Street Marsh Management Plan* was adopted in 1998 and is included in the *SLURP* as Appendix B. Jessie Street Marsh is a City-owned wetland and open space site located just to the north of the San Lorenzo River lagoon and San Lorenzo Boulevard that was purchased by the City as part of the required mitigation for the loss of parkland resulting from the City's wastewater treatment plant expansion project in 1991. Historically, Jessie Street Marsh was part of a large tidal estuary open to the San Lorenzo River. The *Jessie Street Marsh Management Plan* includes specific required management actions for both City-owned lands and recommendations for adjacent privately-owned properties.

Goals

URBAN RIVER PLAN GOALS

URP - Goal 1: Enhance and restore biotic values of the River, creek, and marsh as habitat for fish and wildlife.

URP - Goal 2: Maintain flood control capacity of the San Lorenzo River and Branciforte Creek.

URP - Goal 3: Improve the scenic and recreational value of the Riverfront.

URP - Goal 4: Improve public access and pedestrian/bicycle movement to and along the River.

URP - Goal 5: Improve the urban and neighborhood interface with the San Lorenzo River, Branciforte Creek and Jessie Street Marsh.

URP - Goal 6: Incorporate the San Lorenzo River, Branciforte Creek, and Jessie Street Marsh into the surrounding urban fabric and downtown and neighborhoods.

RESTORATION GOALS AND OBJECTIVES

RES – Goal 1: To increase abundance and diversity of native plant species above the baseline (2000) levels.

- Objective #1: Restore and manage native riparian forest to promote species diversity, structural diversity, and density along the inner and outer levee banks.
- Objective #2: Increase width of the riparian corridor consistent with flood protection constraints to provide increased stream shading and instream cover for aquatic organisms.
- Objective #3: Enhance native populations of riparian species via natural recruitment and an active plating program.
- Objective #4: Control non-native, invasive species.
- Objective #5: Emulate reference vegetation structure and function.

RES – Goal 2: To restore geomorphic and hydrologic form and function to the Lower San Lorenzo River so as to improve channel and habitat conditions that will support and sustain native flora and fauna.

- Objective #1: Manage instream riparian vegetation to encourage geomorphic form and function.
- Objective #2: Maintain a stable bankfull channel to improve channel substrate conditions.
- Objective #3: Maintain adequate base flow through the lower San Lorenzo River and maintain hydrologic connectivity between the estuary and the upper San Lorenzo River.
- Objective #4: Improve quality of waters entering into the river from storm drains and nonpoint sources through public education, structural retrofits and pollutant source reduction.
- Objective #5: Improve and maintain lagoon water quality and quantity at levels consistent with steelhead and coho salmon rearing needs.
- Objective #6: Reduce water temperatures to optimal levels for aquatic species rearing and reproduction.
- Objective #7: Restore floodplain function through levee setbacks in areas determined to be feasible.

RES – Goal 3: To enhance habitat conditions for native and special status wildlife species dependent upon the San Lorenzo River above baseline (2000) levels.

- Objective #1: Enhance native resident and migratory fish, bird, mammal, reptile, and amphibian species abundance and richness.
- Objective #2: Enhance habitat for breeding/nesting populations.
- Objective #3: Sustain and increase population of steelhead trout.
- Objective #4: Provide functional habitat for Western Pond Turtle to increase potential for occurrence of this species.
- Objective #5: Create adequate habitat conditions to allow for migration of coho salmon into the upper watershed.

Policies and Programs

PUBLIC ACCESS

5-SLRP-1.1 Monterey Bay Sanctuary Scenic Trail Network. Integrate the Santa Cruz Riverwalk trail with the Monterey Bay Sanctuary Scenic Trail and the California Coastal Trail Network.

5-SLRP-1.2 Pedestrian and Bicycle Access improvements.

a. Improve and maintain the a safe pedestrian and bicycle access pathway across the Trestle Bridge across the San Lorenzo River mouth as part of implementation of the Monterey Bay Sanctuary Scenic Trail Network to provide safer pedestrian and bicycle use along this route.

b. Improve pedestrian/bicycle access between the River Trail, Jessie Street Marsh, and Oceanview Park.

c. Design access and pathways from the neighborhoods at Ocean Street and Barson Street to facilitate pedestrian and bicycle use.

d. Create access points to the levee from key streets including Raymond, Uhden, and Kaye Streets.

e. Continue to provide disabled access to areas and facilities of the river.

5-SLRP-1.3 Trail Improvements. Develop a San Lorenzo River trail improvement program that addresses infrastructure improvements (lighting, safety), signage (wayfinding, interpretation), and trail linkages. Design trail lighting to be non-intrusive to fish and wildlife, and use energy efficient fixtures.

RECREATION AND VISITOR-SERVING USES

5-SLRP-2.1 Recreational Use of River. Review existing City ordinances prohibiting use of the River for kayaking and canoeing; explore opportunities to establish a seasonal boating program with appropriate launching facilities and public safety measures. Design any boating program to avoid conflicts with fish and wildlife and public safety.

5-SLRP-2.2 Public Safety. Devote consistent attention to issues of public safety, maintenance, and enforcement of ordinances to reduce harmful effects of human activity (e.g., overnight camping, illegal activities) that can degrade environmental or recreational quality of the riverfront.

MARINE ENVIRONMENT

5-SLRP-3.1 Flood Control Maintenance. Conduct annual vegetation and sediment management for flood control maintenance.

a. Annually prepare specific procedures for the current year that outline vegetation and sediment management prescriptions by applying adaptive management principles subject to direction by appropriate regulatory agencies. Tables V-1 and V-2 provide recommendations for management.

5-SLRP-3.2 Summer Lagoon Water Level. Implement the San Lorenzo Interim Management Program, which addresses unauthorized river lagoon breaching and sets management strategies for summer lagoon water levels to prevent localized flooding of properties, focused on protection of fishery habitat, and public access and safety at the Santa Cruz Main Beach.

5-SLRP-3.3 River Mouth Breaching. Develop long-term management strategies to address illegal breaching activities at the river mouth based on review of results of implementation of the Interim Management Program, and provide education and enforcement information for residents and visitors.

5-SLRP-3.4 Stream Flow. Establish a stream flow standard for inflow into the lagoon and maintenance of a low flow channel.

LAND RESOURCES

5-SLRP-4.1 Aquatic Enhancement. Enhance streambed aquatic cover and substrate.

5-SLRP-4.2 Riparian Enhancement. Enhance riverbank shoreline and riparian corridor vegetation.

5-SLRP-4.3 Restoration Planning. Develop plans for floodplain and marsh restoration in special planning areas.

5-SLRP-4.4 Education. Educate residents and visitors about the San Lorenzo River and estuary through the use of signage, public art, and multi-lingual materials.

5-SLRP-4.5 Protection of Levee Plantings. Protect river levee plantings through installation and maintenance of fencing along the Boardwalk (Seaside Company) parking lot to prevent shortcut trails from the parking area to the River and beach.

5-SLRP-4-6 Litter Abatement. Continue to work with the Seaside Company on litter abatement program to reduce trash and other debris from entering the River from Boardwalk and Main Beach parking areas.

TABLE V-SLR-1: Recommended Vegetation Thinning Prescriptions By Reach

Reach	Vegetation Management Prescription	Frequency
Bankfull Channel Area Instream Channel Bed	Remove riparian vegetation that exceeds accepted Corps Manning's "n" roughness coefficient for the flood control channel. A 5-foot edge of stream buffer area should be maintained on either side of the wetted edge.	Annually
Transitional Reach	Maintain a 10-foot wide strip of woody riparian vegetation and tules and cattails on the west bank. The east bank should be maintained to keep trees overhanging water. Trees or branches that fall in the water should be assessed for cutting into smaller pieces and may be removed entirely if they cause an immediate safety hazard. Sandbars should be maintained to allow volunteer groves to establish, but remove all trees greater than 6 "diameter.	Annually
Estuarine Reach	Maintain a 5-foot wide strip of willow, cattail and tule at the levee toe. Willows should have stem diameter of no greater than 5 inches and be limbed up and periodically thinned to create defined groves.	Annually

TABLE V-SLR-2: Recommended Sediment Management Prescriptions By Reach

Reach	Sediment Management Prescription	Frequency
Transitional Reach	Disking on the west bank should occur east of levee toe up until outside edge of 5-foot vegetation buffer. Existing cross-channel scour areas should be encouraged through disking and manipulation of discarded root wads/vegetation material.	As determined by cross-section monitoring
Estuarine Reach	Sediment management or removal is not necessary in this reach.	NA

DEVELOPMENT

5-SLRP-5.1 Relationship to River. Encourage new development to create a positive relationship with the River.

Front Street

5-SLRP-5.1 Riverwalk. Require new development projects to incorporate design features that encourage active engagement with the Riverwalk such as: filling area adjacent to the Riverwalk with landscaping, providing direct physical access to the Riverwalk, including appropriate active commercial and/or residential uses adjacent to the Riverwalk, or a combination of these and/or other design features that support the resource enhancement and river engagement policies of the San Lorenzo Urban River Plan.

5-SLRP-5.2 Pedestrian and Bicycle Connections. Require new development projects to incorporate pedestrian and/or bicycle connections between Front Street and the Riverwalk at appropriate locations such as the extensions from Maple Street and Elm Street.

5-SLRP-5.3 Riverwalk Setbacks. Maintain the ten-foot setback area between residential and commercial uses adjacent to the levee trail from the western edge of the trail. The area between the property line and the Riverwalk shall be filled to raise the adjacent ground-level use to a similar or higher elevation as the Riverwalk The public lands between the Riverwalk and the private property may incorporate publicly accessible commercial or residential amenities, such as outdoor public seating. Trees planted as part of the San Lorenzo Flood Control Improvement Project should be maintained and incorporated into new development where feasible and not in conflict with the required fill or publicly-accessible amenities.

Beach Flats

5-SLRP-5.7 Beach Flats/Riverwalk Connection. Integrate San Lorenzo River recreational and transportation opportunities in redevelopment options for the Beach Flats area. Encourage use of the River Trail for alternative transportation access to the Main Beach area.

Santa Cruz Harbor Development Plan

Introduction

The Santa Cruz Harbor is part of an extensive federal, state, and regional network of ports and harbors providing refuge, commerce, and marine rescue and educational services. It is a significant regional resource, providing recreational, commercial, social, and economic benefits to the community. It functions as a group of interdependent water-related activities including boat-launching, berthing for commercial fishing vessels and recreational boats, boat repair areas, marine-related retail/commercial businesses, restaurants, sailing programs, a yacht club, and boat sales.

The Santa Cruz Harbor Development Plan (HDP) was initially adopted by the Port District in December 1980 and subsequently revised and re-adopted in 1992. The 1992 HDP combined and revised the previously adopted 1980 HDP and the certified 1980 Local Coastal Plan (LCP) in one planning document for the lands under the jurisdiction of the Santa Cruz Port District. The 1992 adopted HDP was included in the City of Santa Cruz 1990-2005 General Plan/LCP. The HDP serves as a specific guide to development and permit approvals for the Harbor. The primary objectives of the Plan are to:

- Provide access to the ocean;
- Increase the capacity of the Harbor for use by and service of recreational and commercial vessels;
- Provide facilities for commercial fish receiving;
- Expand marine-related service facilities and recreational businesses in the Harbor;
- Provide non-boating recreational opportunities and shoreline access for the general public;
- Facilitate financial planning by providing for the expansion of facilities within the Harbor;
- Provide visitor-serving facilities for the residents of the local community, visitors, and tourists; and
- Provide a well-coordinated, aesthetically pleasing harbor development that is in harmony with Port District goals and the 1976 California Coastal Act.

Harbor Background

The planning area of the Harbor Development Plan encompasses about 75 acres, of which 46 acres are submerged underwater. The Harbor accommodates approximately 950 berths and dory ties for commercial and recreational boats. Lands under Port District jurisdiction include 3.3 acres of sandy beach on both sides of the Harbor jetties. There are approximately 45,000 square feet of commercial space that accommodate restaurants, retail shops, boat sales, bait and tackle shops, and a variety of other marine-related uses. More than 1,000 parking spaces support the various uses of the Harbor. Table V-HDP-1 below identifies Harbor uses as of 2021.

The preservation and management of the Monterey Bay in its current pristine state is of primary interest to the Santa Cruz Port Commission and the public. In September 1992, Monterey Bay was designated a National Marine Sanctuary by the federal government, becoming the eleventh and largest marine sanctuary in the United States. The Santa Cruz Harbor is the largest harbor complex with access to the

Monterey Bay and will function as the gateway to the sanctuary for millions of visitors in the future. In recognition of the Harbor's significant geographical position on the Monterey Bay, in 1992, the Santa Cruz Port District Commission passed Resolution #92-08, in which the intent and the principles of the Sanctuary Act were formally adopted by the District, and the Commission indicated its intent to actively assist the federal government working through the National Oceanic and Atmospheric Administration (NOAA) in realizing its bay management goals.

TABLE V-HDP-1: Existing Harbor Uses

(As of November 2021)

	South East Harbor	South West Harbor	North Harbor	TOTAL
Land Area	7 Acres	5 Acres	17 Acres	**29 acres**
Beach Area	58,300 sf	85,000 sf	None	**3.3 acres**
Boat Berths ▪ Dory Ties	223 None	167 None	498 69	**888** **69**
Dry Boat Storage Spaces	None	99	85	**184**
Launch Facilities	1 Launch Ramp I Small Craft/Hand Launch Float	1 Hoist 1 Small Craft/Hand Launch	None	**Four**
Approximate Building Square Footage ▪ Coastal Dependent/Related ▪ Visitor Serving ▪ General Office/Commercial **TOTAL**	 21,800 sf 18,400 sf 5,900 sf **46.100 sf**	 400 sf 2,000 sf **2,400 sf**	 2,400 sf **2,400 sf**	 24,600 20,400 5,900 **50,900 sf**
Recreational Space/Activity ▪ Observation Decks ▪ Mini-Parks ▪ Charter Boat Operations ▪ Restrooms	 4 3 25 passengers & varies 2	 3 2 50 passengers & varies 2	 5 1 20 passengers & varies 3	 **12** **6** **100+** **7**
Parking Spaces ▪ Auto ▪ Car/Boat Trailer ▪ RV Spaces ▪ Bicycle	 419 68 0 15	 242 None 0 10	 384 None 12 5	 **1,045** **68** **12** **70**

sf = square feet
Source: Santa Cruz Port District

Harbor Improvements

Planned Harbor improvements and projects that were envisioned in the 1992 Harbor Development Plan were included in the City's 1994 LCP. Many of these improvements have been completed. In addition, the March 2011 tsunami that struck the Harbor served as a catalyst for rebuilding the majority of the Harbor's docks and their appurtenant utility services. The following section provides an overview of envisioned improvements and uses for the Harbor's three subareas. Table V-HDP-2 summarizes these improvements and identifies which improvements have been completed and which are still planned. The Harbor is divided into three distinct areas which are defined by access and use characteristics: North Harbor, South West Harbor, and South East Harbor.

TABLE V-HDP-2: Summary of Harbor Improvements

(As of November 2021)

Improvement	Completed	Planned or To Be Considered in Future
North Harbor		
‣ 100 Space Boat Storage	✓	
‣ 12 Space RV Parking	✓	
‣ 2,200 square foot building for fishing-related concessions	✓	
‣ ADA Accessible Dock & Boat Slips	✓	
South West Harbor		
‣ Dry Boat Storage with Additional Launch Hoist	✓	
‣ UCSC Dock/Turning Basin Reconfiguration	✓	
‣ 5,000 square foot Community Boating Center		✓
‣ New Boat Slips, Visitor Dock, & Water Taxi Landing	✓	
‣ 616 Atlantic Avenue Restaurant Rebuild (approx. 4,000 square feet)		✓
‣ Small Craft/Hand Launch Ramp	✓	
‣ West Jetty Walkway Improvements (a portion of the project, which includes paving the walkway, was completed in 2013)		✓
South East Harbor		
‣ Coast Guard Auxiliary Building Rebuild	✓	
‣ Commercial Fishery Dock Improvements		✓
‣ Mini-Park	✓	
‣ Marine Services Center		✓
‣ Johnny's Harborside Restaurant Expansion (approx. 500 square feet)		✓
Access and Circulation Improvements		
‣ Pedestrian Walkway with self-guided tour: 10 stations, observation decks, and interpretive signage	✓	
‣ 70 bicycle parking spaces	✓	
‣ One Additional Restroom at UCSC Sailing Center	✓	
‣ Easement over Port District Land for Arana Gulch Trail	✓	
‣ Sidewalk/bikeway improvements along Brommer Street Extension	✓	
‣ Overflow Trailer Parking Improvements at 7th Ave/Brommer Street	✓	

- **North Harbor**
  - *Dry Boat Storage and Transient Launching Facilities:* At the north end of the North Harbor, additional dry boat storage with parking for trailers and combined car/boat trailers has been completed. Additionally, parking and utility hook-ups for 12 recreational vehicles (RVs) have been installed, which provide support to boaters.
  - *Retail Commercial Uses:* A small (2,200± square foot) building adjacent to the dry boat storage was constructed to house a small fishing-related concessions area, restrooms, and/or other boating support facilities.
  - *Charter Boat Operations:* Existing fishing and pleasure craft charter operations are planned to be maintained in the North Harbor area.

- **South West Harbor**
  - *Dry Boat Storage and Launching Capability:* An additional launch ramp was constructed and additional boat storage spaces provided. New dry boat storage spaces, a small craft /hand launch ramp, visitor dock, and water taxi landing have been completed.
  - *Turning Basin Reconfiguration:* A reconfigured dock has been completed just south of the Murray Street Bridge to accommodate UCSC sailing programs, public charter boat operations, and general boating.
  - *Community Boating Center:* A small building (less than 5,000 square feet) is planned for a community meeting facility and to support the UCSC sailing program.
  - *616 Atlantic Avenue Restaurant*[2]*:* The seawall supporting the restaurant at 616 Atlantic Avenue was replaced in 2019, necessitating demolition of the restaurant building. Modifications of the original building's exterior and interior design are planned, with potential limited expansion to a total of approximately 4,000 square feet. The exact modifications are not yet known, but could include encompassing portions of the original deck area to the west (back) portion of the original building.
  - *Jetty Walkway:* Upgrades are planned to existing pedestrian facilities along the Harbor waterfront and the west jetty. The upgrades are anticipated to include seating, landscaping, and garbage receptacles.

- **South East Harbor.**
  - *Retail-Commercial Uses:* The South Harbor is generally developed. A modest expansion and/or reconstruction of existing buildings may be planned in the long-term. Limited expansion of the existing marine-related retail commercial uses adjacent to the Crow's Nest Restaurant through expansion of the second floor space at 2222 East Cliff Drive [3] has been completed. The seven existing buildings housing various retail commercial uses in the north and central areas of the South East Harbor will remain; however, these buildings are expected to undergo renovation over time.

[2] Formerly referred to as "Aldo's" Restaurant.
[3] Formerly referred to as the "O'Neill Building."

- *Coast Guard Auxiliary Building:* Demolition of the existing earthquake-damaged building and reconstruction of a building of similar design to accommodate the Coast Guard Auxiliary functions and public meeting space has been completed.
- *Commercial Fish Facilities:* Improvements to the commercial fishery dock have been made to better accommodate commercial boats and truck traffic. Additional planned improvements include a 3,200-square foot pier addition to provide improved truck access and circulation, and the potential addition of a limited amount (1,000 square feet) of retail fish sales.
- *Charter Boat Operations:* Existing fishing and pleasure craft charter operations are planned to be maintained in both the South East and South West Harbor areas. South East Harbor fishing boat charter operations are planned to be expanded from 25 to 65 passenger capacity, while the South West Harbor charter boat capacity has expanded from 50 to 200 person capacity. Some of this expansion is expected as a result of increasing interest and awareness of the Monterey Bay Marine Sanctuary and improved fishing opportunities in the bay.
- *Marine Services Center:* The existing boatyard and building are planned to continue in operation to serve boaters with berths in the Harbor as well as from outside the area. The existing building is planned to be remodeled or replaced with a lower-profile modern workshop style building to accommodate specialty work.

❑ **Access and Circulation.**

- *Parking:* Parking or suitable alternatives will be provided for existing and planned uses in the North and South Harbor, including parking for harbor visitors and beach users. Overflow boat trailer parking improvements have been completed at the northeast corner of the Seventh Avenue/Brommer Street intersection.
- *Shuttle and Remote Parking Program:* As Harbor development proceeds, the Port District will monitor parking supply and demand.
- It is the long-term goal of the District to maintain and expand a remote parking program in the North Harbor with a shuttle to transport boaters and visitors to destinations in the South East and West Harbor areas. It is expected that a shuttle would operate primarily during peak periods.
- *Pedestrian Walkways and Observation Decks:* A pedestrian walkway has been completed bordering the interior shorelines of the Harbor. This widely used path links the various land uses of the harbor, including the public observation decks and mini-parks. The Port District has implemented a self-guided walking tour around the entire Harbor with about ten stations that include observation decks with interpretive signage explaining cultural, historical, and environmental aspects of the Harbor, including the Monterey Bay Marine Sanctuary, and local fish and bird populations. These decks are furnished with benches from which visitors can view Harbor activities, and include bicycle racks, trash containers, and landscaping. Sidewalk and bicycle improvements have been completed along Brommer Street Extension, upgrading pedestrian and cyclist access into the North Harbor and connecting with the Harbor walkway and the multi-use path and bridge to Arana Gulch.

- *Bicycle Access:* Bicycle access will be maintained via both the existing roadway and path around the Harbor. Bicycle access through the North Harbor provides a link between Seventh Avenue on the east side of the Harbor and the Frederick Street and Seabright neighborhoods on the west side. The Port District approved an easement for the City to install portions of the Arana Gulch Trail on Port District-owned land. The Arana Gulch Trail provides pedestrian and bicycle access via paved paths and a bridge over Arana Creek behind the North Harbor Dry Storage facility and has been completed. The Port District has installed bike racks throughout the Harbor, resulting in approximately 70 bike parking spaces throughout the Harbor. Additional bicycle parking will be provided as part of any new or expanded development. Existing bike parking is shown on Figure V-HDP-1.
- *Mini-Parks:* Public mini-parks exist on both the east and west sides of the South Harbor adjacent to the water. An additional mini-park is planned for the east side, with construction of public amenities such as benches, drinking fountains, bike racks, and landscaping. Locations of existing mini-parks are shown on Figure V-HDP-1.
- *Restrooms:* Nine existing restrooms and shower facilities are available to resident and visitor boaters throughout the Harbor, including three public restrooms. One additional public restroom is planned as part of the future reconstruction of the restaurant building at 616 Atlantic Avenue (formerly Aldo's Restaurant) in the South East Harbor. Locations of existing public restrooms are shown on Figure V-HDP-1.
- *Access for the Disabled:* The Port District has adopted guidelines for providing access to its facilities for disabled persons in regard to recreation, commercial use, and job opportunities. Two docks have been reconstructed (one each in the North and South Harbor) providing accessibility for physically disabled boaters. When any upgrade or new construction takes place, access improvements for physically disabled persons will be included wherever practicable.

Policies and Programs

PUBLIC ACCESS

5-HDP-1.1 Pedestrian Access. Maintain and improve pedestrian access to and along the interior Harbor as an important element of the Harbor for visitors and to link various public uses within the North and South Harbor areas. Allow minor exceptions from the continuous pedestrian pathway adjacent to harbor waters (such as the boatyard in the South East Harbor and areas of launch facilities) where conflicts between immediate shoreline access and coastal dependent uses would be severe.

a. Design Harbor walkways to provide connection to accessways leading to the Harbor with appropriate pedestrian-scale landscaping, lighting, and drinking fountains.

b. Improve or expand pedestrian lateral access as part of new development projects in the North and South Harbor areas as outlined below, designed to minimize or remove use conflicts, in order to provide continuous pedestrian access around the Harbor. In the case of potential future restaurants, which are not coastal dependent uses, public pedestrian accessways have priority for the immediate waterfront strip/area.

c. Where existing pathways accommodate both pedestrian and bicycle use (such as both sides of the southern portion of the North Harbor), provide appropriate signage to alert pedestrians of bicycle use in area and vice versa.

d. Consider and plan for other long-range pedestrian improvements after other priority Harbor projects are complete and as funds become available.
   - Improve the east Harbor jetty as a pedestrian walkway, similar to the west side jetty, if engineering studies demonstrate feasibility and pedestrian safety, and if funds are available.

e. Where existing pedestrian pathways are interrupted by Harbor uses (such as the boatyard and launch facilities), provide appropriate signage, special paving, or design features to guide pedestrians throughout the Harbor.

5-HDP-1.2 Bicycle Access. Maintain bicycle circulation along Harbor roadways in support of regional alternative transportation systems and allow for bicycle links to adjacent bike routes along City and County streets. Provide appropriate signage to minimize potential conflicts between motorists and bicyclists wherever possible.

a. Provide additional bicycle parking as part of new or expanded development projects in accordance with city standards.

5-HDP-1.3 Disabled Access Improvements. Improve access to Harbor facilities for physically disabled persons as part of any upgrade or new construction project.

5-HDP-1.4 West Jetty Access Improvements. Work with the California Department of Parks and Recreation, the U.S. Army Corps of Engineers, and the City of Santa Cruz to maintain and improve access to and along the west jetty.

5-HDP-1.5 Transit and Recreational Access. Continue to promote seasonal water taxi service and explore other means of access between the North and South Harbor as Harbor development occurs and activities/uses increase.

5-HDP-1.6 Beach Access. Continue to cooperate with efforts of the City and County of Santa Cruz and the California State Department of Parks and Recreation to plan, develop, and manage public parking and expansion of transit systems to area beaches.

5-HDP-1.7 Beach Parking. Maintain the existing level of beach parking spaces within Harbor boundaries (31 spaces in the South West Harbor and 22 spaces in the South East Harbor), but allow relocation of such spaces in conjunction with implementation of a Harbor shuttle, or if relocation is necessary to accommodate coastal dependent uses.

a. Provide clear signage to indicate location of Harbor parking areas available for beach parking to guide visitors to appropriate parking areas.

5-HDP-1.8 Shuttle Transportation. In areas where future parking shortages have been projected, require new or expanded uses to provide shuttle transportation to remote parking areas in accordance with Port District requirements and/or require participation in an integrated

Harbor shuttle system to be developed by the Port District and approved by the City of Santa Cruz and California Coastal Commission.

5-HDP-1.9 Parking for Special Events. Parking for special events at the Harbor will be coordinated and managed by the Port District. Depending on the size of the event, implementation of appropriate measures, such as but not limited to directing of traffic to overflow parking in the North Harbor (if it doesn't conflict with peak boating use) and coordination and operation of a shuttle to both onsite and offsite parking areas.

RECREATION AND VISITOR-SERVING USES

5-HDP-2.1 Priority to Boating, Recreation, Marine/Tourist Uses. To facilitate boating, coastal recreation, and marine- and tourist-related uses within the Harbor, give priority for new or expanded development to facilities that support boating, fishing, coastal recreation, and visitor-serving uses over general retail, office, and commercial uses.

5-HDP-2.2 Waterfront Recreational Uses. Maintain waterfront recreational uses in Harbor waters, sandy beaches, and a portion of land along the immediate shoreline. Principal uses include active (e.g., bicycling, jogging, walking, or swimming) and passive (e.g., sunbathing, painting, photography, etc.) on-shore recreation, and boating uses, including catamaran boat storage. Only minimal public safety improvements, piers, and floating docks shall be permitted to intrude upon the beach, Harbor channel, or the jetties.

5-HDP-2.3 Visitor Recreational Vehicles. Maintain overnight visitor parking use in the North Harbor for visitor recreational vehicles, with priority given to boating-related users, upon demonstration that provision of such use does not remove or preclude priority boating facilities (dry storage, boat trailer parking); does not conflict with boating support activities; and that appropriate measures are incorporated into recreational vehicle overnight parking project design to limit the length of stay to a short-term duration (14 days). Provide adequate security and support services (water, sewer) for recreational vehicle overnight parking.

5-HDP-2.4 Non-Boater Visitor Recreation. Continue to provide non-boater recreational opportunities (pathways, mini-parks, benches, observation decks) throughout the Santa Cruz Small Craft Harbor in park-like settings. Develop and improve recreational facilities as part of any new or upgraded commercial development.

a. Maintain a self-guided walking tour with informational stations depicting historical, boating, and environmental elements associated with Harbor.

b. Maintain existing public restrooms (1 in South West, 1 in South East Harbor areas, and 1 in North Harbor) and construct additional public restrooms as part of new development when appropriate.

c. Provide trash containers and trash/recycling enclosures in convenient locations for Harbor visitors. Properly design and screen trash enclosures to minimize visual impacts and be compatible with the design of existing development and improvements.

MARINE ENVIRONMENT

Maintain and Enhance Marine Resources

5-HDP-3.1 Marine Habitat Protection. Avoid permanent adverse impacts on the marine habitat within the Harbor by investigation and use of least environmentally damaging construction techniques (e.g., pilings instead of fill), mitigation of adverse impacts through enhancement of marine resources within the City of Santa Cruz to the satisfaction of the California Department of Fish and Wildlife, and by the avoidance of projects that would require dredging or fill unless they are necessary to the effective functioning of recreational or commercial boating.

5-HDP-3.2 Monterey Bay National Marine Sanctuary. Support the principles of the Monterey Bay National Marine Sanctuary Act and actively assist the federal government, working through the National Oceanic and Atmospheric Administration, in realizing its management goals.

Boating Opportunities

5-HDP-3.3 Boat Berths. Minimize losses of wet boat berthing opportunities due to provision of new or expanded boat launch facilities or shoreline uses and seek to increase berthing and/or boating opportunities, where feasible.

5-HDP-3.4 Boating Opportunities. Continue to encourage increased access to the Harbor and Monterey Bay waters through boating opportunities provided by teaching programs, commercial group fishing and recreational trips, and boat or slip use.

5-HDP-3.5 Boat Launch Capability. Maintain the overall launching capability of the Harbor at a level limited only by demand and safety considerations, availability of parking, and appropriate facility design to mitigate traffic, marine, and other impacts.

5-HDP-3.6 Boat Storage. Maintain the existing beach storage area within Port District Harbor boundaries for a maximum of 80 boats. The area designated for boat storage on the beach shall be clearly marked and managed to minimize conflicts with other beach users.

Dredging

5-HDP-3.7 Harbor Dredging. Continue annual or periodic dredging, as required, to maintain the safe boating functions of Santa Cruz Small Craft Harbor. Dredging shall be carried out in a manner protective of the public's health and safety, and the public's right to enjoy the use of downcoast beaches. Guidance for dredging includes:

a. Sample dredged materials periodically in accordance with permit requirements of U.S. Army Corps of Engineers, Regional Water Quality Control Board, and other agencies to ensure proper disposal of dredge spoils.

b. Install any dredging spoils disposal system on land or offshore to minimize visual and physical disruption of recreational beach use. Systems may be buried, to the greatest extent possible.

c. Maximize use of dredged materials to replenish upcoast and downcoast beaches to help enhance the recreational values of the beaches and help protect adjacent properties.

d. Maintain procedures for addressing public complaints regarding dredging operations. Monitor dredging operations to ensure compliance with above measures and refine operations as necessary to correct deficiencies.

Water Quality

5-HDP-3.8 Storm Water Runoff. Control storm water runoff by minimizing the quantity of potential runoff through use of drainage retention measures and protect the water quality through means necessary to meet Regional Water Quality Control Board Standards. Continue to install oil, grease, and silt traps as part of any Harbor development or improvement projects, and implement improvements to the existing drainage system where appropriate.

5-HDP-3.9 Water Aeration System. Continue to maintain and improve the water aeration system utilized within Harbor waters for anchovy life support. To date, the existing system has been effective in minimizing or eliminating conditions that lead to periodic anchovy kills. Support and utilize other environmentally-sound water aeration methods or technologies as they become available, and if proven to prevent anchovy kills.

5-HDP-3.10 Arana Gulch Sediment Control. Continue to work with the City and County of Santa Cruz and the Resource Conservation District to prevent any increased sediment from Arana Gulch from entering Harbor waters.

LAND RESOURCES

5-HDP-4.1 Scenic Views. Future development proposals shall ensure that: scenic and visual qualities of the Santa Cruz Small Craft Harbor are protected; public views to and along the waters of Harbor Beach and Twin Lakes Beach are protected; development is compatible with the architectural character of surrounding developed areas; and development is designed to complement the existing visual and structural character of the Harbor environs.

5-HDP-4.2 Tree Protection. Protect existing trees, unless proven to be diseased, unhealthy, or unsafe as determined by a certified arborist or tree specialist. Provide appropriate native and drought-tolerant landscaping throughout the Harbor as part of any new development and facility improvement projects, and to screen unattractive uses (i.e., trash containers), where needed.

DEVELOPMENT

New Development

5-HDP-5.1 Coastal Dependent Facility. The Harbor is designated "Coastal Dependent" in the City of Santa Cruz General Plan and Zoning Ordinance. This designation, as applied to the Harbor, allows land uses that provide marine-related services or goods which contribute to the diverse activities associated with boating, fishing, recreational, pedestrian, and beach uses of the Harbor; are compatible with existing uses; and represent diverse activities. These land uses are described below, and shown on Table V-HDP-3.

5-HDP-5.2 Harbor Land Uses. Maintain and intensify existing Harbor development in accordance with the permitted land uses and development intensities discussed below and outlined in Table V-HDP-3. Permit requirements for these uses are also included in Table V-HDP-3. Uses and development intensities to be maintained within three subareas of the Harbor are discussed below.

- South East Harbor: High intensity boating, marine-related and visitor commercial uses;
- South West Harbor: High intensity boating and recreational uses; and
- North Harbor: Moderate intensity boating and recreational uses with limited support facilities.

a. South East Harbor: Continue to concentrate marine- and visitor-related commercial development in the southern and central portions of the South East Harbor. Principal uses include: boat rental/sport fishing charters; fishing and marine equipment and supplies rentals/sales; restaurants/food service; other retail sales and commercial services oriented to harbor visitors and boaters; and public offices, meeting facilities, and storage for the Port District and Coast Guard Auxiliary. Accessory uses include restrooms, laundry facilities for boaters, mini-parks, observation decks, boat wash-down areas, and fuel sales. Maintain existing public uses (Port District and Coast Guard Auxiliary) to support the Harbor-related activities of these agencies. Allow a limited amount of general office, retail, and commercial uses, subject to development standards outlined in Policy 5-HDP-5.3 below.

   Maintain marine industrial uses in the northern portion of the South East Harbor to allow industrial-type marine-related and commercial fishery support uses dependent on a shoreline location. The principal uses are boat repair and construction, and commercial fish receiving and other support facilities. Allow continued operations of restaurants as previously approved. Encourage retail fish sales in support of the commercial fishery operations.

b. South West Harbor: Maintain recreational boating support facilities as the primary land use. Principal uses include: boat hoist; slip renter parking; dry boat storage; pleasure craft charters; and public or quasi-public offices, meeting rooms, and storage for the Coast Guard and UCSC Boating Program. Accessory uses include restrooms, mini-parks, and boat wash-down areas. Allow construction of a restaurant at 616 Atlantic Avenue (formerly Aldo's Restaurant), including limited expansion from original building for a total square footage of 4,000 square feet with a Special Use

Permit. Allow additional dry boat storage and boat hoist facilities upon demonstration that adequate parking can be provided. Allow one new building (less than 5,000 square feet of floor area) to accommodate public or quasi-public uses of a recreational, educational, cultural, or public service nature, which are in support of existing boating, marine, and harbor uses.

c. North Harbor: Maintain recreational boating support facilities as the primary land use. Principal uses include: launch ramp; slip renter parking; dry boat storage; charter boat operations; and Port District maintenance facilities. Accessory uses include restrooms, laundry facilities for boaters, mini-parks, observation decks, and boat wash-down areas. Maintain recreational vehicle parking spaces in support of recreational boating activities subject to compliance with development standards in in Policy 5-HDP-5.3.

Allow limited marine/visitor commercial uses (less than 5,000 square feet of floor area) to accommodate fishing/marine and visitor-related concessions, lockers for boaters, and other boating support facilities. Allow construction of visitor-serving restaurant upon approval of a Special Use Permit by the City of Santa Cruz.

Limit uses within areas of steep slopes and sensitive habitats along the northern and eastern perimeters of the North Harbor to non-vehicular public access, consistent with provisions of the City's Conservation regulations and protection of habitat, visual resources, and other resources present.

5-HDP-5.3 Development Standards. Allow new, expanded, and/or replacement development and uses in accordance with permitted uses outlined in Policy 5-HDP-5.2 and in Table V-HDP-3, CD (Coastal Dependent) Zone District standards, development/design standards outlined below, provision of adequate parking, and the mitigation of significant environmental impacts. Building sizes and uses shall be restricted by availability of parking, provision of adequate public access, and the ability to mitigate traffic and other impacts of development.

a. New or expanded structural development in the South East Harbor shall not exceed 12,000 square feet, excluding replacement square footage, and shall be allowed upon demonstration of adequate parking, including implementation of parking management programs as may be necessary. Ensure that Harbor land uses continue to be oriented toward boating, marine, and coastal visitor/recreational uses, by allowing no more than 5,000 square feet of new or expanded building square footage in the South East Harbor for non-marine related, general retail, commercial, and office uses. Such uses will only be allowed in the central and northern portions of the South East Harbor area upon demonstration that parking demand can be accommodated without decreasing overall parking availability for other principal Harbor uses.

b. Ensure that proposed site design for future Harbor development is consistent with the "General Site Design Standards" of the City's Zoning Ordinance.

c. Require that new development shall not exceed two stories (35 feet) in height, except for accessory uses, which shall not exceed one story (15 feet) in height.

Development shall be consistent with the City's CD (Coastal Dependent) District regulations and development standards.

5-HDP-5.4 Buildings over water. Buildings shall not be expanded over the water, except under a Coastal Development Permit approved by the Coastal Commission.

5-HDP-5.5 Harbor Parking. Maintain existing level of parking, and expand, where feasible, through parking lot reconfiguration, to support addition/expansion of Harbor uses. Utilize parking rates in accordance with City standards and as shown below.

a. Require each development in Santa Cruz Small Craft Harbor to be served by adequate parking according to applicable standards of the City.

b. Periodically review and update the Harbor Parking Management Plan to ensure parking availability is optimized.

5-HDP-5.6 City and County land use designations. Support City and County of Santa Cruz land use designations that accommodate marine-oriented retail and commercial service in commercial zones within approximately a half mile of the Harbor, and boat building and storage uses in heavy commercial/industrial zones within a mile of the Harbor.

a. Work with the County of Santa Cruz to maintain a commercial land use designation on Port District-owned property along Seventh Avenue that can accommodate potential future coastal/marine-related and visitor-serving commercial uses associated with Harbor uses and activities.

TABLE V-HDP-3: Harbor Land Use Map Designations

The Land Use Maps establish coastal land use designations for the Harbor. Policies contained in the Harbor Development Plan provide additional guidance regarding permitted uses in specific areas of the Harbor. Uses and intensities are limited in accordance with Policies 5-HDP-5.2 and 5.3 and uses outlined below. Any other uses or service establishments that are determined by the Zoning Administrator to be of the same general nature as the below uses that will not impair the present or potential uses of adjacent properties and are consistent with the policies of the Harbor Development Plan may be allowed by Special Use Permit.

Uses	South East Harbor	South West Harbor	North Harbor
Waterfront Recreation: This designation includes most of the Harbor's waters and sandy beaches and a portion of land along the immediate shoreline. Principally permitted uses include: active (e.g., bicycling, jogging, walking, swimming) and passive (e.g., sunbathing, photography) recreation and boating uses, including boat storage. Only minimal public safety improvements, piers and floating docks shall be permitted to intrude upon the beach, Harbor channel, or the jetties with approval of an Administrative Use Permit.	✓	✓	✓
Marine/Visitor Commercial: This designation includes structures, parking, and leased areas for primarily commercial purposes. Principally permitted uses include: boat rental/sport fishing charters, fishing and marine equipment sales and services, retail sales and services oriented to Harbor visitors and boaters, public offices, and a limited number of general office, retail, and commercial uses, subject to development standards outlined in Policies 5-HDP-5.2 and 5.3. Restaurants can be permitted with approval of a Special Use Permit. Accessory uses include: restrooms, laundry facilities for boaters, mini-parks, observation decks, boat wash-down areas, and fuel sales.	✓		✓
Marine Industry: This designation includes areas devoted to industrial-type (marine-related) uses and commercial fishery support uses dependent on a shoreline location. The principally permitted uses include: boat repair and construction, and commercial fish receiving and support services, including a limited amount of related retail fish sales. Continued operation of previously approved restaurant is allowed.	✓		
Boating Support Facilities: This designation includes Port District and private lands which are needed for land-based support of recreational boating. Principally permitted uses include: launching facilities, slip renter parking, dry boat storage, and pleasure craft charters. Accessory uses include: restrooms, laundry facilities for boaters, mini-parks, observation decks, and boat wash-down areas.	✓	✓	✓
Public Offices and Storage: This designation includes Port District, University and U.S. Coast Guard land-based facilities needed to support the Harbor activities of those agencies. Principally permitted uses include: public offices, meeting rooms, and equipment storage.	✓	✓	✓
Open Space: This designation includes lands within the Port District that are part of (or provide a buffer to) a larger natural habitat or visually significant natural area. Uses are limited to non-vehicular public access consistent with the resources present.			✓

Minimize Adverse Effects of Development

5-HDP-5.7 FEMA Flood Hazards. Development in the Harbor will be in accordance with FEMA flood hazard regulations.

5-HDP-5.8 Efficient Building Design. Design buildings to minimize energy use and maximize the use of natural ventilation and lighting to the greatest extent feasible.

5-HDP-5.9 Water Conservation Devices. Utilize water conservation devices such as low flow toilets, flow reducing faucet aerators, and pressure reducing valves to the greatest extent feasible.

Permit Procedures for the Harbor Area

Any development or improvement project proposed by the Port District is subject to site-specific environmental review and review/approval of coastal, use, and/or design permits by the City of Santa Cruz for those portions of the Harbor within City jurisdiction. Portions of the Harbor are also within the jurisdiction of the California Coastal Commission, as shown on Figure VI-1. In these areas, the Coastal Commission will be responsible for issuing Coastal Development Permits. Additionally, Coastal Development Permits issued by the City for any Harbor development are subject to appeal to the Coastal Commission.

The City of Santa Cruz General Plan and Zoning Ordinance designate the Harbor for "coastal-dependent/related" (CD) land uses. The CD Zoning District will allow all identified Harbor uses, except restaurants, as principally permitted uses. Principally permitted uses may require approval of a Design Permit and Coastal Development Permit from the City. For restaurants and uses not specifically referenced in the Harbor Development Plan, a Special Use Permit may be required in addition to Design and Coastal Permits. See Table V-HDP-3 above for summary of principally permitted, accessory, and other uses allowed within each Harbor area. Proposed development will be subject to all applicable City General Plan and LCP policies and Zoning Ordinance regulations and shall be designed to be compatible with the architectural character of surrounding developed areas and complement the existing visual and structural character of the Harbor environs.

California State Parks and Recreation Plans

Lighthouse Field State Beach

LIGHTHOUSE FIELD STATE BEACH GENERAL PLAN

Lighthouse Field State Beach is a 36-acre open space situated along Monterey Bay, featuring coastal terrace, ocean cliffs, and Its Beach. The open space features grassland (primarily non-native), willows, Monterey cypress trees, and eucalyptus groves. The State of California owns the field area and the western coastline, while the City owns Lighthouse Point and the eastern coastline. Lighthouse Field is classified as a State Beach, which consist of areas with frontage on the ocean or bays and which are designed to provide beach-oriented recreational activities.

The *Lighthouse Field State Beach (LFSB) General Plan* was adopted in 1984 by the State of California, which considers a general plan to be the primary management document for a State Park or Beach. As of late 2021, State Parks department staff has indicated there is no immediate plan for an update of the *LFSB General Plan*. The *LFSB General Plan* evaluates and defines proposed land use, facilities, operations, and management of resources. The Resource Management Plan component of the *LFSB General Plan* addresses hydrologic, geologic, plant, wildlife, and aesthetic resources. Table V-FFSB-1 below indicates land use intensities for Lighthouse Field State Beach as presented in the *LFSB General Plan*.

COASTAL POLICIES

1.1 Aggressively invading exotic (non-native) vegetation shall be removed except in those areas where it is perpetuated for resource management reasons.

1.2 Native vegetation and drought-tolerant groundcover, shrubs, and trees shall be planted around parking and picnic areas and where exotic species have been removed.

1.3 The existing mature Monterey Cypress trees within the moderate intensity use areas (primarily road margins, picnic, and turf areas) shall be maintained to reduce the hazards of falling limbs and/or the falling of diseased trees.

1.4 Existing grassland, shrubs, and trees on the interior portions of Lighthouse Field shall generally be allowed to undergo natural succession. However, limited numbers of young Monterey cypress shall be planted to replace currently declining cypress trees.

1.5 Natural wildlife populations shall be protected and perpetuated.

1.5.4 Prior to construction activity along West Cliff Drive, a qualified biologist should verify that proposed activities will not significantly alter the black swift's nesting sites. In addition, no construction work should be done in the cliff area during the nesting season from May to August.

2.1 The dramatic views from West Cliff Drive shall remain unimpaired and unobstructed by vegetation, structures, or accumulated refuse.

3.1 No concentrated use activities shall be permitted in the low-use intensity area.

3.2 Bicycling, roller skating, and parking shall be confined to the moderate- and high-use areas.

3.3 The low-use intensity area shall be adequately buffered from the higher-intensity use areas.

3.4 Preservation of the scenic natural features of field and coast are the primary objectives of the Lighthouse Field site and any proposed concession facilities must be compatible with these objectives and with surrounding residential neighborhoods.

4.1 Stormwater runoff shall be conveyed primarily via existing surface channels on the site with provisions for sufficient culvert capacity beneath West Cliff Drive for direct discharge into the ocean.

4.2 A regular maintenance schedule for solid waste removal should be developed to ensure sanitary conditions throughout the site. This includes the placement of trash receptacles at high-intensity use areas.

4.3 New electric cable for pedestrian lighting at stairs should be placed underground, as with any street lighting at pedestrian crosswalks. The power needs for the Lighthouse Museum/Interpretive Center/Restroom may be met through the use of wind generators or solar photovoltaic cells.

5.1 Hazardous geologic formations (i.e., coastal bluffs) shall be signposted and/or the hazard reduced to enable the public to use the areas in reasonable safety.

5.2 Setback of transportation circulation routes may be necessary if erosion continues at the coastal bluffs near roadway and pedestrian/bicycle paths.

5.3 Consideration of additional rip-rap to be placed at the base of eroding coastal bluffs shall occur only when deemed necessary to reduce a severe erosion hazard.

TABLE V-LFSB-1: Lighthouse Field Land Use Intensities

Lighthouse Field Land-Use Intensities

Low-Intensity Uses — Categories of uses that fall in this category include nature observation, hiking trails, and interpretive trails. (See *Lighthouse Field State Beach General Plan*, pages 45 to 46 for a detailed description of uses.)

Moderate-Intensity Uses — Moderate-intensity uses include parking and active recreation uses. The retention of West Cliff Drive in its current alignment will not affect the amount of area devoted to moderate intensity uses, but divide this area between those areas focused on Lighthouse Point in picnic and informal play area, and other uses that will now be located north and inland of West Cliff Drive. The parking previously associated with the realignment is planned to be redistributed through the retention of the parking as it currently exists at Lighthouse Point, and construction of additional parking to serve the moderate-intensity use area north of West Cliff Drive. (See *Lighthouse Field State Beach General Plan*, pages 46 to 53 for a detailed description of uses.)

High-Intensity Uses — High-intensity uses proposed as part of the Lighthouse Field State Beach General Plan include the expansion of the Lighthouse Museum, an interpretive center, and a restroom. The proposed location of these uses is shown on page 35 of the Lighthouse Field State Beach General Plan. (See *Lighthouse Field State Beach General Plan*, pages 53 to 54 for a detailed description of uses.)

Natural Bridges State Beach

NATURAL BRIDGES STATE BEACH GENERAL PLAN

Natural Bridges State Beach is a 65-acre open space and wetland situated on Monterey Bay, on the western boundary of the City of Santa Cruz. Primary resources include the remaining natural rock "bridge", a wide and deep sandy beach, Monarch butterfly overwintering habitat, and the Moore Creek wetland. Natural Bridges was formally classified as a State Beach in 1962.

The preliminary general plan document for Natural Bridges was adopted by the California State Parks Commission in 1988. The final *Natural Bridges State Beach (NBSB) General Plan,* dated 1992, is currently the primary management document for this State Beach. As of Autumn 2021, State Parks staff has indicated there are no immediate plans for an update of the *NBSB General Plan*. The Resource Element of the *NBSB General Plan* addresses management of wetlands, riparian vegetation, Monarch butterfly habitat, paleontological resources, and marine and animal life. Key management recommendations include:

- Prepare management plans for the Moore Creek wetland and Monarch Butterfly habitat.
- Remove invasive exotic vegetation, except eucalyptus trees used by Monarch butterflies, and replace with native species from local population sources.

COASTAL POLICIES

1.1 Monitor and potentially control both the numbers of visitors that enter the tide pool areas and the way visitors use the area. Laws against poaching shall be enforced by State Parks Department peace officers and Department of Fish and Wildlife wardens.

1.2 Remove and control feral cats and dogs that endanger native wildlife and visitors.

1.3 Develop and implement a resource management plan to promote the perpetuation of the Monarch Butterfly resource.

1.4 Establish a 14-acre Moore Creek wetland preserve and develop and implement a wetlands management plan.

1.4.1 The wetland management plan should address sensitive species management, flood control, changes in historic hydrology and sedimentation, removal of artificial structures not required for visitor safety, any alteration of the beach for recreation, exotic species removal, and pollution abatement.

1.5 Maintain the integrity of the riparian ecosystem within Natural Bridges State Beach through development and implementation of a vegetation management plan. Control of non-native species shall be an important element of this plan.

1.6 Disallow use of exotic species capable of naturalizing for landscaping within Natural Bridges State Beach. Management plans to control and eradicate Hottentot fig and pampas grass shall be developed and implemented. An exotic tree removal and replacement program shall be developed and implemented for areas within the state beach boundary, except that eucalyptus trees used as overwintering sites for the Monarch butterfly shall be preserved. Native species from local population sources shall be used to replace exotic species.

1.7 Install landscaping with irrigation that includes protective windbreaks and natural buffer areas between the parking and natural preserves. Irrigation from landscaped areas should not enter either preserve area.

1.8 Ensure the protection of the unique features found within Natural Bridges State Beach and at the same time, provide visitor use and enjoyment. The California Department of Parks and Recreation staff shall monitor and potentially control both the number and use patterns of visitors.

2.1 Avoid use of shoreline protective devices with new development and allow the natural erosion process to continue.

2.2 Relocate and design the property fence near the entry so as not to obstruct ocean views.

2.3 Redesign the West Cliff Drive entrance to the State Beach to accommodate relocated short-term parking and new day-use parking.

2.4 Redesign and expand the existing visitor center through a multi-phased construction program.

2.5 Construct a unit maintenance support building near the future new entrance to accommodate equipment storage and other maintenance needs.

2.6 Retain the existing employee residence; however, future design details should consider incorporating it into the visitor center complex as an office or removing the structure to further develop the visitor center and related outdoor use areas.

3.1 Continue to provide short-term parking by developing a new 25-space parking lot for the scenic overlook near the West Cliff Drive State Beach entrance, setting it back from the bluff.

3.2 Develop an 80-car parking lot adjacent to the existing beach access stairway and entry road for surfers and other beach-goers. Include a ramp access to the existing beach-level restroom. The day use fee may be collected at a new contact station or by metered parking.

3.3 Close the connecting road from the West Cliff Drive entrance to the core area of the park to all but authorized vehicles in order to protect the Monarch Butterfly Natural Preserve from impacts caused by automobiles, buses, and conflicting activities.

3.4 Provide for easy walk-in access from Swanton Boulevard by developing a new trail and gate. Coordinate with the City of Santa Cruz for entrance redesign and compatible bus stop and bicycle trail connections. Improve vehicle access from Swanton with adequate turn lanes.

3.5 Develop a new entrance from Delaware Avenue at Natural Bridges Drive, with a new office/station and vehicle turnaround.

3.6 Develop a new 100-car day-use parking lot with bus drop off in the core area. The outdoor areas between the visitor center and the Monarch Butterfly Natural Preserve should be improved to allow clear, safe movement of visitors from their autos and buses to the visitor center for assembly of nature tours. Access to the existing beach/picnic parking lot will be from a new road alignment to the west of the visitor center and employee residence.

4.1 Develop an interpretive overlook with low-panel interpretive exhibits and sitting areas in a portion of the existing parking lot area near West Cliff Drive.

4.2 Expand picnic facilities in the core area from 31 to 45 tables, and include a new restroom accessible to elderly and disabled persons.

4.3 Develop pedestrian walkways and trail plans.

4.4 Install interpretive panels at the Monarch Butterfly observation platform and various vista points.

4.5 Develop group picnic areas adequate to accommodate school groups and outdoor classes in the core area.

4.6 Expand the docent program at Natural Bridges State Beach to a year-round program with Monarch butterfly tours in the fall and winter months and tide pool and wildlife interest hikes in the spring and summer.

4.7 Expand visitor center programs, exhibits, and collections.

4.8 Include only fire rings and signs as permanent beach facilities to be provided on the beach area with the exception of the existing combination shower-restroom building.

5.1 Carefully control permits for collection of paleontological resources within Natural Bridges State Beach to ensure proper management and protection of these nonrenewable resources. Collection of fossil resources shall be approved only when the collection will result in direct benefit to the State Park System.

5.2 Any excavation, trenching, or grading in the vicinity of archeological site SCR-266, including the parking lot area, shall be monitored or evaluated by an archeologist.

6.1 Carefully control and Implement a visitor and aquatic safety program to provide immediate aquatic incident response every day, all year long.

6.2 Undertake structural protection measures to reduce coastal bluff erosion only if nonstructural measures (i.e., relocation of facility, additional setback, redesign, or beach replenishment) are not feasible. (*NBSB General Plan*, p. 22) If a protective structure is constructed or modified (i.e., rip-rap at the base of the coastal bluff in an attempt to protect West Cliff Drive), the structure shall not:

- Significantly reduce or restrict beach access;
- Adversely affect shoreline processes and sand supply;
- Significantly increase erosion on adjacent properties;
- Cause harmful impacts on vegetation, wildlife, or fish habitats;
- Be placed further than necessary from the development requiring protection; or
- Create a significant visual intrusion.

6.3 Develop and maintain a regular program of monitoring rates of cliff erosion and the width and elevation of beaches.

6.4 Establish a “zone of exclusion” to include the base, face, and top of all bluffs and cliffs extending inland to a plane formed by a 45-degree angle from the horizontal at the base of the cliff or bluff. No new structures shall be constructed within this zone unless they are movable or expendable. Existing facilities may remain in use subject to regular inspections by State Department of Parks and Recreation personnel. A “zone of demonstration” shall be established in the park to extend inland from the zone of exclusion to the intersection of the ground surface with a place inclined 20 degrees from the horizontal from the toe of the cliff

6.5 Conduct facility maintenance and housekeeping in a manner to meet standards for public health and safety, to maintain public and departmental expectations for cleanliness and appearance, to meet security requirements, and to extend the life span of facilities, tools, and equipment.

6.6 Establish a fire management program to reduce the risk of wildfire within the Natural Bridges State Beach. The management and removal of accumulated tree litter shall be part of the program.

Twin Lakes State Beach Plan

TWIN LAKES STATE BEACH GENERAL PLAN

Twin Lakes State Beach, totaling 91.6 acres, is located within both the eastern portion of the City and the unincorporated area of Santa Cruz County. Within the City limits, the State Beach lands include Seabright Beach and San Lorenzo Point along the eastern bank of the mouth of the San Lorenzo River. The preliminary *Twin Lakes State Beach (TLSB) General Plan* was adopted by the State Parks Commission in 1988. The final general plan document is dated 1992. As of Autumn 2021, State Parks department staff indicates there are no immediate plans for an update process.

The Resource Element of the *Twin Lakes State Beach General Plan* pertaining to Seabright Beach and San Lorenzo Point primarily addresses resource management of bluffs, paleontological resources, shoreline protection, and marine life.

COASTAL POLICIES

1.1 Disallow use of exotic species capable of naturalizing for landscaping at Twin Lakes State Beach. Develop and implement management plans to control and/or eradicate broom, eucalyptus, English ivy, and cotoneaster. Exotic species shall be replaced by native plant species from local population sources. When reproduction of eucalyptus occurs, remove the young trees. All exotic tree species shall be removed from undeveloped areas.

1.2 Remove and control cats and dogs and other feral animals that endanger native wildlife and visitors using established wildlife management practices.

2.1 Prepare a landscape improvement plan for the area that includes locations and design standards for outdoor furniture, signs, lighting, gates, bicycle racks, landscaping, and accessways.

3.1 Continue to coordinate efforts among the City, State Parks Department, the Santa Cruz Port District, and other local recreation providers and related businesses to promote the planning, development, and management of public parking and expansion of public transit systems to Santa Cruz area beaches.

3.2 Continue to coordinate with local community efforts to enhance the streetscape and improve vehicle and pedestrian accessways.

4.1 Develop a second comfort station/restroom on the beach between Fourth Avenue and the West Harbor jetty to serve beach users.

5.1 Investigate the feasibility of beach replenishment at Twin Lakes State Beach in concert with deposition of the dredge materials from the Santa Cruz Small Craft Harbor. Early consultation with the County, Santa Cruz Port District, Army Corp of Engineers, California Department of Boating and Waterways, California Coastal Commission, and State Lands Commission will be necessary to evaluate and develop a successful project.

5.2 Continue to monitor the ongoing erosion process occurring on San Lorenzo Point to ensure safe public access along the existing trail and overlook. Bluff safety fencing and signage shall be maintained. The publicly-accessible bluff top land overlooking the San Lorenzo River should include appropriate landscaping, benches, and interpretive panels focusing on shorebirds, beach safety, sand transport, erosion, natural bridge formation, and the historic uses of Twin Lakes State Beach.

5.3 Increase lifeguard service and extend it year-round.

5.3.1 Provide an additional lifeguard tower at Seabright Beach and a rescue boat moored in the Santa Cruz Small Craft Harbor to provide for quick and immediate response.

5.3.2 Construct a year-round lifeguard facility for beach observation, first aid, and public contact, and a communications command post. The preferred location for this facility is between the Harbor and Fourth Avenue near the base of the bluff. The tower should be located and constructed with sufficient height so as to provide for beach surveillance extending to San Lorenzo.

5.4 Continue to provide services stipulated by any existing concession contract at "Seabright Cove" near end of Mott Avenue. The concessionaire(s) will provide food, sundries, and beach equipment.

5.5 Encourage present day-use activities as long as they do not compromise natural resources and visitor safety. Recreational activities sponsored by individuals, groups, or organizations may be considered by special-event permit.

5.6 Provide additional staff and equipment to increase beach cleaning (sand sifting) to maintain a clean, hazard-free environment for visitors. Additional fire rings and their frequent cleaning should also be given high priority. Debris deposited by winter storms should be removed as soon as possible.

5.7 Consider a docent program under the management of the Monterey Bay Natural Historical Association or similar organization and initiate program if appropriate. Docent volunteers could potentially conduct guided walks or give educational presentations to various user groups, and also maintain interpretive displays.

5.8 Encourage the Monterey Bay Natural Historical Association to maintain involvement with the local Junior Lifeguard program and any other similar programs.

6.1 Carefully control permits for collection of paleontological resources within Twin Lakes State Beach to ensure proper management and protection of these nonrenewable resources. Collection of fossil resources shall be approved only when the collection will result in direct benefit to the State Park System.

7.1 Establish setback zones — both "zones of exclusion," where facility development is precluded, and "zones of demonstration," where facility development is allowable if stability and geologic suitability can be demonstrated.

7.1.1 A zone of exclusion shall be established to include the base, face, and top of all bluffs and cliffs extending inland to a plane formed by a 45-degree angle from the horizontal at the base of the cliff or bluff. No new structures shall be constructed within this zone unless they are either movable or expendable. Existing facilities, including buildings, may remain in use subject to regular inspections by field personnel in coordination with a geologist. A zone of demonstration shall be established to extend inland from the zone of exclusion to the intersection of the ground surface with a plane inclined 20 degrees from the horizontal from the toe of the cliff.

7.2 Consider increased law enforcement staffing and associated equipment to provide adequate levels of public and resource protection if visitor-use patterns continue. Should visitor-use patterns change decidedly, the level of response may need to be reviewed and modified accordingly. Regular patrols and crime prevention programs will be provided to establish a law enforcement presence, prevent crime, and apprehend violators.

7.3 Undertake structural protection measures only if nonstructural measures (i.e., relocation of facility, additional setback, redesign, or beach replenishment) are not feasible. (*TLSB General Plan*, p. 20) If a protective structure is constructed (i.e., riprap at the base of the seawall or construction of a new seawall), the structure shall not:

1. Significantly reduce or restrict beach access;
2. Adversely affect shoreline processes and sand supply;
3. Significantly increase erosion on adjacent properties;
4. Cause harmful impacts on plant, wildlife, or fish habitats;
5. Be placed further than necessary from the development requiring protection; or
6. Create significant visual intrusion.

7.4 Institute a photographic and physical survey monitoring program at Twin Lakes State Beach to document beach width and elevation changes, sea cliff retreat, and block falls. Monitoring points shall be established, in consultation with a geologist and support shall be sought from other public agencies initiating baseline data collection programs (California Department of Boating and Waterways, U.S. Geological Survey, U.S. Army Corp of Engineers).

IN THIS SECTION:	IN OTHER SECTIONS	ATTACHED BY REFERENCE:
⊙ Beach/South of Laurel ⊙ Ocean Street Area Plan ⊙ San Lorenzo Urban River Plan ⊙ Harbor Development Plan ⊙ State Parks Plans		⊙ City-Wide Creeks Plan ⊙ B/SOL Design Guidelines

VI. IMPLEMENTATION

IN THIS SECTION:

- Coastal Permit Process
- Implementation Plan

Coastal Permit Process

Coastal Permit Authority

The City reviews projects in the coastal zone according to adopted regulations prescribing the permit process, public noticing requirements, the extent of Coastal Commission review and authority, and the requirements of its Coastal Land Use Plan and Implementation measures. Title 24 (Zoning) of the City's Municipal Code, Chapter 24.08 Part 3, sets the provisions for coastal permits, including exclusions and exceptions. Amendments to the Local Coastal Program will first be reviewed by the Planning Commission for its recommendation, and then brought to the City Council for approval. Once approved by the City Council, an LCP Amendment must be approved by the Coastal Commission before becoming effective. A summary of the local LCP amendment process is provided in Table VI-1.

Extent of Coastal Commission Review and Authority

The extent of Coastal Commission review of and authority over local projects is defined in two ways. The first consists of all lands below the mean high-tide line, and lands where the public trust may exist, i.e., the Santa Cruz Small Craft Harbor and within 100 feet of any wetland, estuary, or stream. Within these areas and within tidelands, submerged lands, and public trust lands, the Coastal Commission retains coastal permit authority over all applications for development in coastal lands.

The second relates to appeals to the Coastal Commission. Pursuant to Section 30603 of the Coastal Act, after certification of a local coastal program, an action taken by a local government on a coastal development permit application may be appealed to the Commission, but only for the following types of development:

(1) Development approved by the local government between the sea and the first public road paralleling the sea, or within 300 feet of the inland extent of any beach or of the mean high tideline of the sea where there is no beach, whichever is the greater distance.

(2) Development approved by the local government not included within paragraph (1), but which is located on tidelands, submerged lands, public trust lands, within 100 feet of any

wetland, estuary, or stream, or within 300 feet of the top of the seaward face of any coastal bluff.

(3) Development approved by the local government not included within paragraphs (1) or (2), but that is located in a sensitive coastal resource area.

(4) Any development approved by a coastal jurisdiction that is not designated as the principal permitted use under the zoning ordinance or zoning district map approved pursuant to Chapter 6 of the Coastal Act (commencing with Section 30500).

(5) Any development which constitutes a major public works project or a major energy facility.

The grounds for an appeal are limited to an allegation that the proposed development does not conform to the standards set forth in the jurisdiction's certified local coastal program or the public access policies set forth in this division. . See Figure VI-1[1] for areas of permit authority.

Implementation Plan

Several different sets of land use regulations are used to implement the Coastal Land Use Plan, including Zoning Ordinance Regulations, the Zoning Map, and some Municipal Code Regulations. Zoning ordinance regulations consist of development regulations, such as the conservation regulations and specific land use zoning districts, including the Shoreline Protection Overlay District, Coastal Zone Overlay District, and the Small Craft Harbor District. The Local Coastal Program Implementing regulations are referenced in Table VI-2.

In order to better demonstrate the relationship between the City's Coastal Land Use Policies and associated implementation measures, each of the coastal land use policies is referenced with its various implementing regulations. The implementation measures for particular coastal policies are cross-referenced in Table VI-3. This reference is a key resource element in the processing of coastal permits and allows a direct link between coastal policies and the implementation measures which must be considered when processing a coastal development permit.

[1] All figures are included in Chapter VIII of this document for ease of reference.

TABLE VI-1: Local Coastal Program Amendment Process

1. Prior to filing an official application for a Local Coastal Program amendment, the prospective applicant should discuss the proposed amendment with the City's Planning Director or designee. This gives the applicant a first-hand opportunity to learn the details of the amendment process as well as understand any concerns the City may have about the proposed changes.

2. Should the applicant decide to proceed with an LCP amendment, the next step is to file an official application with the Planning Department and pay the required fees for processing.

   City policy requires that all applications for changes in land use designation be accompanied by a development plan of sufficient detail to ascertain the potential impacts of the proposed project on the site and the surrounding area. What constitutes sufficient detail is determined by the Planning Director on a case-by-case basis.

   Environmental review in accordance with the provisions of the California Environmental Quality Act (CEQA) will be required of every Local Coastal Program amendment.

3. After application submittal, and typically after initial staff review and comment and possible revisions, it will be placed on a public hearing agenda before the City Planning Commission according to the established Commission schedule. Prior to the Planning Commission hearing, the City, in accordance with State Government Code, will provide notice to the public of the hearing date and the application. For an individual amendment, this typically involves a legal notice in a newspaper of general circulation and a mailed notice to all property owners within 300 feet of the subject property. (Major amendments affecting the entire community, such as an update of the Plan, are noticed differently because of their broad scale. State law provides alternative notification methods that do not require mailing to individual property owners.) Local Coastal Program amendments also require a summary of measures taken to ensure public participation including a list of hearing dates; sample notice; indication of where and when the notice was published and/or to whom mailed; names and addresses of all hearing participants and commenters; copies or summaries of significant comments received at the local hearing, and an indication of local government response to each comment

4. Planning Department staff will prepare a report to the Planning Commission for the public hearing, describing in detail the proposed amendment, discussing the amendment's relationship to and effect on other sections of the LCP, any environmental or other impacts that may result, measures necessary to carry out the amendment, and comments from other City departments or affected government agencies. The staff also will recommend whether or not the Planning Commission should recommend the amendment to the City Council for approval. The staff report is sent to the Planning Commission, the applicant, and then to the Coastal Commission staff. The staff report, comments from the applicant, and other public testimony become factors in the Planning Commission, City Council and, for a Local Coastal Program, Coastal Commission's review and final actions.

   State law requires that any decision on a Local Coastal Program amendment be supported by findings of fact. These findings are the rationale for making a decision either to approve or deny a project. While specific findings may be applied on a project-by-project basis, at least the following standard findings should be made for each Local Coastal Program amendment:
   (1) The proposed amendment is deemed to be in the public interest.
   (2) The proposed Local Coastal Program amendment is consistent and compatible with the rest of the LCP and any implementation programs that may be affected.

(3) The potential impacts of the proposed amendment have been assessed and have been determined not to be detrimental to the public health, safety or welfare.

(4) The proposed amendment has been processed in accordance with the applicable provisions of the California Government Code and the California Environmental Quality Act (CEQA).

City-initiated amendments, as well as amendments requested by other public agencies, are subject to the same basic process and requirements described above to ensure consistency and compatibility with the Plan. This includes appropriate environmental review, public notice, and public hearings leading to an official action by Council resolution.

5. Amendments to the Local Coastal Program are heard in public hearing first by the Planning Commission, then forwarded to the City Council for approval. Once approved by the City Council, a Local Coastal Program amendment must be approved by the Coastal Commission before becoming effective.

TABLE VI-2: Local Coastal Program Implementing Regulations

Local Coastal Program Implementing Regulations

A. City of Santa Cruz Zoning Ordinance

Chapter 24.04 - Administration (all)

Chapter 24.08 - Land Use Permits and Findings

Part 1: Use Permits
Part 2: Variances
Part 3: Coastal Permit
Part 5: Design Permit
Part 8: Planned Development Permit
Part 9: Slope Regulations
Part 10: Historic Alteration Permit
Part 20: Reconstruction Permit
Part 21: Watercourse Development Permit
Part 22: Watercourse Variance

Chapter 24.10 - Land Use District

24.10.050 Annexation of Territory
24.10.105 Substandard Lots
24.10.150 Development of Known Archaeological Sites
Part 3: R-S Residential Suburban District
Part 4: R-1 Single-Family Residential District
Part 5: R-L Multiple Residential—Low-Density District
Part 6: R-M Multiple Residence—Medium-Density District
Part 6A: R-H Multiple Residence – High-Density District
Part 7: R-T Tourist Residential District
Part 7A: R-T(A) Subdistrict A – Medium Density Residential
Part 7B: R-T(B) Subdistrict B – Motel Residential
Part 7C: R-T(C) Subdistrict C – Beach Commercial
Part 7C.1: R-T(C)/PER – Subdistrict C – Beach Commercial/Performance Overlay Zone
Part 7D: R-T(D) Subdistrict D – Beach Residential
Part 7E: R-T(E) Subdistrict E – Beach Medium/High Density Residential
Part 8: C-C Community Commercial District
Part 11: C-N Neighborhood Commercial District
Part 12: C-B Beach Commercial District
Part 13: P-A Professional and Administrative Office District
Part 14: SC-H Small Craft Harbor District
Part 14A: C-D/R Coastal Dependent Related District
Part 16: I-G General Industrial District
Part 16B: I-G/Per: General Industrial District/Performance Overlay District
Part 18A: P-K Parks District
Part 18B: P-F Public Facilities District
Part 19: E-A Exclusive Agricultural District
Part 20: OF-R Ocean Front (Recreational) District

Local Coastal Program Implementing Regulations

Part 21: F-P Flood Plain District
Part 24A: CBD Subdistrict E – Lower Pacific Avenue
Part 25: SP-O Shoreline Protection Overlay District
Part 26: CZ-O Coastal Zone Overlay District
Part 27: Mixed Use Overlay District
Part 28: FP-O Flood Plain Overlay District
Part 31: CON Neighborhood Conservation Overlay District
Part 42: West Cliff Drive Overlay District

Chapter 24.12 - Community Design

Part 1: General
Part 2: General Site Design Standards
Part 3: Off-Street Parking and Loading Facilities
Part 5: Historic Preservation
Part 9: Bed-and-Breakfast Inns
Part 18: Residential Short-Term Rentals

Chapter 24.14 - Environmental Management

Part 1: Conservation Regulations
Part 2: Performance Standards
Part 3: Environmental Review Regulations
Part 4: Flood Plain Management

Chapter 24.16 - Affordable Housing Provisions

24.16.262: Local Plan Consistency

Chapter 24.18 - Nonconforming Uses and Structures (all)

Chapter 24.20 - Zoning Map

B. Subdivision Ordinance

23.04.030	Conformity
23.16.020.3(c)	Engineering Geology and/or Seismic Safety Report
23.16.050.3	Approval of Tentative Map
23.16.050.4	Findings for Denial
23.16.050.5	Waste Discharge Determination
23.16.070	Final Map
23.16.080	Submittal for City Approval
23.20.020.9	Conditions of Approval
23.24.020.2	Minimum Requirements
23.24.020.3	Street Trees and Landscaping
23.24.030.3	Existing Trees
23.28	Dedications; Access to Public Resources; Reservations

C. Municipal Code

1.12.050	Authority to Give Notice to Appeal and Release Citations
6.20.020	Privies and Cesspools
9.56	Protection of Heritage Trees
16.08.080	Limitations and Prohibitions on Wastewater Discharges

D. Miscellaneous

1980 Coastal Access: Standards and Recommendations

Resolution Adopting CEQA Guidelines, NS-19-300

Ordinance 85-70: Ordinance Opposing Oil and Gas Drilling Off the Coast of Central and Northern California

Resolution of Known Archaeological Sites, NS-14,427

Archaeological Resource Protection Procedures, NS-14,835

* Monterey Bay Unified Air Pollution Control District Air Quality Management Plan (AQMP)
* Regional Water Quality Control board (RWQCB) Standards
* Federal and State Endangered Species Acts
* Federal and State Water and Air Quality Acts
* State of California Code of Regulations Title 24: Building Standards Code

(*Federal, State and regional regulations, standards, and Acts with which the City must comply and are included for reference only.)

TABLE VI-3: Implementing Regulations for Coastal Act Sections

Implementing Regulations for Coastal Act Sections			
Coastal Act Policies	**Coastal Act Section**	**Implementing Regulations**	**Maps and Tables**
1. Coastal Access 1.1 Access Opportunities 1.2 Provision of Shoreline Access 1.3 Facilities to Support/Enhance Coastal Access 1.4 Public Access Management in Sensitive Coastal Areas	Article 2, 30210-30212	Zoning Ordinance 24.08, Part 3 24.10, Parts 20, 25, 26 24.12, Part 3 Subdivision Ordinance 23.16.050.4 23.16.070 23.28 Miscellaneous CEQA Moore Creek Access and Management Plan	LCP Figures IIIA-1, IIIA-2 LCP Tables IIIA-1, IIIA-2, IIIA-3
2. Recreation and Visitor-Serving Uses 2.1 Maximize Recreational Opportunities 2.2 Beach Access and Management Plan 2.3 Boating and Water-Related Activities 2.4 Visitor Serving Opportunities 2.5 Visitor-Serving Development Siting and Design	Article 3, 30220-30224	Zoning Ordinance 24.08, Parts 1, 2, 3, 5 24.10, Parts 7B, 7C, 7C.1, 14, 14A, 24.12, Parts 9, 18 Miscellaneous CEQA	LCP Figures IIIA-1, IIIA-2, IIID-4, V-HDP-1 LCP Tables IIIA-1, IIIA-2, IIIA-3, IIIB-1
3. Marine Resources 3.1 Maintain and Enhance Marine Resources 3.2 Water Quality 3.3 Fishing and Boating 3.4 Shoreline Protection 3.5 Dredging	Article 4, 30230-30236	Zoning Ordinance 24.08, Part 3 24.10, Parts 14, 14A, 20, 25, 26 24.14, Parts 1, 2, 3, 4 Municipal Code 6.20 Subdivision Ordinance 23.16.050.5 Miscellaneous Ord. 85-70 CEQA Federal Water Pollution Control Act RWCQB Standards	LCP Figures II-1, IIIA-1, IIIC-1, V-HDP-1 LCP Tables IIIA-1, IIIC-1, V-HDP-1, V-HDP-2, V-HDP-3
4. Land Resources 4.1 Sensitive Habitat Areas and Natural Resources 4.2 Agricultural Resources 4.3 Scenic Resources 4.4 Cultural Resources	Article 5, 30240-30244	Zoning Ordinance 24.04 24.08, Parts 1, 2, 3, 5, 8, 9 10, 20 24.10.050 24.10, Parts 19, 25, 26 24.12, Part 5	LCP Figures IIID-1, IIID-2, IIID-3, IIID-4, IIID-5, IIID-6, IIID-7, IIID-8 LCP Tables IIIB-1, IIIC-1, IIID-1,

		24.14, Part 1, 2, 3, 4 Municipal Code 9.56 Subdivision Ordinance 23.16.050.4 23.16.070 23.24.020.3 23.24.030.3 Miscellaneous CEQA Federal, State Endangered Species Acts	V-SLR-1, V-SLR-2, V-LFSB-1
5. Development 5.1 New Development 5.2 Priority Uses and Development 5.3 Minimize Adverse Effects of Development 5.4 Public Works Facilities and Infrastructure	Articles 6&7, 30250-30265.5	Zoning Ordinance 24.04 24.08, Parts 1, 2, 3, 5, 8, 9, 10, 20, 21, 22 24.10.105 24.10, Parts 3, 4, 5, 6, 6A, 7, 7A, 7B, 7B.1, 7C, 7C.1, 7D, 7E, 8, 11, 12, 13, 14, 14A, 16, 16B, 18A, 18B, 19, 20, 21, 24A, 25, 26, 28, 31, 42 24.12, Parts 1, 2, 3, 4, 5, 9, 18 24.14, Parts 1, 2, 3, 4 24.18 24.20 Municipal Code 16.08.080 Subdivision Ordinance 23.04.030 23.16.050.3 23.16.050.4 23.16.050.5 23.16.070 23.16.080 23.20.020.9 23.24.020.2 23.28 Miscellaneous CEQA AQMP, RWQCB Standards	LCP Figures IIIE-1, IIIE-2, IIIE-3, IIIE-4, IV-1 LCP Tables IIID-1, IV-1, IV-2, VI-1

This page left intentionally blank.

VII. GLOSSARY

IN THIS SECTION:

- Abbreviations
- Interpretation
- Definitions

ABBREVIATIONS

ADT: Average daily vehicle trips in a 24-hour period
ADU: Accessory Dwelling Unit
AMBAG: Association of Monterey Bay Area Governments
AQMP: Air Quality Management Plan
Caltrans: California Department of Transportation
Cal OES: California Governor's Office of Emergency Services
CA SB: California Senate Bill
CAP: Climate Action Plan
CBD: Central Business District
CC&Rs: Covenants, Conditions, and Restrictions
CC: City Council (Santa Cruz)
CCC: California Coastal Commission
CDP: Coastal Development Permit
CEQA: California Environmental Quality Act
CIP: Capital Improvement Program
CVC: Santa Cruz County Conference and Visitor's Council
dB: Decibel
du/ac: Dwelling Units per Acre
EIR: Environmental Impact Report (State)
EIS: Environmental Impact Statement (Federal)
EPA: Environmental Protection Agency (Federal)
FAR: Floor Area Ratio
FEMA: Federal Emergency Management Agency
FIRM: Flood Insurance Rate Map
GHG: Greenhouse Gases
GP: General Plan
HBS: Historic Building Survey
HCD: California Department of Housing and Community Development
HOV: High Occupancy Vehicle
HPC: Historic Preservation Commission (City)
JADU: Junior Accessory Dwelling Unit
LAFCO: Local Agency Formation Commission
LHMP: Local Hazard Mitigation Plan
LCP: Local Coastal Program
LCPA: Local Coastal Program Amendment
LOS: Level of Service
LUP: Land Use Plan
LRDP: Long Range Development Plan (UCSC)
LRT: Light (duty) Rail Transit
MBUAPCD: Monterey Bay Unified Air Pollution Control District
MGD: Million Gallons per Day
NEPA: National Environmental Policy Act
NOAA: National Oceanic and Atmospheric Administration
OPR: Office of Planning and Research, California State
PC: Planning Commission (City)
PUD: Planned Unit Development
RTF: River Task Force (San Lorenzo River)
RTIP: Regional Transportation Improvement Plan
RTP: Regional Transportation Plan
SB: Senate Bill (CA, California)
SCCRTC: Santa Cruz County Regional Transportation Commission
SCCSD: Santa Cruz County Sanitation District
SCMTD: Santa Cruz Metropolitan Transit District
SCWD: Santa Cruz Water Department
SLR: Sea Level Rise
SOU: Small Ownership Unit
SRO: Single-Room Occupancy
TCMs: Transportation Control Measures
TDM: Travel Demand Management
TMA: Transportation Management Association
TOT: Transient Occupancy Tax

TSM: Transportation Systems Management
UCSC: University of California, Santa Cruz
USACE: United State Army Corps of Engineers
VMT: Vehicle Miles Traveled
WCD PWP: West Cliff Drive Adaptation and Management Plan: A Public Works Plan

INTERPRETATION

Unless the context requires otherwise, the following definitions shall be used in the interpretation of the Local Coastal Program and its Implementing Regulations. Words used in the present tense include the future; the singular number includes the plural and the plural the singular; the word "structure" includes the word "building"; the word "used" includes arranged, designed, constructed, altered, converted, rented, leased, or intended to be used or occupied; the word "shall" is mandatory; the word "may" or "should" is permissive.

DEFINITIONS

Adaptation Pathway — A flexible decision-making approach under uncertainty that consists of a sequence of climate adaptation strategy decision points over time where transition between strategies is signaled through the use of triggers and thresholds.

Archaeological Resource/Cultural Resource — Items or locations relating to the material remains of past human life, culture, or activities.

Arroyo — A gully, ravine, or canyon created by a perennial or intermittent stream, with characteristic steep slopes frequently covered with vegetation.

California Coastal Commission — The State agency established by State law responsible for carrying out the provisions of the Coastal Act and for review of coastal permits on appeal from local agencies.

Climate Action Plan — A detailed and strategic framework for measuring, planning, and reducing greenhouse gas emissions and related climatic impacts.

Climate Adaptation Plan — A framework for approaches for natural and human systems to adjust to a new or changing environment in response to actual or expected climatic change or its effects in order to moderate potential harm or exploit beneficial opportunities.

Climate Change — A change in global or regional climate patterns. In particular, a change apparent from the mid to late 20th century onwards and attributed largely to the increased levels of atmospheric carbon dioxide produced by the use of fossil fuels.

Coastal Access — Physical routes and support amenities to maximize public recreational opportunities in the coastal zone consistent with sound resource protection and conservation principles, and protected rights of private property owners.

Coastal Bluff Retreat — Result of hillside or coastal headland erosion by weathering, physical disturbance, and, in the case of ocean cliffs, the continuous and forceful actions of waves and tides.

Coastal-Dependent Lands — Lands utilized for coastal-dependent industries such as marine research and education, agriculture, aquaculture, and attendant facilities that require direct proximity to the ocean.

Coastal Development — Refers to on land, in or under water, the placement or erection of any solid material or structure; discharge or disposal of any dredged material or of any gaseous, liquid, solid, or thermal waste; grading, removing, dredging, mining, or extraction of any materials; change in the density of use of land, including, but not limited to, subdivision pursuant to the Subdivision Map Act (commencing with Section 64410 of the Government Code), and any other division of land, including lot splits, except where the land division is brought about in connection with the purchase of such land by a public agency for public recreational use; change in the intensity of use of water, or access thereto; construction, reconstruction, demolition, or alteration of the size of any structure, including any facility of any private, public, or municipal utility; and 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 submitted pursuant to the provisions of the Z'berg-Nejedly Forest Practice Act of 1973 (commencing with Public Resources Code Section 4511). As used in this section, "structure" includes, but is not limited to, any building, road, pipe, flume, conduit, siphon, aqueduct, telephone line, and electrical power transmission and distribution line.

Coastal Marine Habitat — Area off the coast supporting a variety of marine life occurring in different depths.

Coastal Recreation Area — Lands along the coastline including beaches, the small craft harbor, and outdoor and open water areas used for outdoor recreational activities such as swimming, boating, fishing, picnicking, and parking.

Coastal Zone — An area within the jurisdiction of the California Coastal Act.

Community Park — Land with full public access intended to provide recreation opportunities beyond those supplied by neighborhood parks. Community parks are larger in scale than neighborhood parks but smaller than regional parks.

Endangered Species — See "Rare or Endangered Species".

Erosion	The loosening and transportation of rock and soil debris by wind, rain, or running water and/or the gradual wearing away of the upper layers of earth.
Greenhouse Gas Emissions	Any of various gaseous compounds (such as carbon dioxide or methane) that absorb infrared radiation, trap heat in the atmosphere, and contribute to the greenhouse effect.
Habitat	The physical location or type of environment in which an organism or biological population lives or occurs.
Intermittent Stream	A stream that normally flows for at least thirty (30) days after the last major rain of the season and is dry a large part of the year.
Invasive Species	Plant or animal species introduced into an area where they do not occur naturally and that compete successfully with the native plant or animal species; non-native species that edge out native species.
Landmark	Refers to a building, site, object, structure, or significant tree, having historical, architectural, social, or cultural significance and marked for preservation by the local, state, or federal government. Also refers to a visually prominent or outstanding structure or natural feature that functions as a point of orientation or identification.
Living Shoreline	Shoreline protected and stabilized against erosion that enhances habitat and is made of natural materials such as plants, sand, or rock.
Local Coastal Program	The City plan consisting of land use plans and implementation measures to carry out and be in full conformity with the California Coastal Act of 1976. The Local Coastal Program has two (2) components: the Local Coastal Land Use Plan and the Local Coastal Implementation Plan.
Local Hazard Mitigation Plan	A framework which identifies natural hazards that may affect jurisdictions such as local governments and includes possible mitigation actions to reduce losses from those hazards.
Managed Retreat	A coastal management strategy that allows the shoreline to move inland, instead of attempting to hold the line with structural engineering.
Marsh	Any area designated as marsh or swamp on the largest scale United States Geologic Survey topographic map most recently published. A marsh usually is an area periodically or permanently covered with shallow water, either fresh or saline.
Mini-park	Small neighborhood park of approximately one acre or less.

Mixed-Use Development Properties on which various uses, such as office, commercial, institutional, and residential, are combined in a single building or on a single site in an integrated development project with significant functional interrelationships and a coherent physical design. A "single site" may include contiguous properties.

Neighborhood Park City- or County-owned land intended to serve the recreation needs of people living or working within one-half mile radius of the park.

Off Peak/Season Tourism Generally defined as Sunday through Thursday and November to March.

Open Space Lands Any parcel or area of land or water that is essentially unimproved and devoted to an open space use for the purposes of (1) the preservation of natural resources, (2) the managed production of resources, (3) outdoor recreation, or (4) public health and safety.

Outdoor Recreation Use A privately or publicly owned or operated use providing facilities for outdoor recreation activities.

Paleontological Relating to science forms (fossils of animals and plants) of life existing in former geologic periods.

Park Open space lands whose primary purpose is recreation. (See "Open Space Lands," "Community Park," and "Neighborhood Park.")

Rare or Endangered Species A species of animal or plant listed in Sections 670.2 or 670.5, Title 14, California Administrative Code; or Title 50, Code of Federal Regulations, Section 17.11 or Section 17.2, pursuant to the Federal Endangered Species Act designating species as rare, threatened, or endangered.

Recreation, Active A type of recreation or activity that requires the use of organized play areas including, but not limited to, softball, baseball, football and soccer fields, tennis and basketball courts, and various forms of children's play equipment.

Recreation, Passive Type of recreation or activity that does not require the use of organized play areas but may include hiking, bicycling, and horse trails.

Riparian Corridor Any defined stream channel including the area up to the ordinary high water (or bankfull-flow line), as well as all riparian (streamside) vegetation in contiguous adjacent upland lands.

Satellite Parking The use of an offsite parking lot or garage located more than half a mile from the location of the activity.

Scenic Corridor	A highway, road, drive, or street that, in addition to its transportation function, provides opportunities for the enjoyment of natural and man-made scenic resources and access or direct views to areas or scenes of exceptional beauty or historic or cultural interest. The aesthetic values of scenic routes often are protected and enhanced by regulations governing the development of property or the placement of outdoor advertising.
Sea Level Rise	An increase in the level of the world's oceans due to the effects of global warming (i.e., thermal expansion and ice cap melting).
Sensitive Coastal Resource Area	Identifiable and geographically bounded land and water areas within the coastal zone of vital interest and sensitivity.
Sensitive Habitat	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.
Sensitive Species	Those species which rely on specific habitat conditions that are limited in abundance, restricted in distribution, or are particularly sensitive to development.
Small Ownership Unit (SOU)	A dwelling unit containing no more than one bedroom and a floor area ranging from 400 to 650 square feet, located on a separate subdivided parcel and included in a residential development where all dwelling units are SOU units and are offered for sale to the general public.
Single Room Occupancy (SRO)	A single room, typically 80-250 square feet, with a sink and closet, but that may require the occupant to share a communal bathroom, shower, and kitchen.
Trigger	Predetermined endpoint conditions (e.g., beach width less than 100 feet) that, when thresholds for these conditions are experienced in predetermined timeframe, indicate the need to transition from one adaptation strategy to the next (e.g., beach width narrows to 100 feet or less three times during summer.
View Corridor	The line of sight—identified as to height, width, and distance—of an observer looking toward an object of significance to the community (*e.g.*, ridgeline, river, historic building, etc.); the route that directs the viewers' attention.
Viewshed	The area within view from a defined observation point.
Visitor Coastal Access Routes	Routes intended to be inviting to visitors and to provide convenient, clear access into and out of visitor and coastal destinations.

Watercourse

Natural or once natural flowing (perennially or intermittently) water including rivers, streams, and creeks. Includes natural waterways that have been channelized, but does not include manmade channels, ditches, and underground drainage and sewage systems.

Watershed

The total area above a given point on a watercourse that contributes water to its flow; the entire region drained by a waterway or watercourse that drains into a lake, or reservoir.

West Cliff Drive Adaptation and Management Plan: A Public Works Plan

A plan approved by the Santa Cruz City Council to identify preferred adaptation strategies and formulate scientifically-informed routine monitoring and maintenance programs to be implemented in a 10-to-15 year time horizon to address coastal erosion and other effects of climate change and sea level rise, and reduce the need for emergency response in the West Cliff area.

VIII. FIGURES AND MAPS

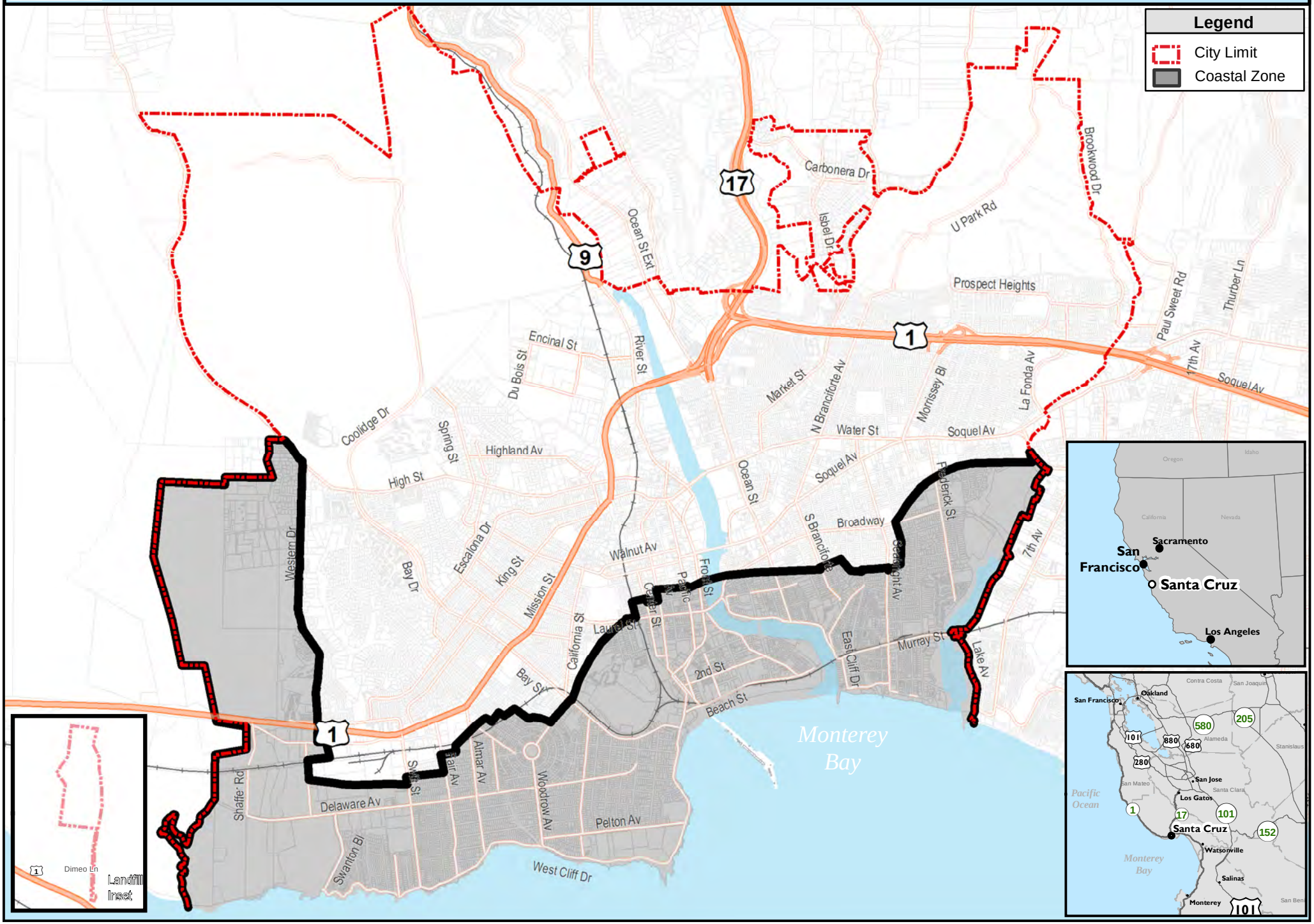
List of Figures and Maps

This page intentionally left blank.

Figure I-1
Regional Location

Local Coastal Program

0 0.75 1.5 Miles



This page intentionally left blank.

Figure II-1
Monterey Bay National Marine Sanctuary Boundary

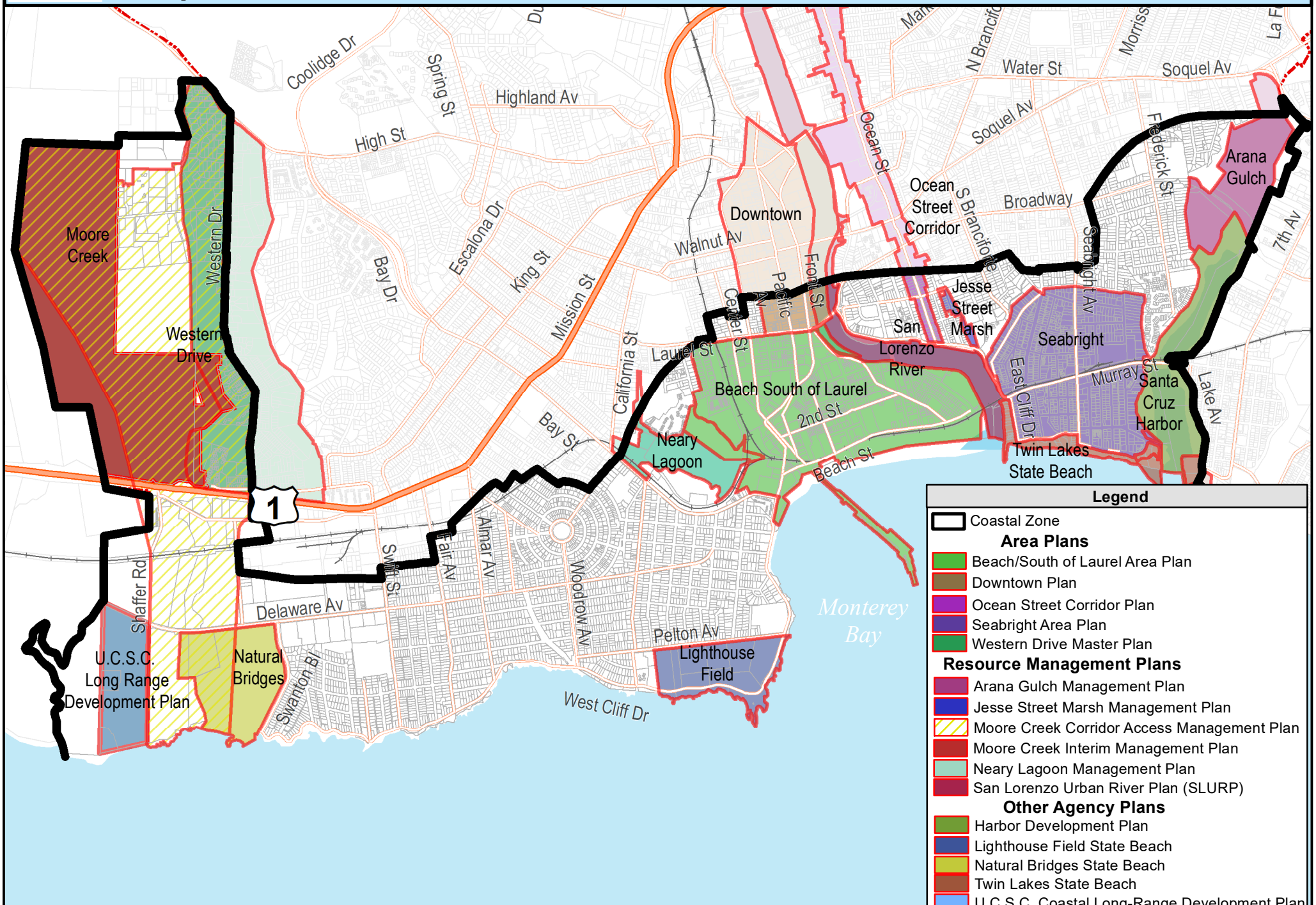
Local Coastal Program

0 30 60 Miles

This page intentionally left blank.

Figure II-2
Adopted Plan Locations

Local Coastal Program



This page intentionally left blank.

Figure IIIA-1
Visitor/Coastal Access Routes and Coastal Recreation Areas

Local Coastal Program

0 0.5 1 Miles

Legend

- Coastal Zone
- Access Routes

Parks and Open Space

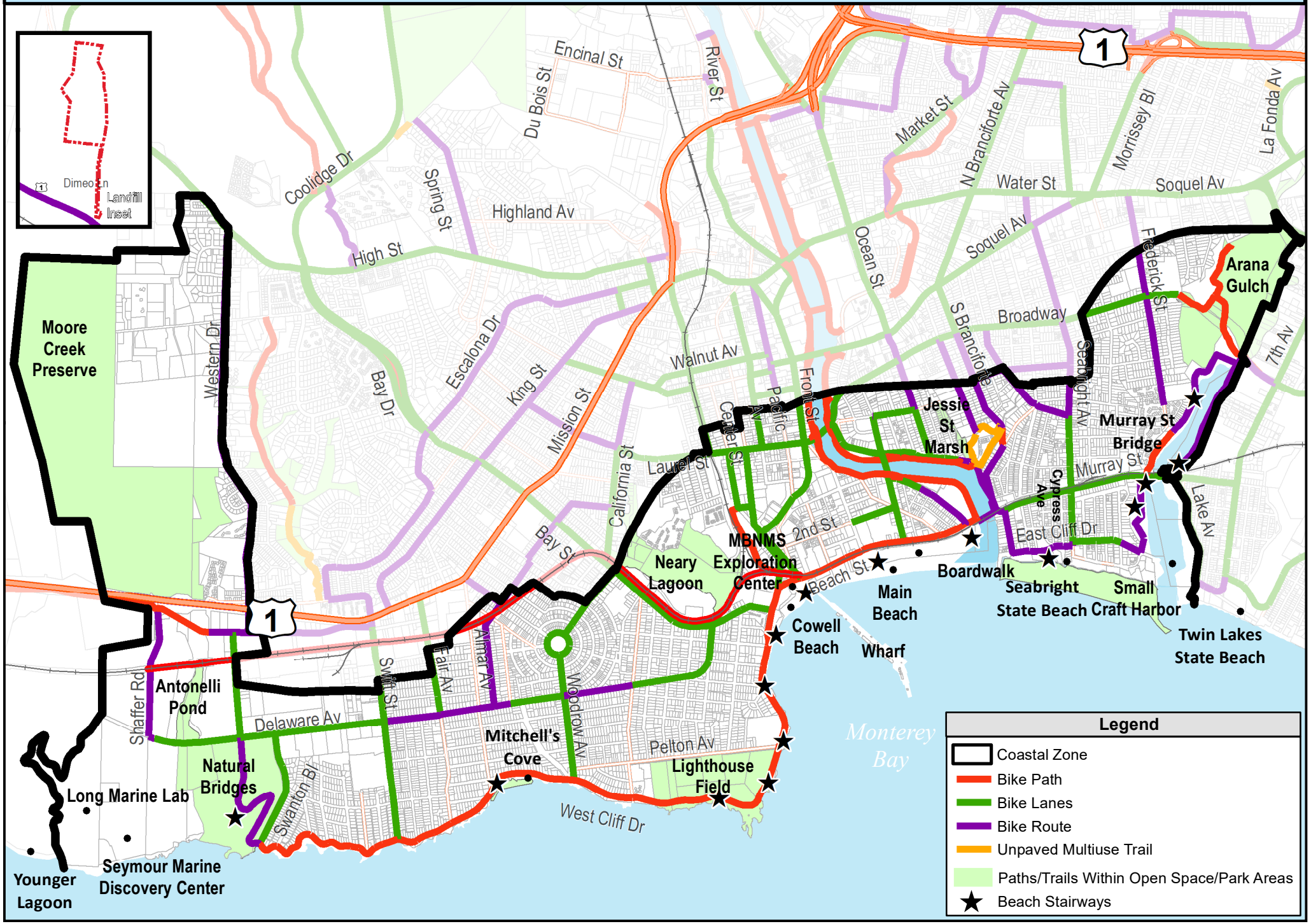
- Parks
- Open Space and Beaches

This page intentionally left blank.

Figure IIIA-2
Pedestrian & Bicycle Paths, Trails & Coastal Access Facilities

Local Coastal Program

0 0.5 1 Miles

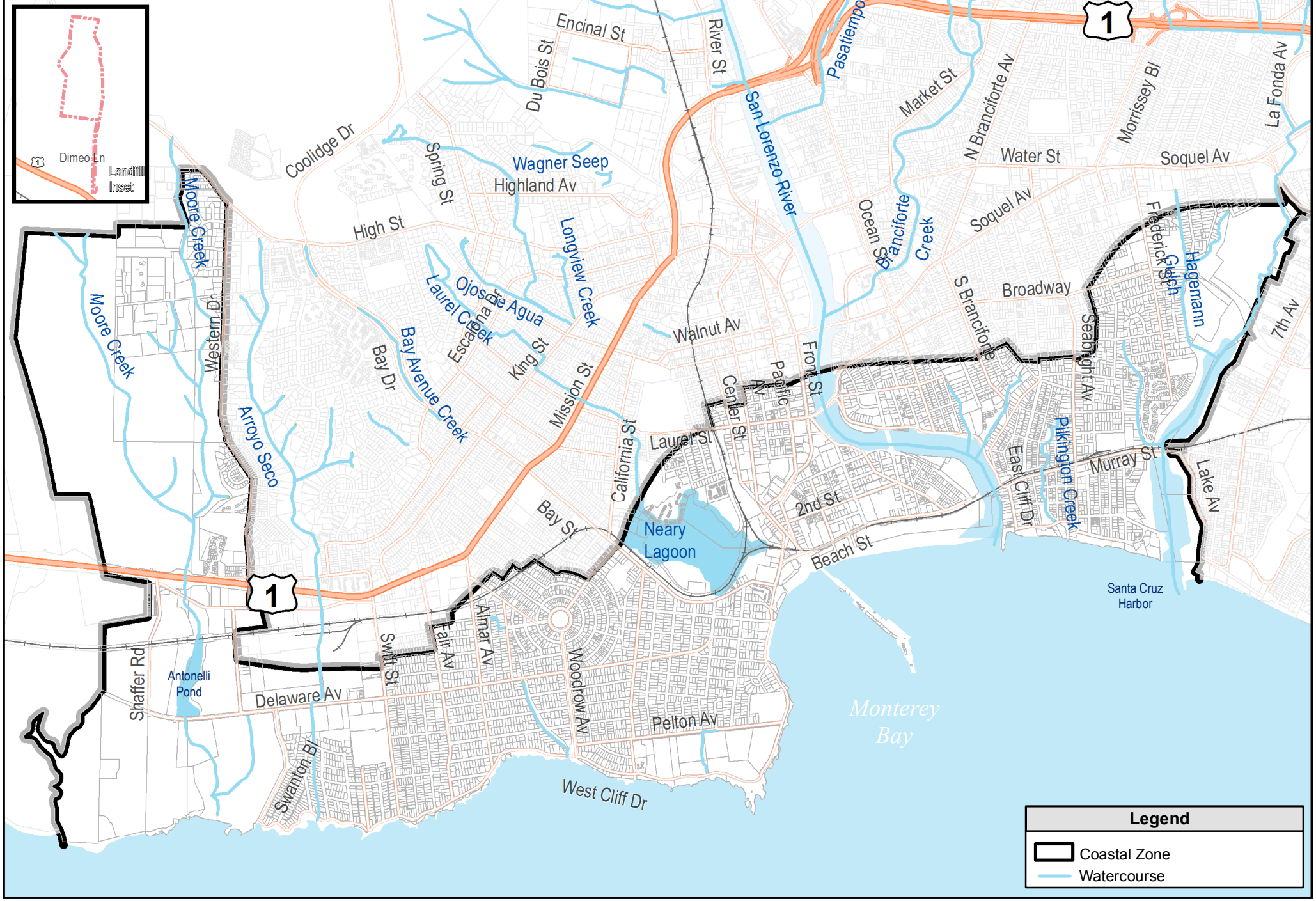


This page intentionally left blank.

Figure IIIC-1
Watercourses

Local Coastal Program

0 0.5 1 Miles

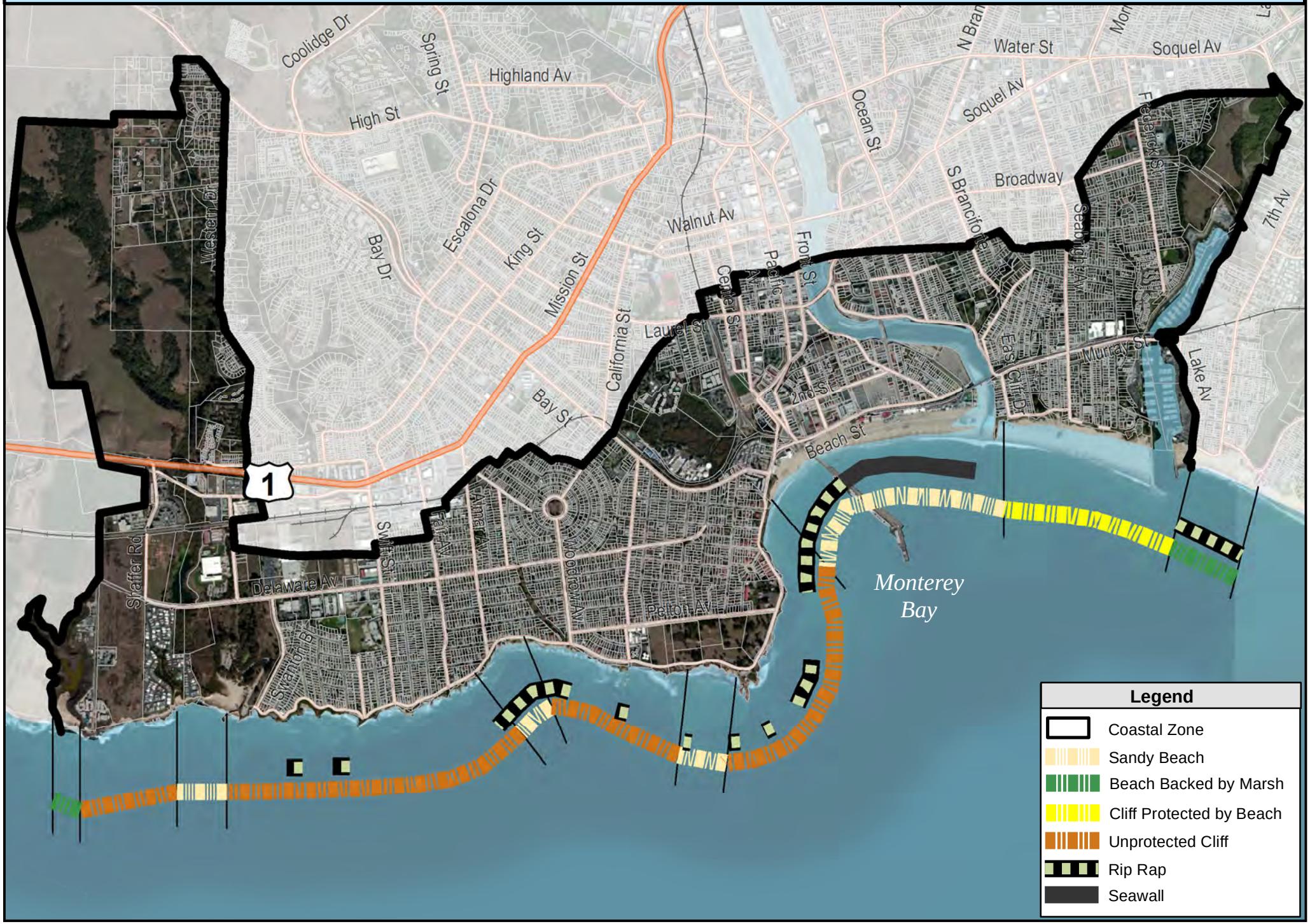


This page intentionally left blank.

Figure IIIC-2
Coastal Bluff Characteristics and Shoreline Protection

Local Coastal Program

0 0.5 1 Miles

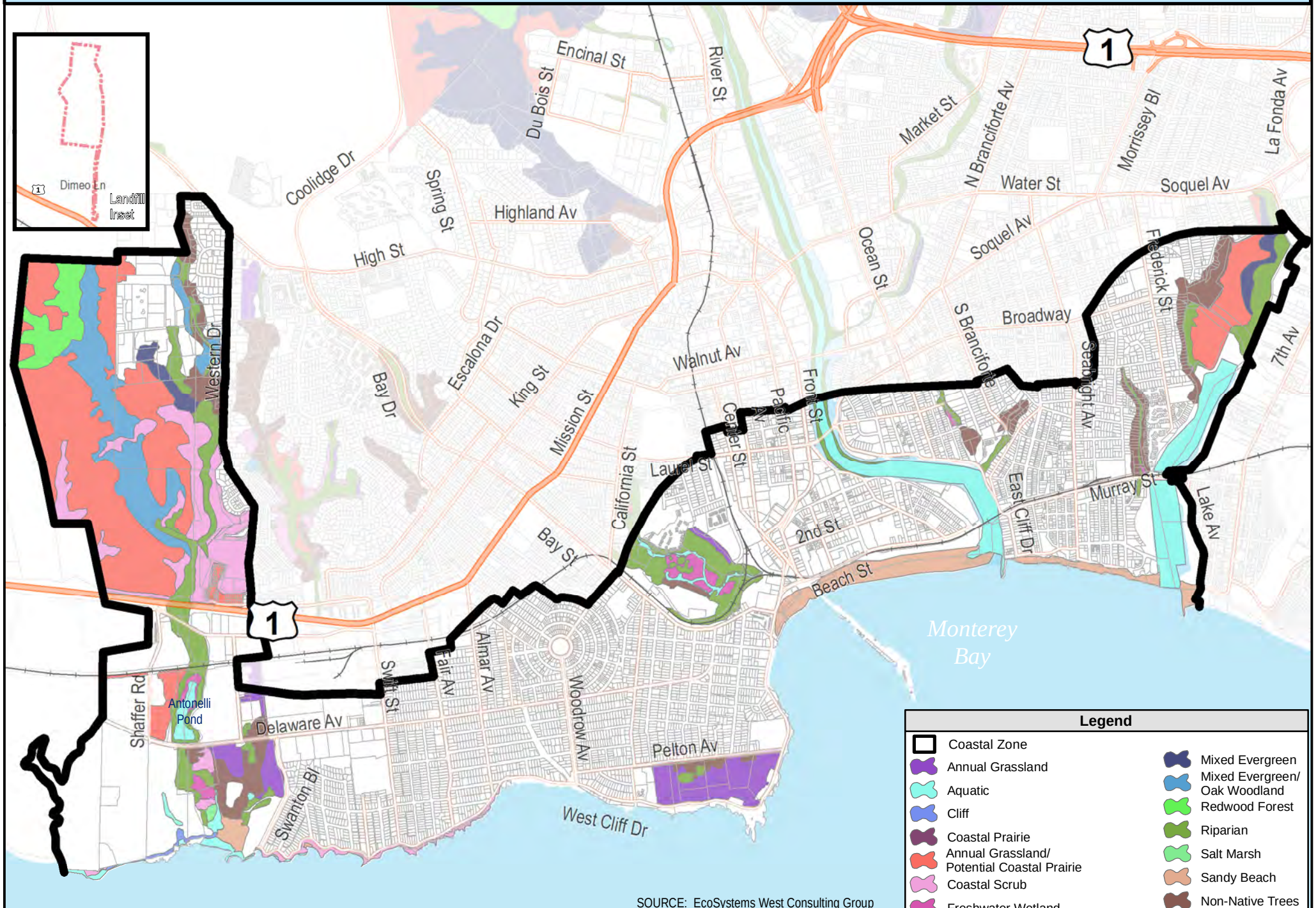


This page intentionally left blank.

Figure IIID-1
Vegetation Types

Local Coastal Program

0 0.5 1 Miles



SOURCE: EcoSystems West Consulting Group

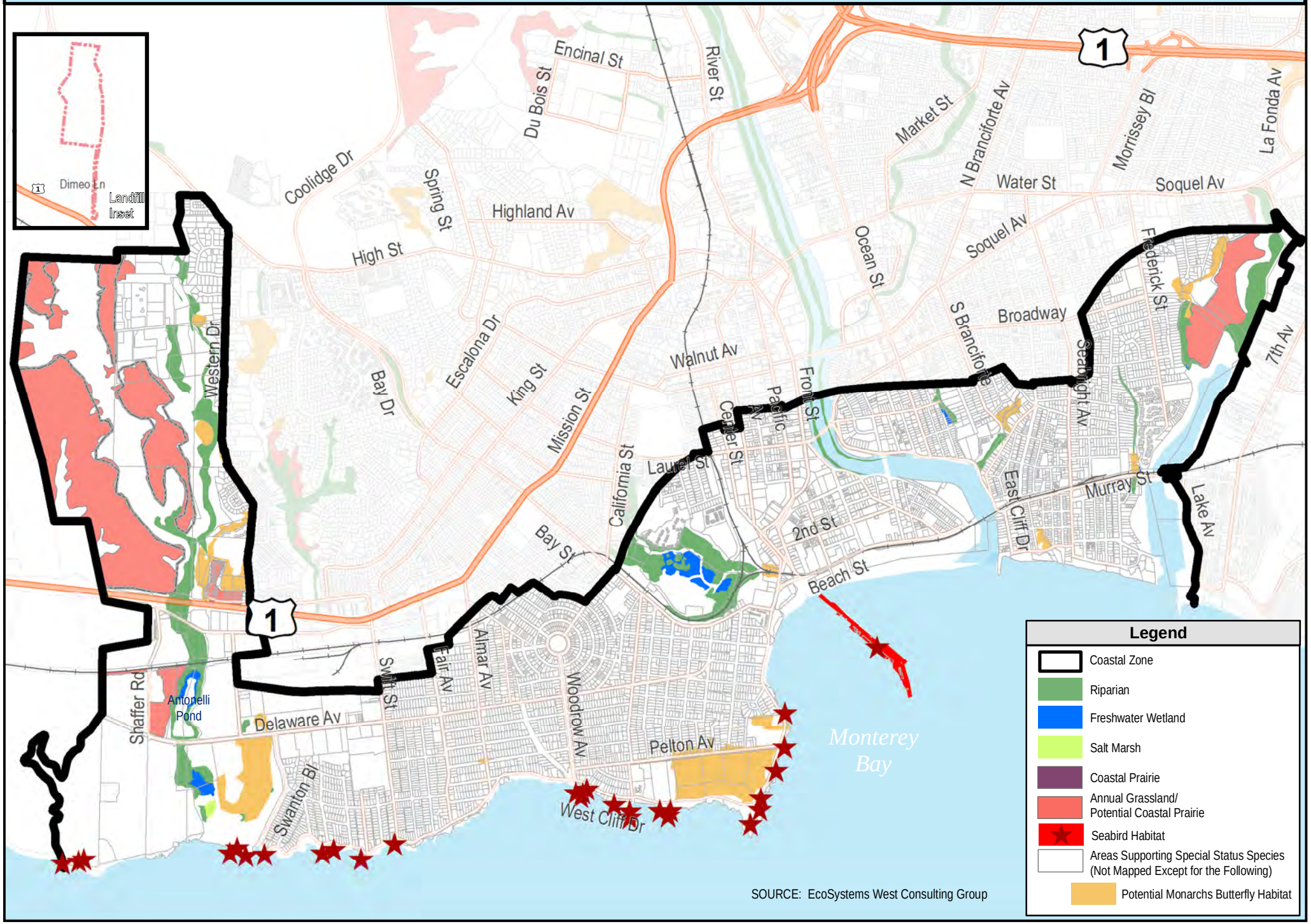
Legend

- Coastal Zone
- Annual Grassland
- Aquatic
- Cliff
- Coastal Prairie
- Annual Grassland/ Potential Coastal Prairie
- Coastal Scrub
- Freshwater Wetland
- Mixed Evergreen
- Mixed Evergreen/ Oak Woodland
- Redwood Forest
- Riparian
- Salt Marsh
- Sandy Beach
- Non-Native Trees

This page intentionally left blank.

Figure IIID-2
Sensitive Habitat Areas

Local Coastal Program

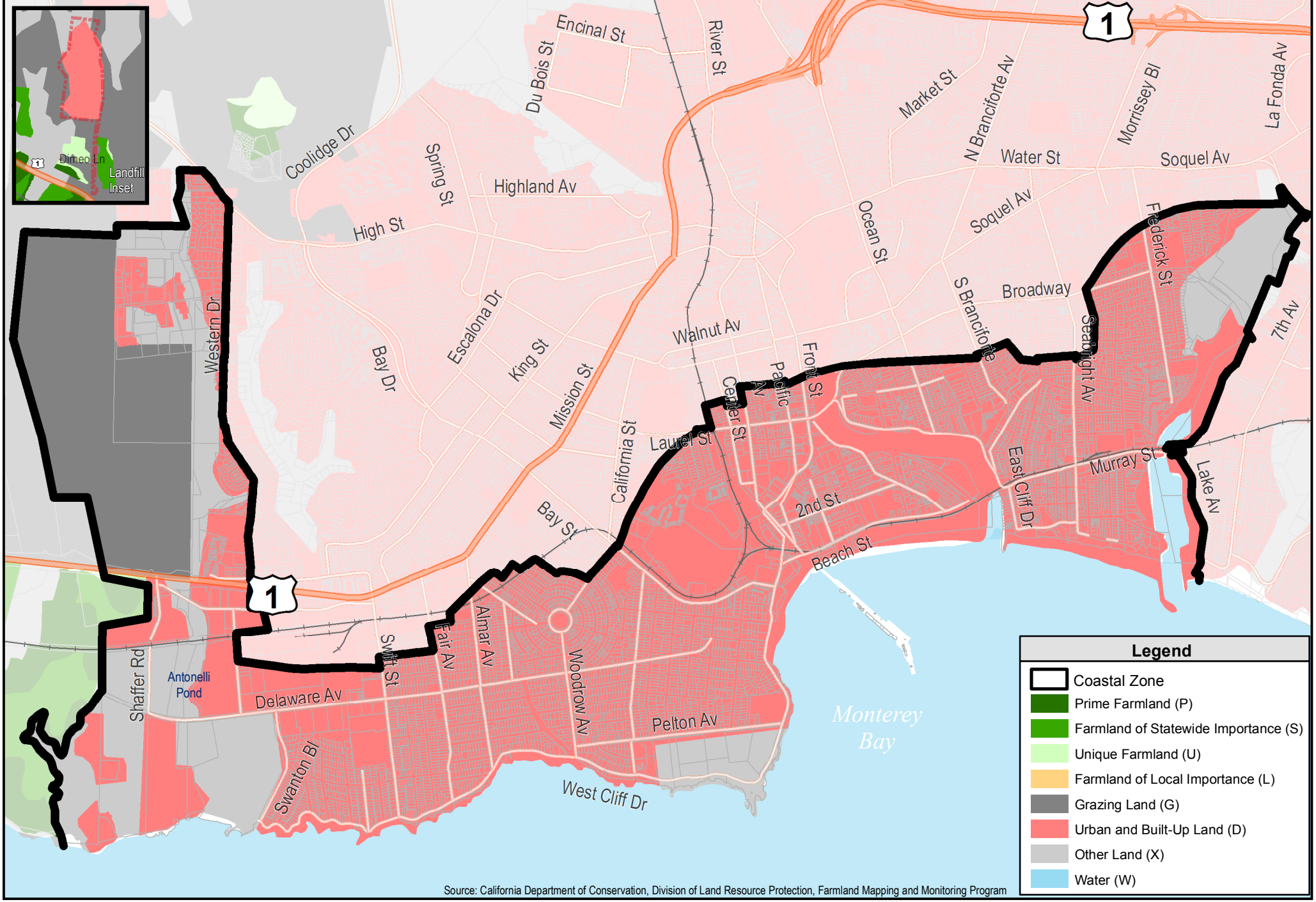


This page intentionally left blank.

Figure IIID-3
Agricultural Lands

Local Coastal Program

0 0.5 1 Miles



Legend

- Coastal Zone
- Prime Farmland (P)
- Farmland of Statewide Importance (S)
- Unique Farmland (U)
- Farmland of Local Importance (L)
- Grazing Land (G)
- Urban and Built-Up Land (D)
- Other Land (X)
- Water (W)

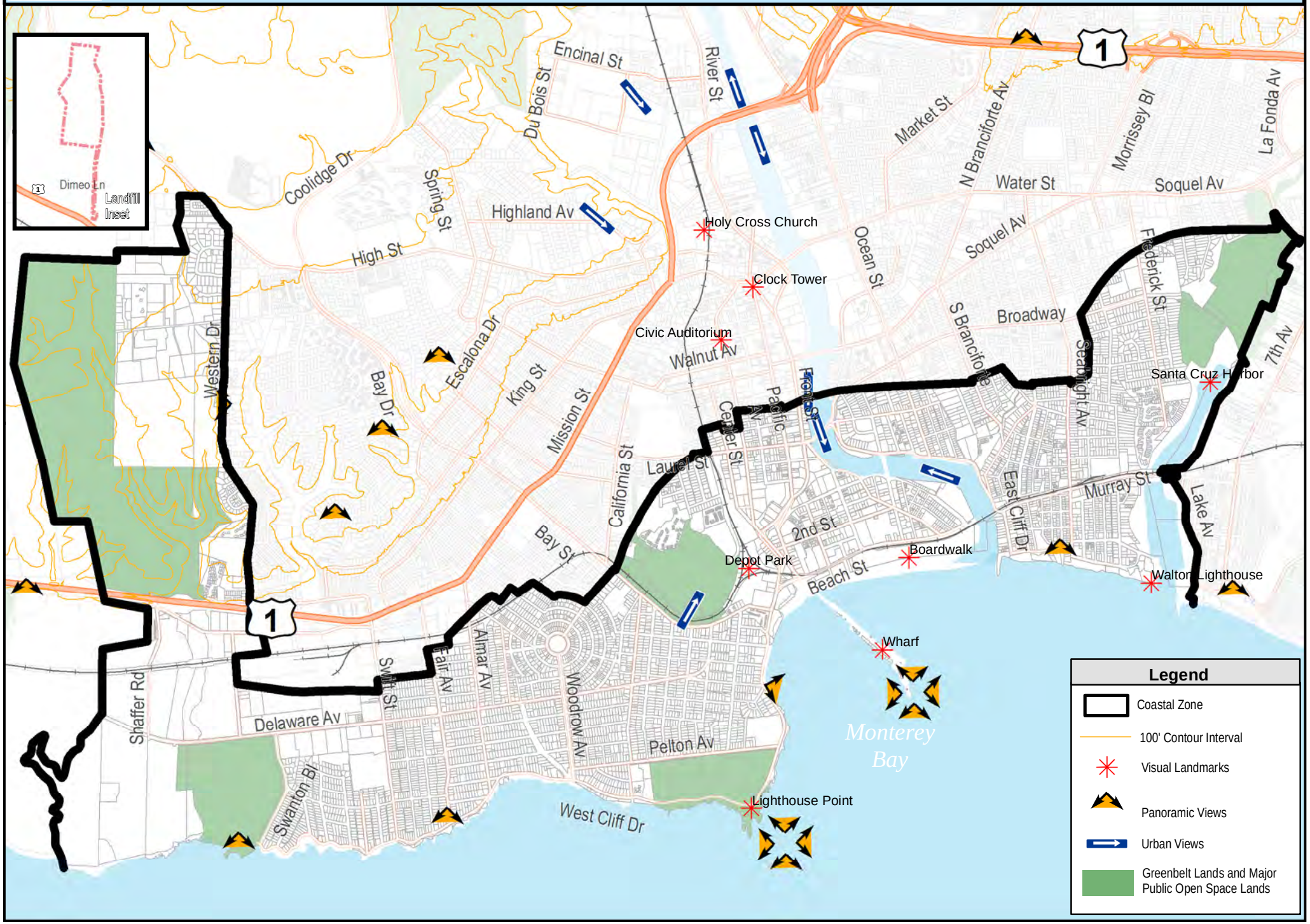
Source: California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program

This page intentionally left blank.

Figure IIID-4
Scenic Views

Local Coastal Program

0 0.5 1 Miles



Legend

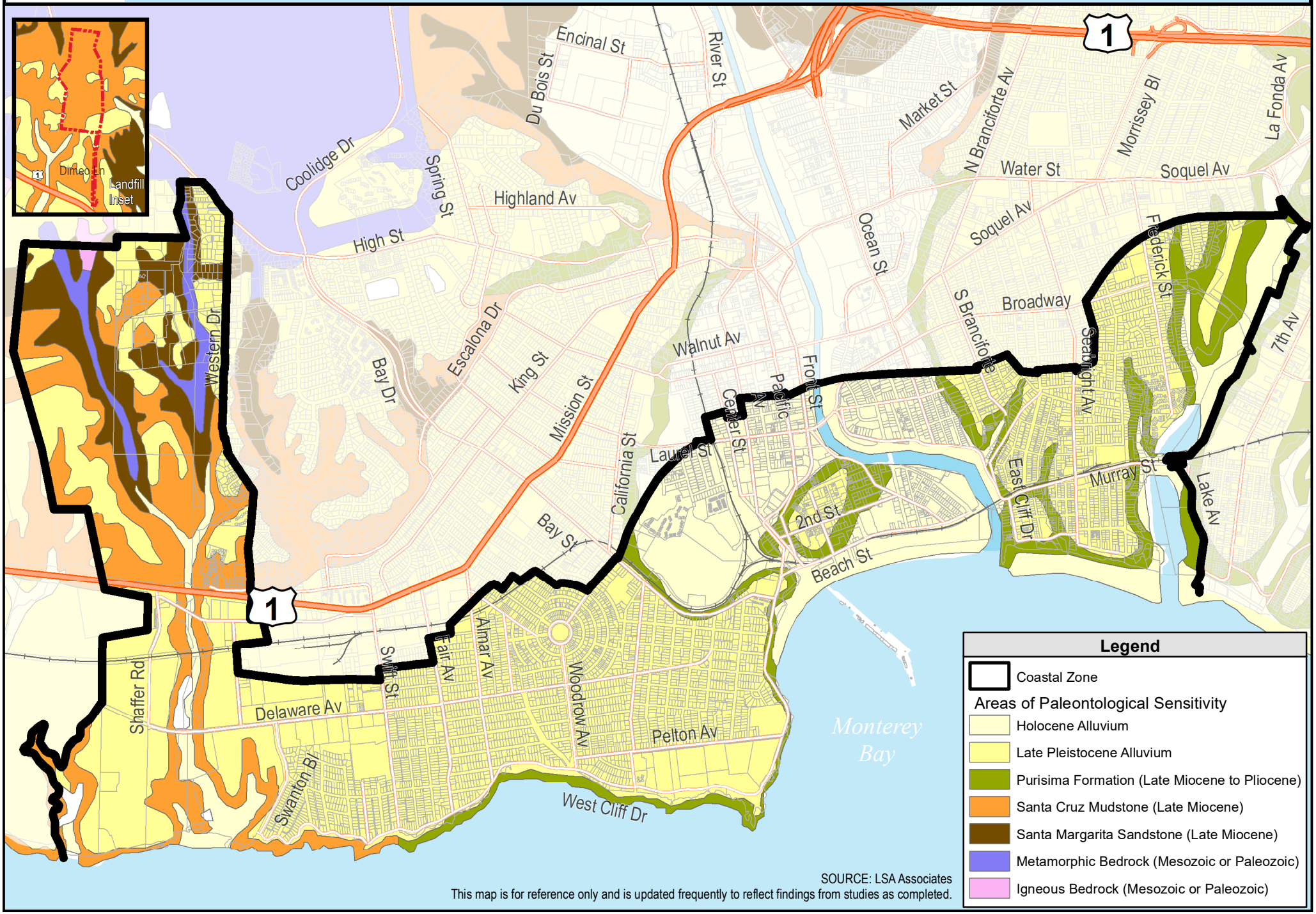
- Coastal Zone
- 100' Contour Interval
- Visual Landmarks
- Panoramic Views
- Urban Views
- Greenbelt Lands and Major Public Open Space Lands

This page intentionally left blank.

Figure IIID-5 Coastal Program
Areas of Paleontological Sensitivity

Local Coastal Program

0 0.5 1 Miles



Legend

- Coastal Zone

Areas of Paleontological Sensitivity

- Holocene Alluvium
- Late Pleistocene Alluvium
- Purisima Formation (Late Miocene to Pliocene)
- Santa Cruz Mudstone (Late Miocene)
- Santa Margarita Sandstone (Late Miocene)
- Metamorphic Bedrock (Mesozoic or Paleozoic)
- Igneous Bedrock (Mesozoic or Paleozoic)

SOURCE: LSA Associates

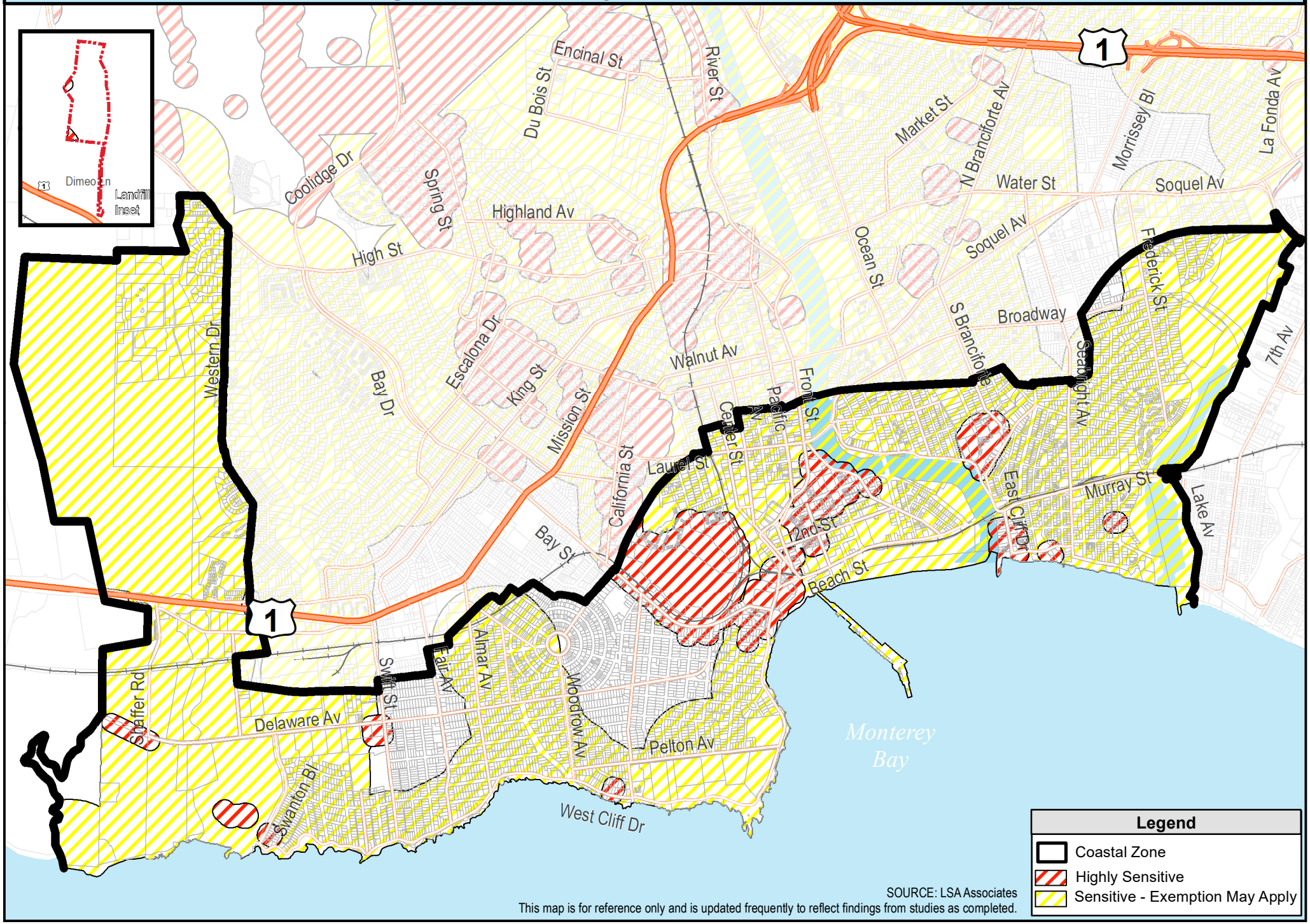
This map is for reference only and is updated frequently to reflect findings from studies as completed.

This page intentionally left blank.

Figure IIID-6
Areas of Archaeological Sensitivity

Local Coastal Program

0 1 2 Miles



Legend

- Coastal Zone
- Highly Sensitive
- Sensitive - Exemption May Apply

SOURCE: LSA Associates

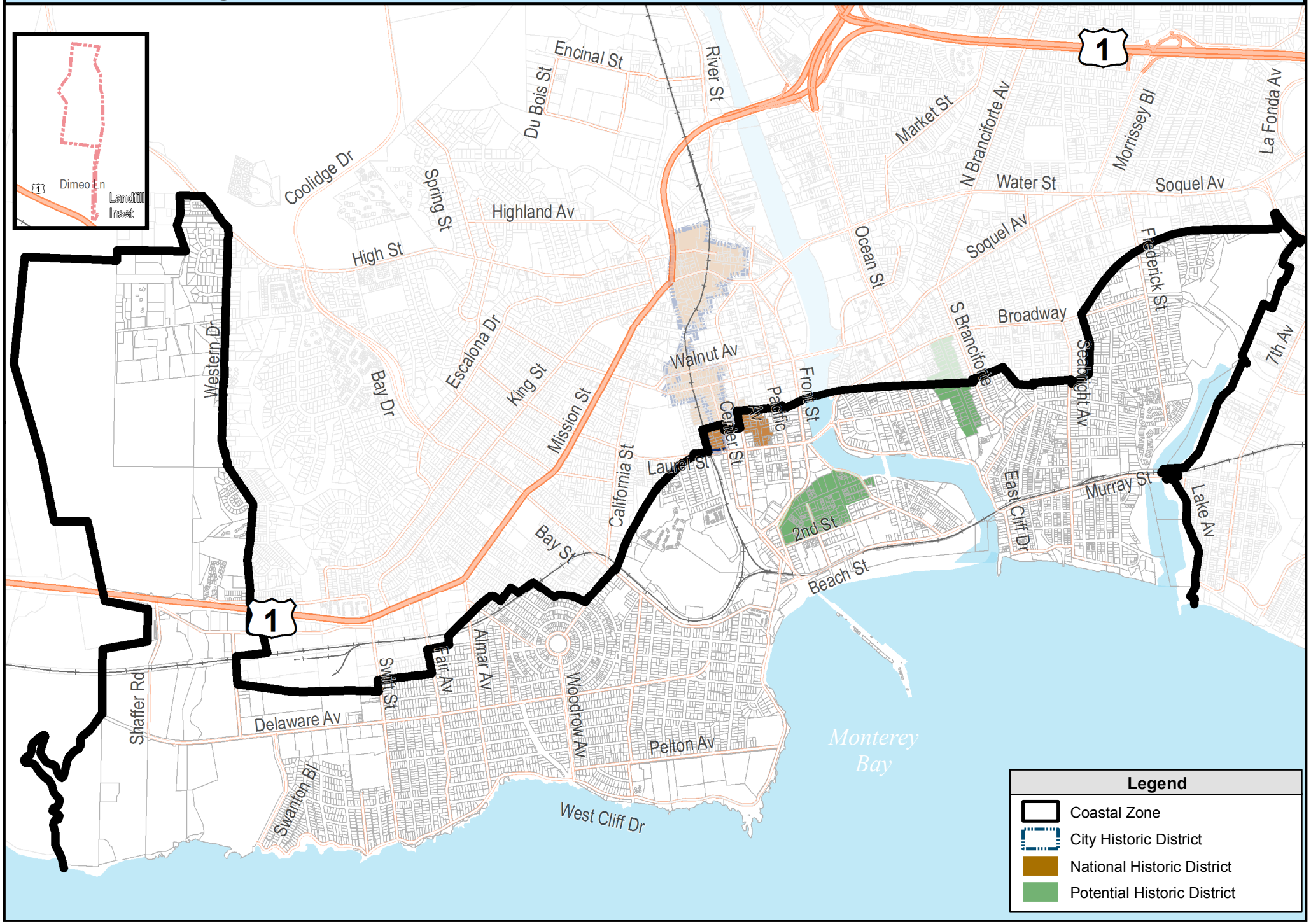
This map is for reference only and is updated frequently to reflect findings from studies as completed.

This page intentionally left blank.

Figure IIID-7
Existing and Potential Historic Districts

Local Coastal Program

0 0.5 1 Miles



Legend

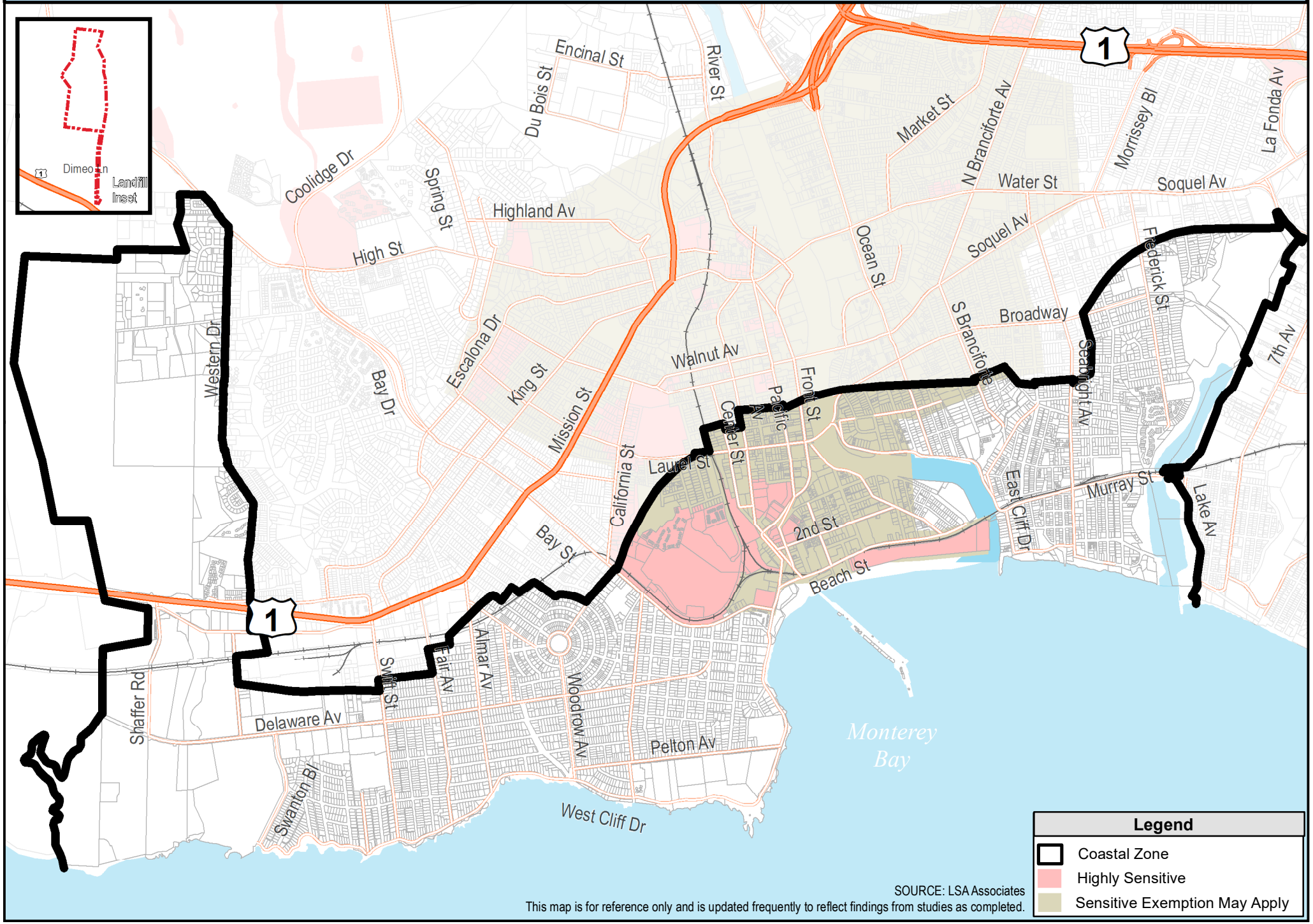
- Coastal Zone
- City Historic District
- National Historic District
- Potential Historic District

This page intentionally left blank.

Figure IIID-8
Areas of Historical Sensitivity

Local Coastal Program

0 0.5 1 Miles



Legend

- Coastal Zone
- Highly Sensitive
- Sensitive Exemption May Apply

SOURCE: LSA Associates

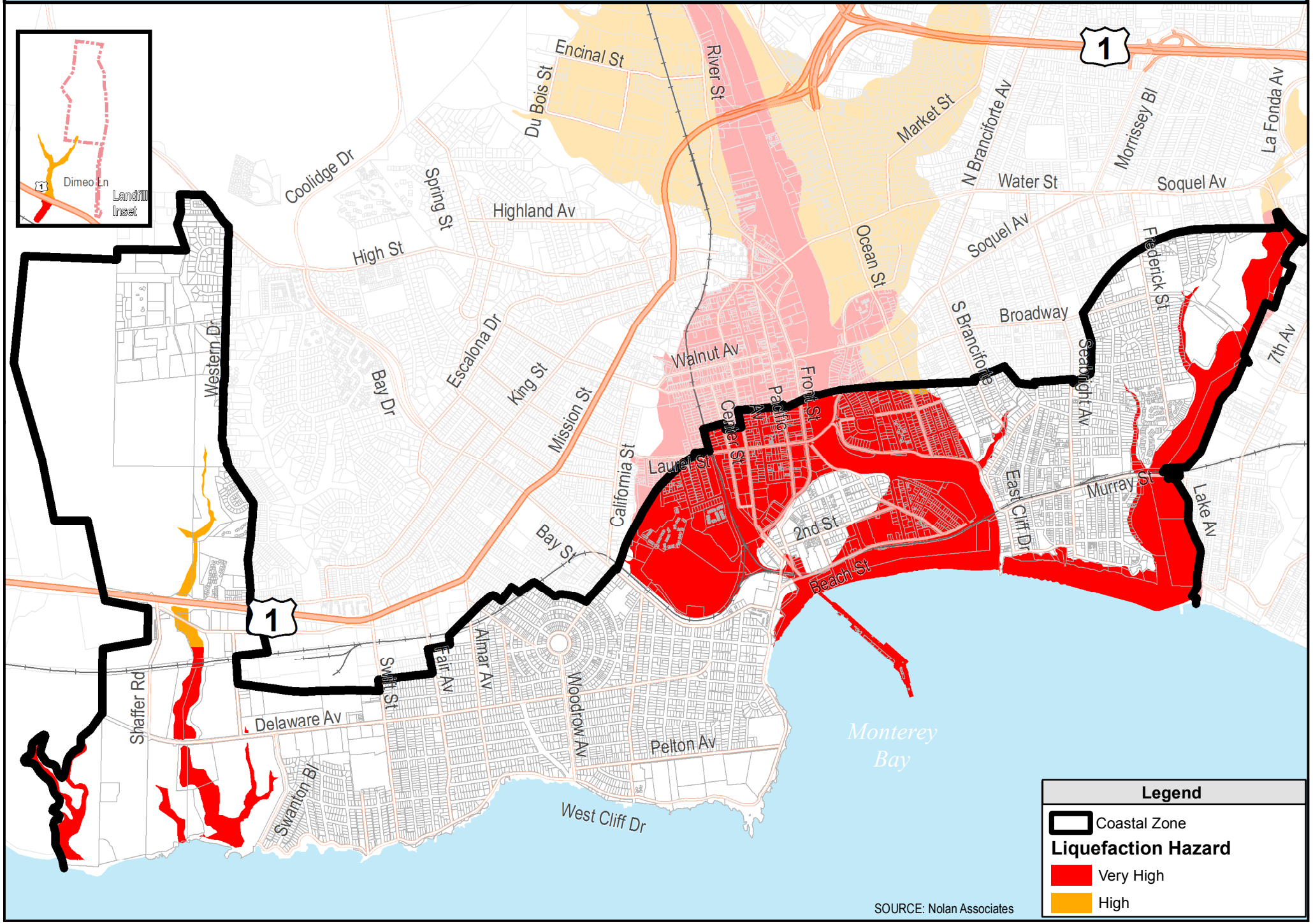
This map is for reference only and is updated frequently to reflect findings from studies as completed.

This page intentionally left blank.

Figure IIIE-1
Liquefaction Hazard

Local Coastal Program

0 0.5 1 Miles



Legend

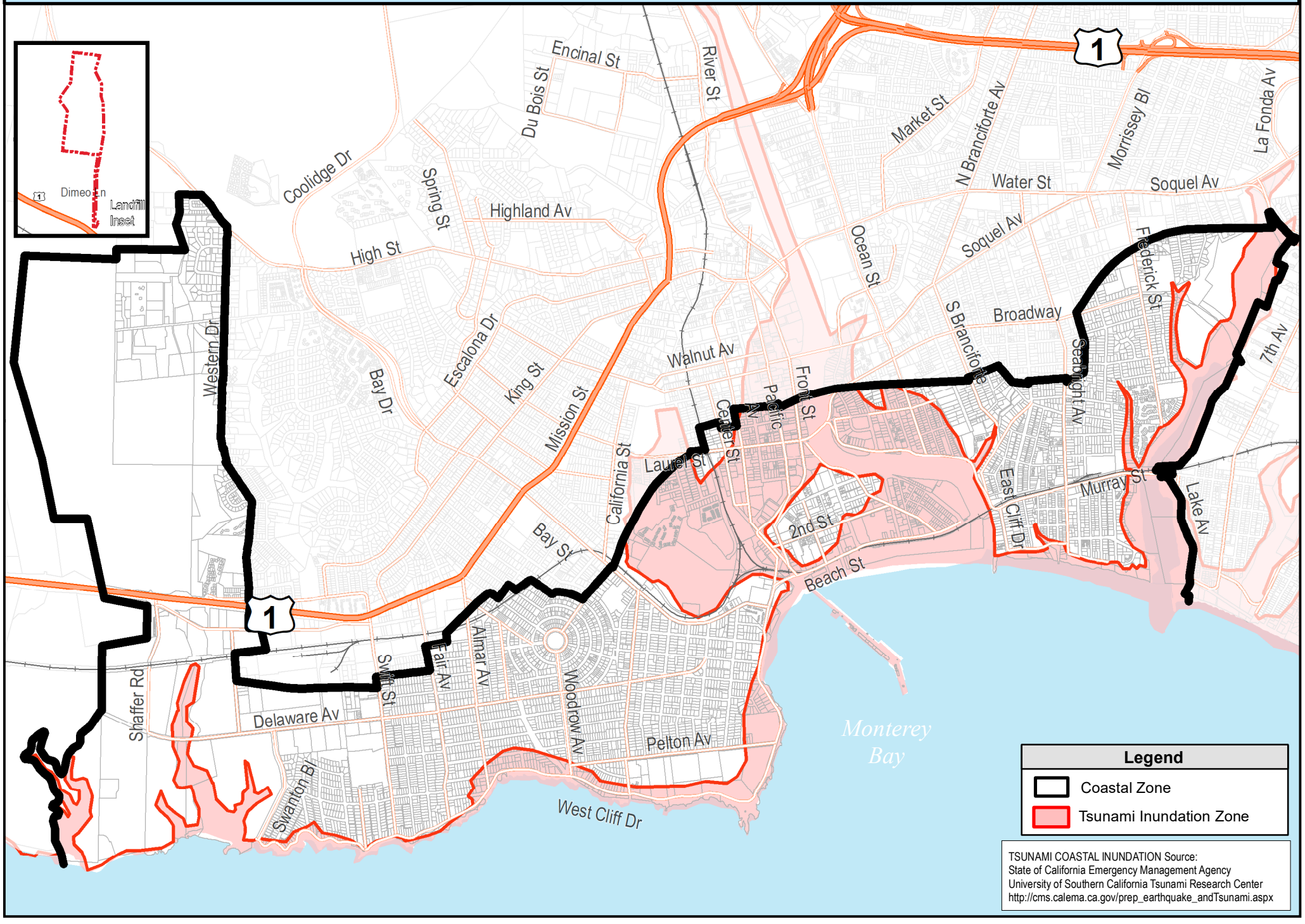
- Coastal Zone
- **Liquefaction Hazard**
  - Very High
  - High

SOURCE: Nolan Associates

This page intentionally left blank.

Figure IIIE-2
Tsunami Inundation Zones

Local Coastal Program

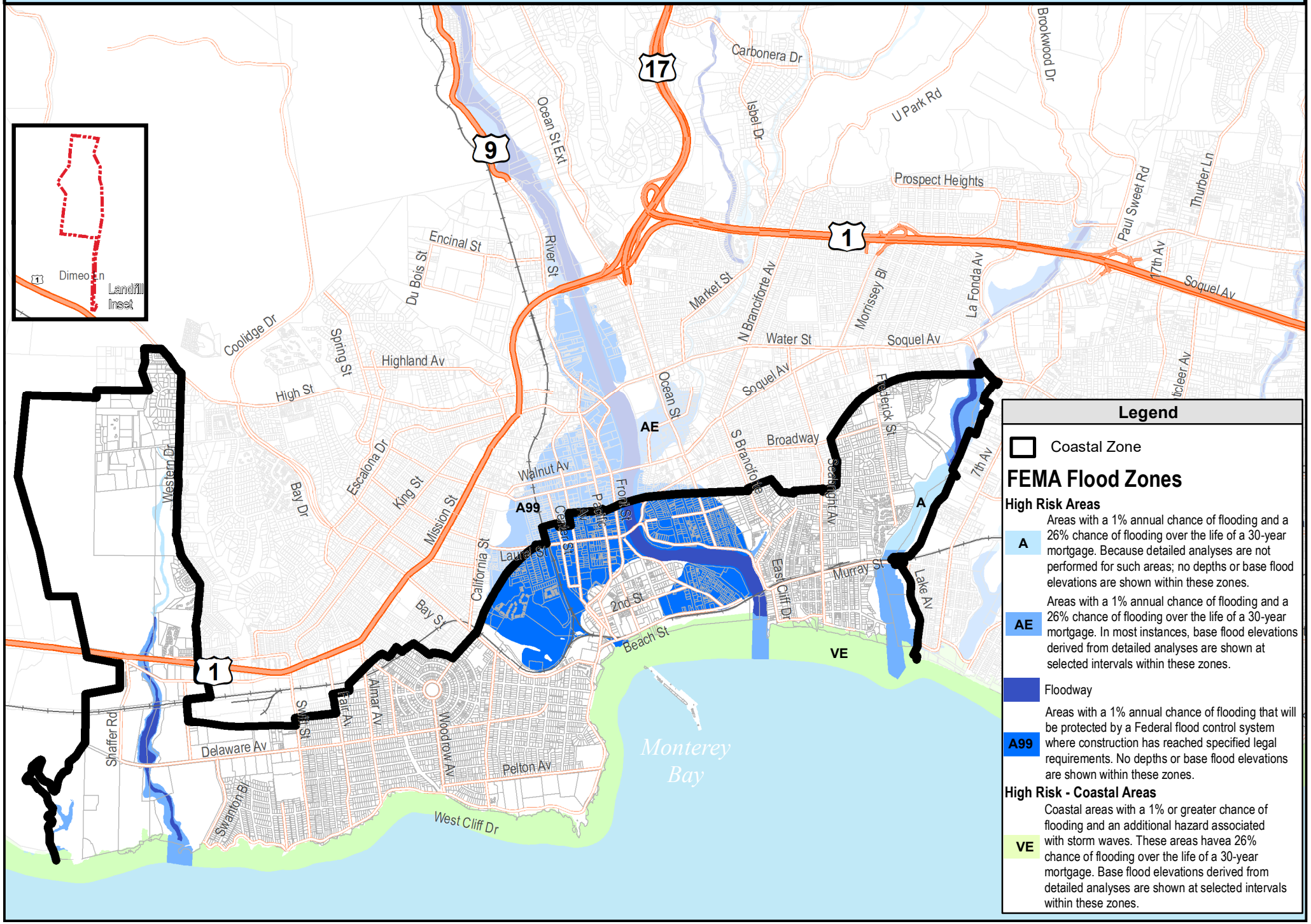


This page intentionally left blank.

Figure IIIE-3
Flood Hazards

Local Coastal Program

0 0.5 1 Miles



Legend

Coastal Zone

FEMA Flood Zones

High Risk Areas

A — Areas with a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage. Because detailed analyses are not performed for such areas; no depths or base flood elevations are shown within these zones.

AE — Areas with a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage. In most instances, base flood elevations derived from detailed analyses are shown at selected intervals within these zones.

Floodway

A99 — Areas with a 1% annual chance of flooding that will be protected by a Federal flood control system where construction has reached specified legal requirements. No depths or base flood elevations are shown within these zones.

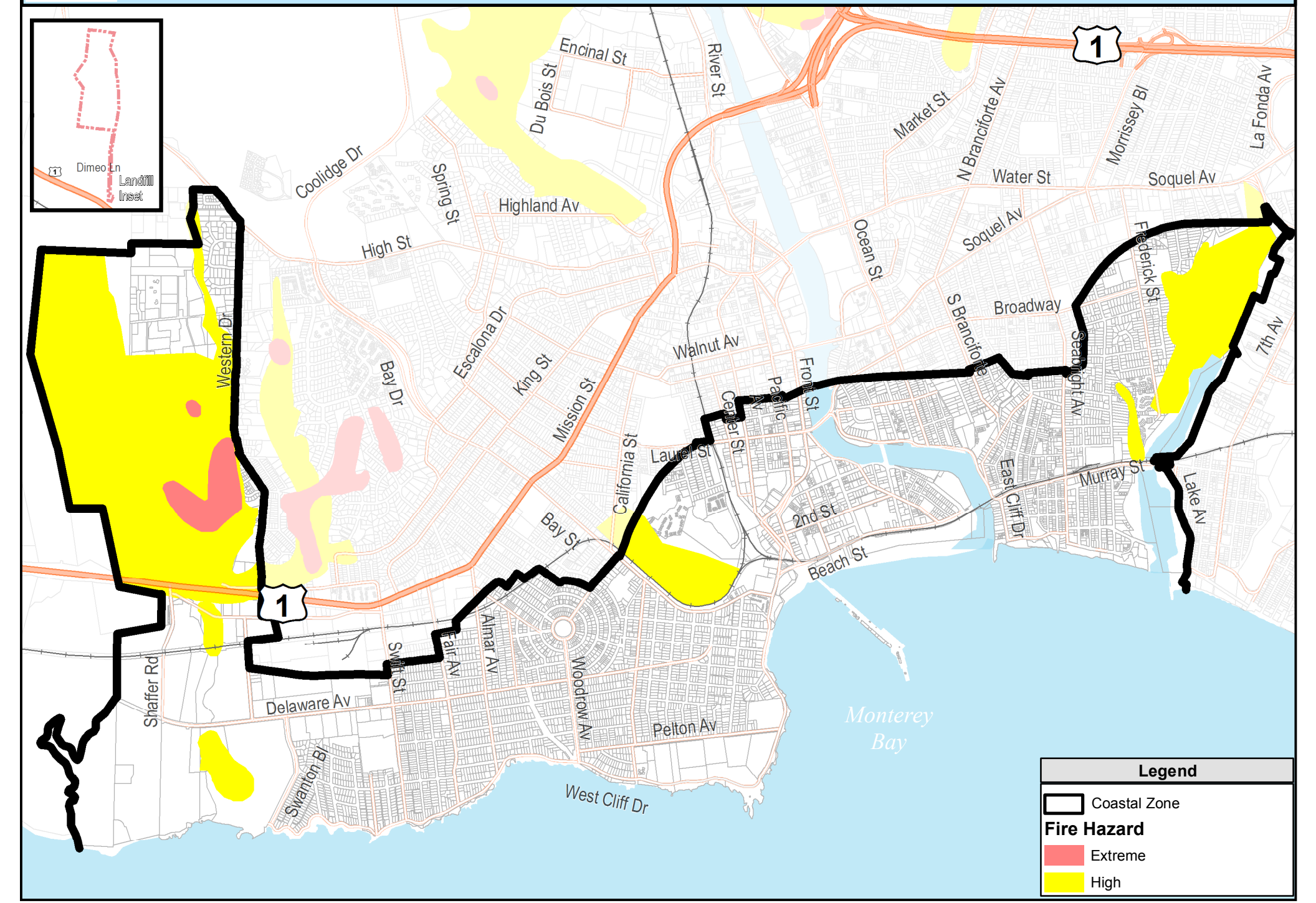
High Risk - Coastal Areas

VE — Coastal areas with a 1% or greater chance of flooding and an additional hazard associated with storm waves. These areas havea 26% chance of flooding over the life of a 30-year mortgage. Base flood elevations derived from detailed analyses are shown at selected intervals within these zones.

This page intentionally left blank.

Figure IIIE-4
Wildland Fire Hazard

Local Coastal Program

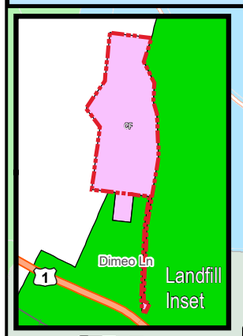


This page intentionally left blank.

Figure IV-1
Land Use Map

Local Coastal Program

0 0.5 1 Miles



Coolidge Dr
Spring St
Highland Av
High St
Du Bois St
Bay Dr
Escalona Dr
King St
Walnut Av
Ocean St
Market St
N Branciforte Av
Water St
Morrissey Bl
La Fonda Av
Soquel Av
S Branciforte
Broadway
Frederick St
Seabright Av
7th Av
Front St
Pacific Ave
Center St
California St
Laurel St
Murray St
Lake Av
East Cliff Dr
Bay St
1
Shaffer Rd
Delaware Av
Fair Av
Almar Av
Woodrow Av
Pelton Av
Swanton Bl
Monterey Bay

Legend

Coastal Zone
Specific or Area Plan Required

General Plan Land Use Designations

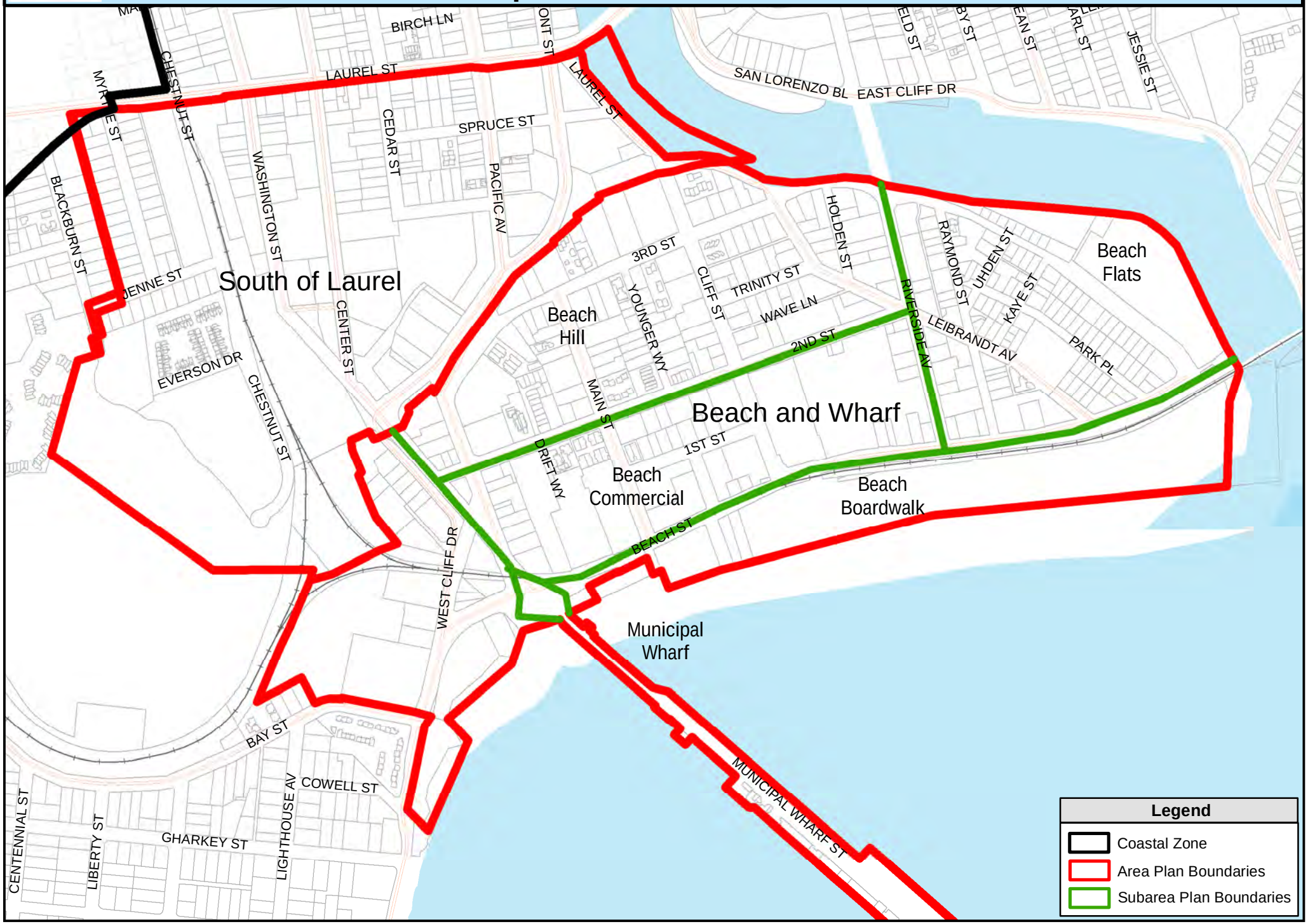
- Community Commercial
- Regional Visitor Commercial
- Industrial
- Community Facilities
- U.C.S.C. Lands
- Coastal Dependent
- Coastal Recreation
- Agriculture / Grazing
- Parks
- Natural Areas
- Very Low Density Residential (.1-1 DU/Acre)
- Low Density Residential (1.1-10 DU/acre)
- Low Medium Density Residential (10.1-20 DU/acre)
- Medium Density Residential (20.1-30 DU/acre)
- High Density Residential (30.1-55 DU/acre)
- Mixed-Use High Density (MXHD), 1.0-2.75 FAR, 10-55 DU/AC
- Mixed-Use Medium Density (MXMD), 0.75-1.75 FAR, 10-30 DU/AC
- Mixed-Use Visitor Commercial (MXVC), 1.0-2.75 FAR, 0-55 DU/AC
- Neighborhood Commercial
- Office

This page intentionally left blank.

V-BSOL-1
Beach/South of Laurel Comprehensive Area Plan Boundaries and Subareas

Local Coastal Program

0 0.1 0.2 Miles



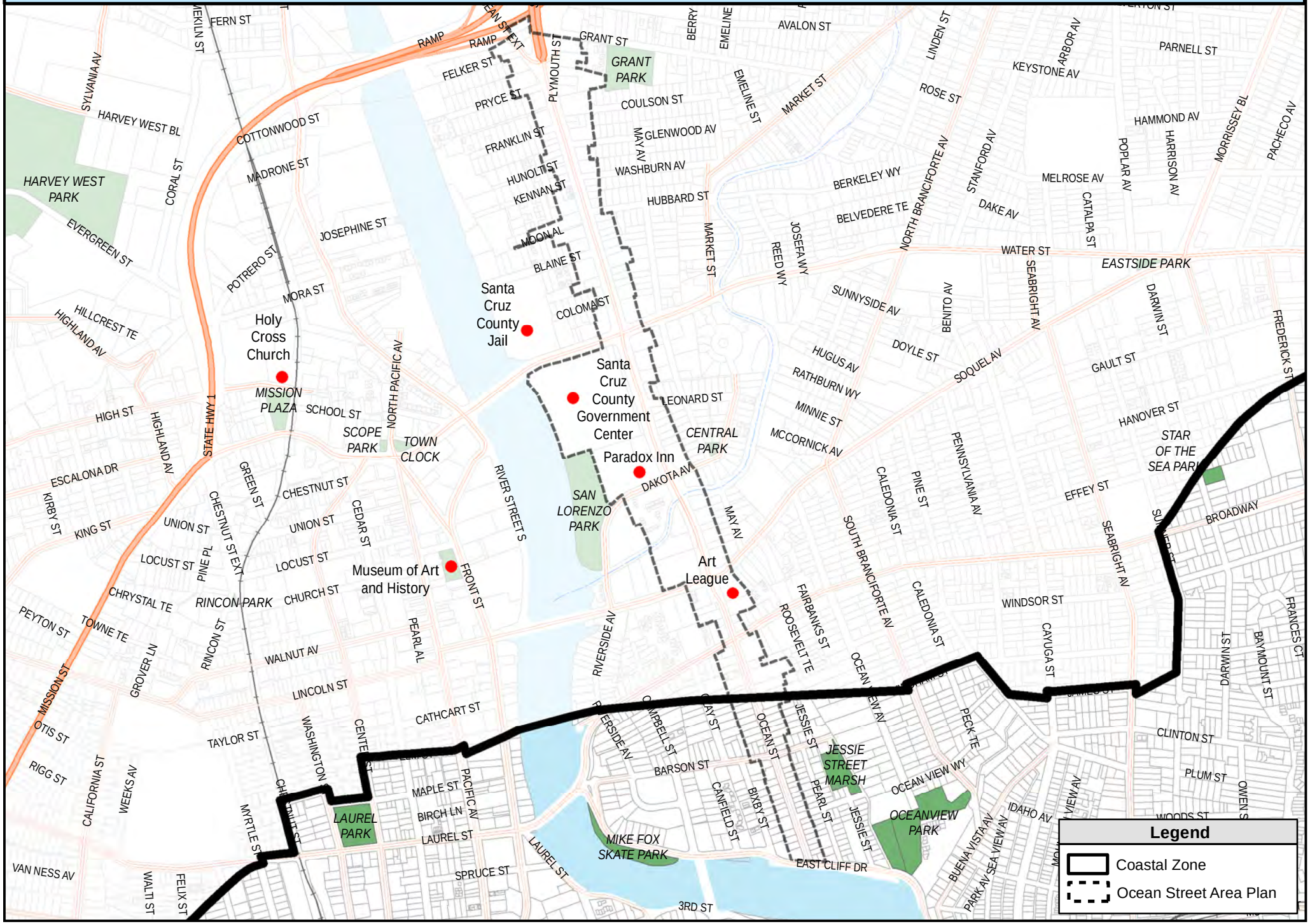
Legend

- Coastal Zone
- Area Plan Boundaries
- Subarea Plan Boundaries

This page intentionally left blank.

V-OSAP-1
Ocean Street Area Plan Boundaries

Local Coastal Program

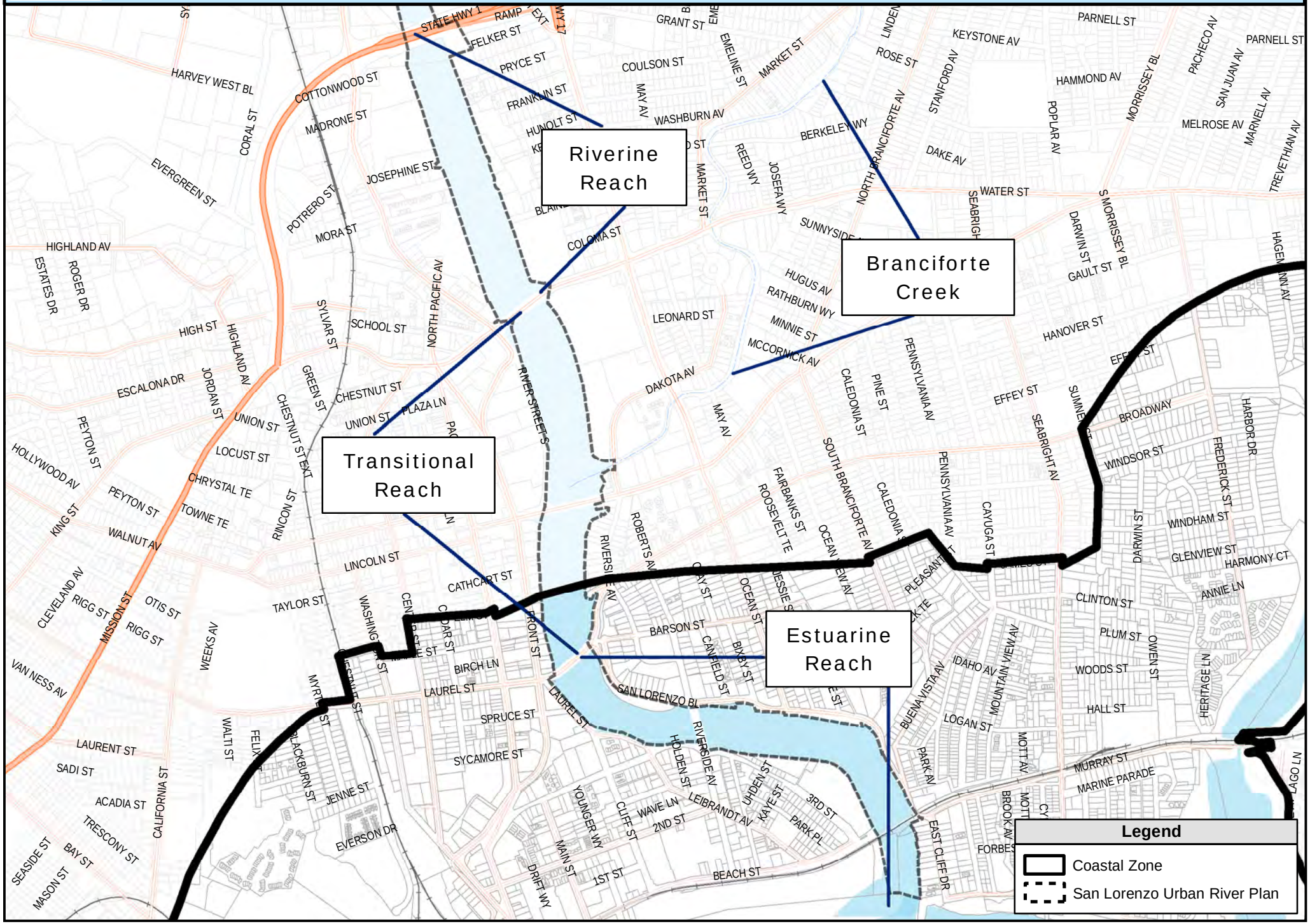


This page intentionally left blank.

V-SLR-1
San Lorenzo River Urban Plan Boundaries

Local Coastal Program

0 0.3 0.6 Miles

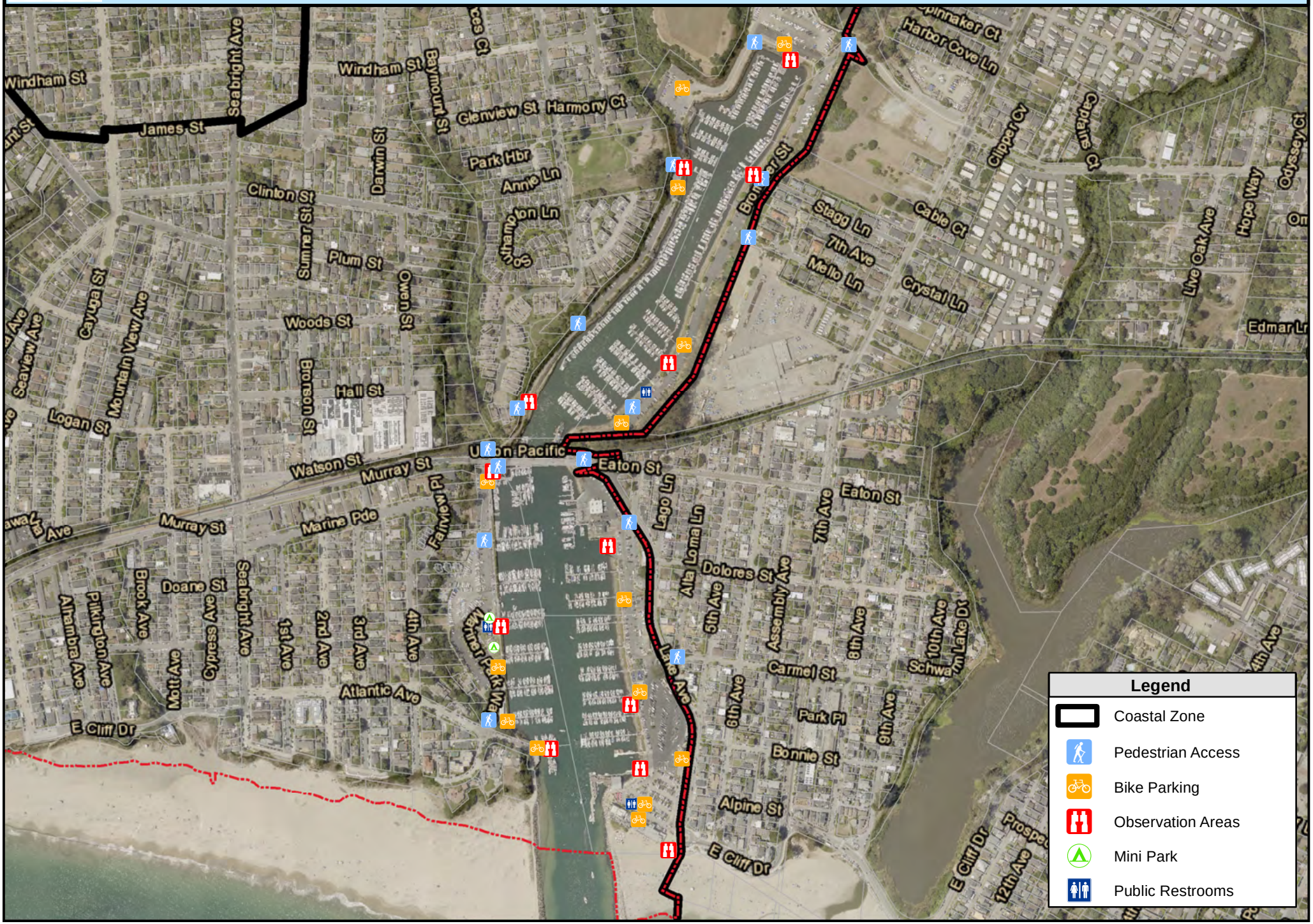


This page intentionally left blank.

Figure HDP-1
Harbor Access

Local Coastal Program

0 0.15 0.3 Miles

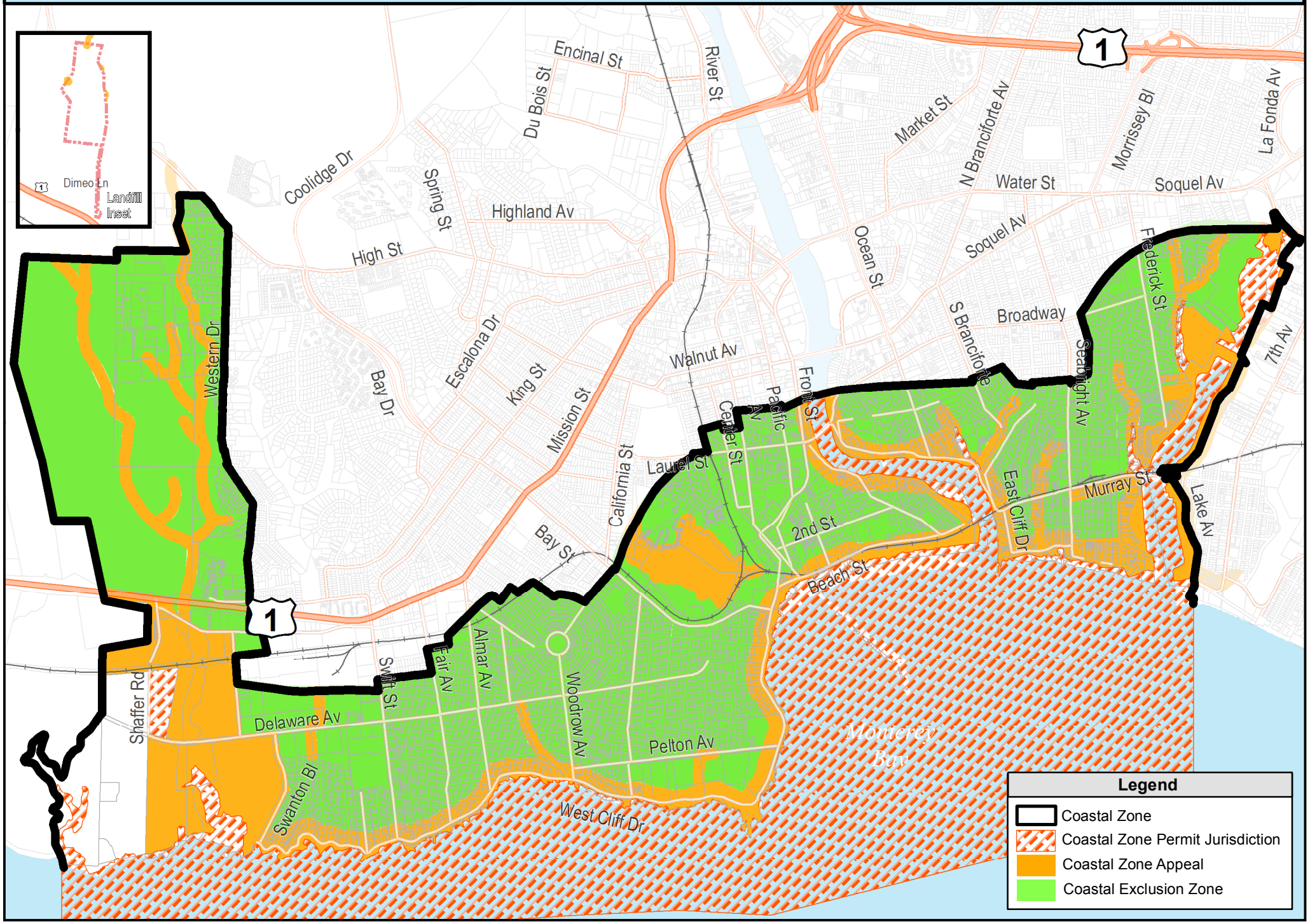


This page intentionally left blank.

Figure VI-1
Coastal Commission Review and Authority

Local Coastal Program

0 0.5 1 Miles



This page intentionally left blank.