

Final Draft

City of Carlsbad

Local Coastal Program

Land Use Plan

LEAD AGENCY

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September 2019

JN 149652

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Introduction

This chapter introduces and describes the purpose and organization of the Local Coastal Program Land Use Plan. The Land Use Plan provides policy direction for decision makers, property owners, and the public regarding land use and development in the Coastal Zone, consistent with the California Coastal Act.



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1.1 Background

Carlsbad Setting and Evolution

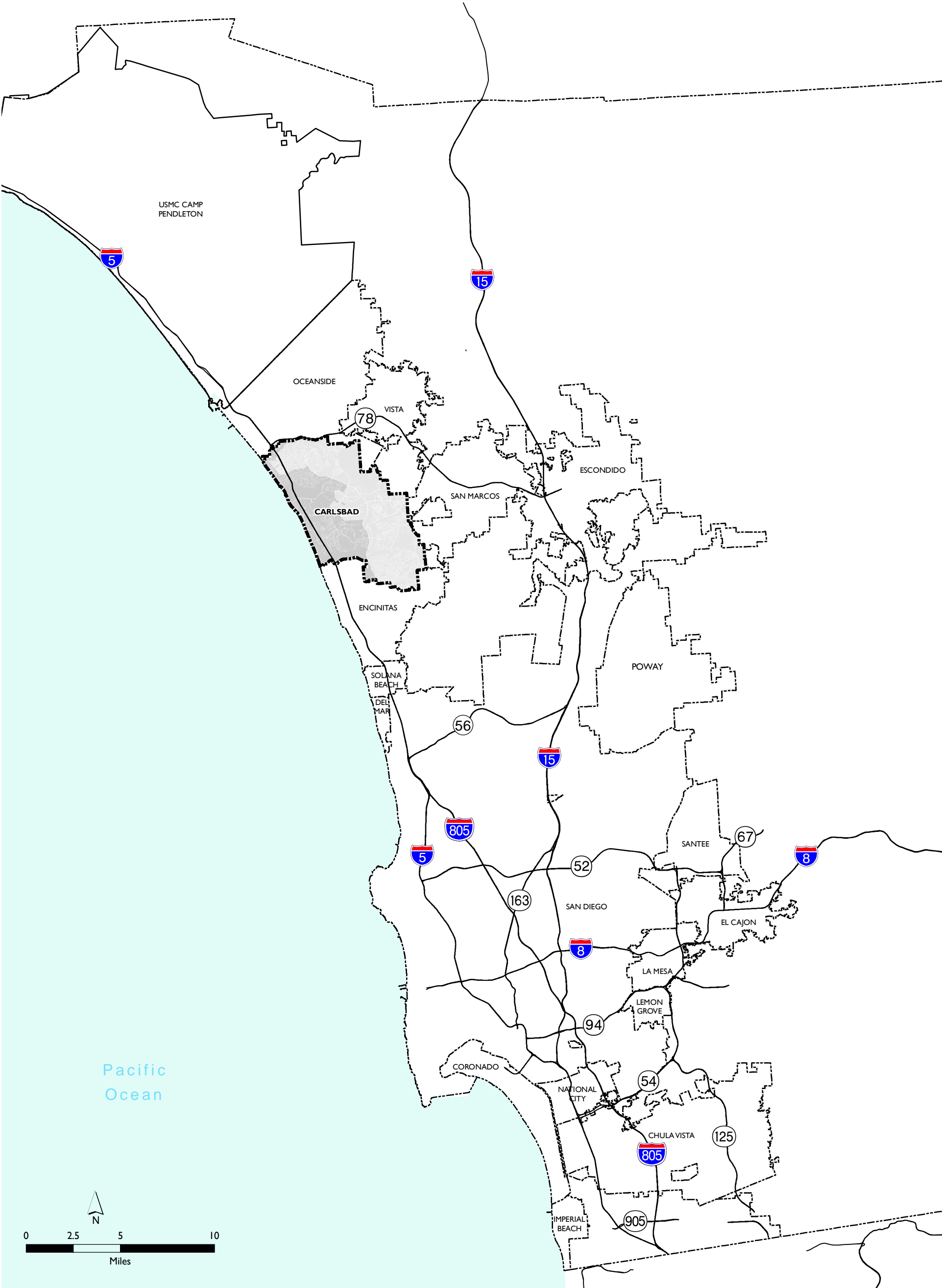
Carlsbad is located about 30 miles north of San Diego and about 90 miles south of Los Angeles. The city occupies approximately 39 square miles of rolling hills, beaches, and bluffs along the northern coast of San Diego County. Approximately 14.4 square miles of the city is within the California Coastal Zone. The city's regional location is depicted on Figure 1-1, and the boundary of Carlsbad's Coastal Zone is shown on Figure 1-2.

Carlsbad incorporated as a city in 1952 and consisted of about 7.5 square miles centered on the Village. Over time, a series of annexations gradually expanded the city's land area south and east to the current size of 39 square miles. Today, the city is a regional employment center and home to several international companies in high-technology, biotechnology, recreational equipment, and other sectors. Carlsbad is also a world-famous travel destination offering scenic outdoor recreation, numerous retail shopping opportunities, as well being considered the "golfing capital of the world," with numerous resorts.

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CITY OF CARLSBAD

LOCAL COASTAL PROGRAM



Source: Michael Baker International, 2016; SANGIS, 2016; City of Carlsbad, 2016

7/31/2019 JN M:\data\149652\GIS\MXD\Carlsbad_MXD\LCP_2019\Figure I-I Regional Vicinity I 1x17.mxd

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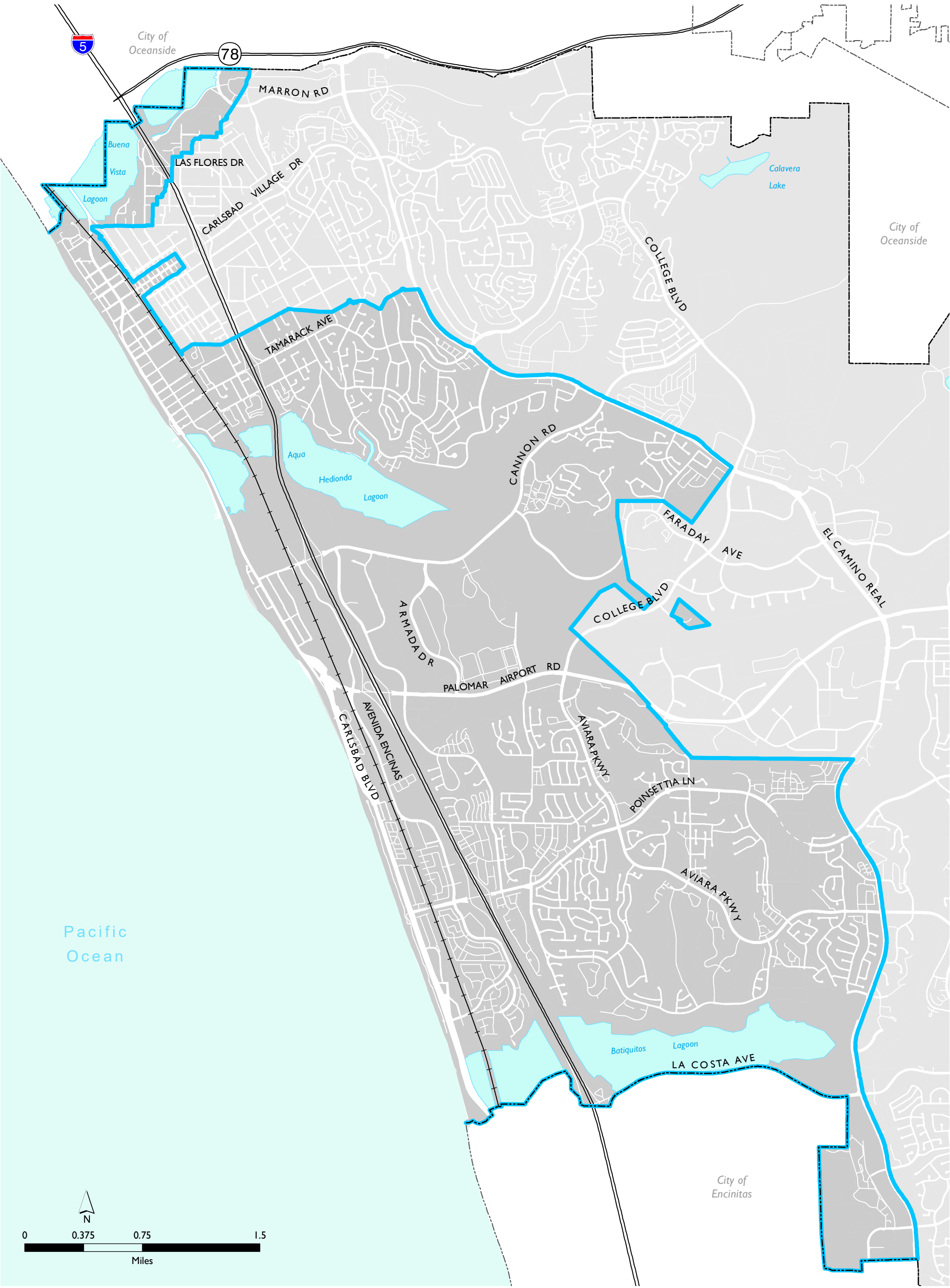
-  City Limit
-  Other Municipal Boundaries

FIGURE I-I
REGIONAL VICINITY

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CITY OF CARLSBAD

LOCAL COASTAL PROGRAM



Source: Michael Baker International, 2016; SANGIS, 2016; City of Carlsbad, 2019

12/6/2021 JN M:\Data\149652\GIS\MXD\Carlsbad_MXD\LCP_2019\Chapter 1\Figure 1-2 Coastal Zone Boundary 1x17.mxd

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- Coastal Zone
- City Limit
- Railroad

FIGURE I-2
COASTAL ZONE BOUNDARY

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History of Carlsbad's Local Coastal Program Land Use Plan

Prior to certification of this Local Coastal Program Land Use Plan, Carlsbad had six Local Coastal Program Land Use Plans that applied to six specific geographic segments of the city's Coastal Zone: Agua Hedionda Lagoon segment; Carlsbad Mello I segment; Carlsbad Mello II segment; East Batiquitos Lagoon/Hunt Properties segment; West Batiquitos Lagoon/Sammis Properties segment; and the Village Area segment. Figure 1-3 shows the boundaries of the former Local Coastal Program segments.

In the late 1970s and early 1980s, pursuant to state legislation (Coastal Act Sections 30170 and 30171), the Coastal Commission prepared local coastal program land use plans for the Mello I and Mello II segments (state legislator Henry Mello sponsored the legislation that created Coastal Act Sections 30170 and 30171). The Coastal Commission approved the Mello I and Mello II Local Coastal Program Land Use Plans in September 1980 and June 1981, respectively; however, the city did not adopt the land use plans until the Coastal Commission approved major amendments to the plans.

In October 1985, the Coastal Commission approved amendments to the Mello I and Mello II segments. These major amendments involved changes to policies related to agricultural preservation, and steep slope and housing protection policies. After Coastal Commission approval of these amendments, the city adopted the Mello I and Mello II Local Coastal Program Land Use Plans.

The Village area was part of the original Mello II segment. In 1984, the Coastal Commission approved the segmentation of the Village area from the Mello II segment and approved a local coastal program land use plan for the Village area.

The Agua Hedionda Lagoon Local Coastal Program Land Use Plan was approved by the Coastal Commission in 1982. In 1985, the Coastal Commission approved the West Batiquitos Lagoon/Sammis Properties Local Coastal Program Land Use Plan; and in 1988, the commission approved the land use plan for the East Batiquitos Lagoon/Hunt Properties segment.

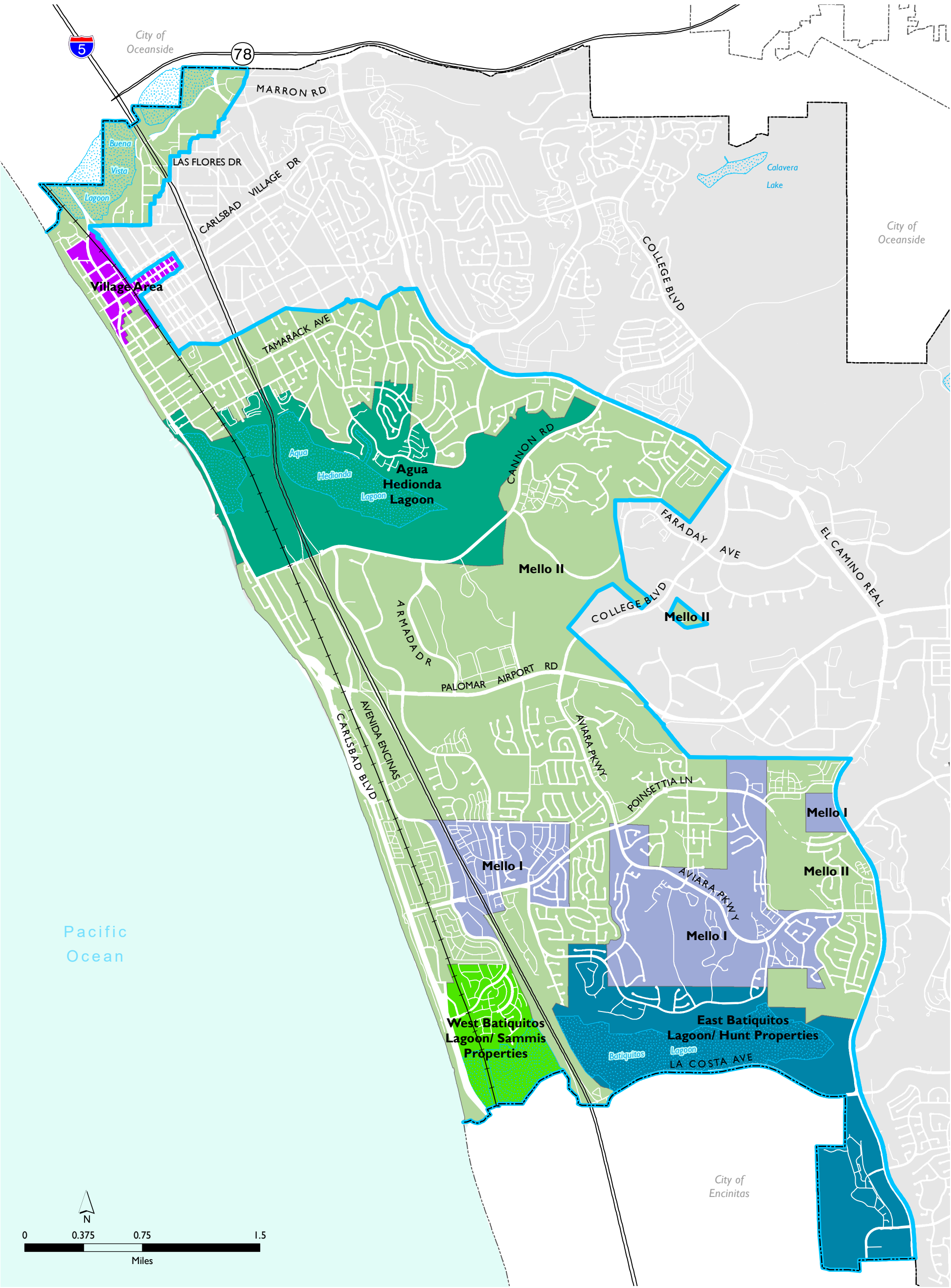
In 1996, the Coastal Commission approved Local Coastal Program implementation plans for all segments except the Agua Hedionda Lagoon segment.

This Local Coastal Program Land Use Plan synthesizes coastal planning for the previous segments, providing one unified plan for all of Carlsbad's Coastal Zone. Policies related to specific geographic or resource areas are still important components of the plan and are clearly identified in each chapter.

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CITY OF CARLSBAD

LOCAL COASTAL PROGRAM



Source: Michael Baker International, 2016; SANGIS, 2016; City of Carlsbad, 2019

12/6/2021 JN M:\Mdas\149652\GIS\MXD\Carlsbad_MXD\LCP_2019\Chapter 1\Figure 1-3 Former Local Coastal Program Segments 11x17.mxd

LEGEND

- | | | |
|--------------|--|---|
| Coastal Zone | Former Local Coastal Program Segments | Mello II |
| City Limit | Agua Hedionda Lagoon | Village Area |
| Lagoon | East Batiquitos Lagoon/ Hunt Properties | West Batiquitos Lagoon/ Sammis Properties |
| Railroad | Mello I | |

FIGURE I-3
FORMER LOCAL COASTAL PROGRAM SEGMENTS

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1.2 Local Coastal Program Overview

Purpose

The California Coastal Act requires jurisdictions within the California Coastal Zone to prepare a local coastal program. Local coastal programs are required to address the planning and management of public access to the coast, the provision of coastal recreation, protection of the marine environment, protection of land resources, and regulation of development in the Coastal Zone.

Components of a Local Coastal Program

The Coastal Act is implemented through local coastal program land use plans and implementation plans. Such plans are prepared for each individual city and county located within the state's coastal zone.

To meet the requirements of the Coastal Act, a local coastal program land use plan must be “sufficiently detailed to indicate the kinds, location, and intensity of land uses, the applicable resource protection and development policies, and, where necessary, a listing of implementing actions” (Coastal Act Section 30108.5). A local coastal program land use plan should “...assure that maximum public access to the coast and public recreation areas is provided” (Coastal Act Section 30500(a)). A local coastal program implementation plan specifies the standards and regulations utilized to implement the policies of a local coastal program land use plan.

Local Permitting Authority

Local coastal programs are basic planning tools that allow local governments to permit development in the coastal zone consistent with the Coastal Act. After a local coastal program land use plan and an implementation plan are certified by the Coastal Commission, the authority to approve or deny coastal development permits is transferred to the local government; however, the Coastal Commission retains permanent authority to approve or deny coastal development permits for development proposed on tidelands, submerged lands, and public trust lands.

The city's action to approve a coastal development permit can be appealed to the Coastal Commission if the development project is between the first public road and the sea; within 300 feet of a beach, mean high tide, or bluff edge; or within 100 feet of a wetland or stream (refer to Figures 1-4A, 1-4B, and 1-4C). The approval or denial of a major public works project or energy facility, regardless of location, is also appealable. Appeals to the Coastal Commission may be filed subject to the following:

- Any applicant or person who participates in the city's permitting process for a project, or who otherwise communicates their concerns to the City of Carlsbad, may file an appeal.

- An appellant must exhaust all city appeals unless the city charges a fee to appeal, restricts the class of people who can file appeals, or failed to follow the hearing and notice requirements for issuing a coastal development permit.
- Any two Coastal Commissioners may file an appeal to the Coastal Commission.
- The grounds for appealing a project are limited to whether the project conforms to the requirements of the Local Coastal Program or the public access policies of the Coastal Act.
- Issues that are not addressed by the Local Coastal Program are not valid grounds for an appeal.

Relationship of the Land Use Plan to Other Plans and Regulations

Local Coastal Program Land Use Plan and Implementation Plan

Carlsbad's Local Coastal Program consists of two essential components that, taken together, implement the Coastal Act's requirements:

- Carlsbad Local Coastal Program Land Use Plan (this document)
- Carlsbad Local Coastal Program Implementation Plan—zoning ordinance, zoning map, and other regulatory provisions (refer to Section 1.5)

Local Coastal Program Land Use Plan and the General Plan

The Carlsbad Local Coastal Program Land Use Plan and General Plan both provide policies that guide the physical development of Carlsbad's Coastal Zone; however, the General Plan is not a component of the Local Coastal Program. While they are two separate documents, some of the descriptive text and some of the policies are the same. Detailed discussion of Coastal Act requirements and goals is included only in this Local Coastal Program Land Use Plan, while issues that are not directly relevant to the Coastal Act are covered only in the General Plan. If the policies of the General Plan conflict with the policies of this Local Coastal Program Land Use Plan, the policies of this Local Coastal Program Land Use Plan shall apply.

City of Oceanside

78

5

MARRON RD

EL CAMINO REAL

Buena Vista Lagoon

JEFFERSON ST

CARLSBAD VILLAGE DR

MAGNOLIA AVE

TAMARACK AVE

PARK DR

ADAMS ST

OCEAN ST

CARLSBAD BLVD

Pacific Ocean

Aquia Hedionda Lagoon

0 0.25 0.5 Miles

N

California Coastal Commission Appeal and Permit Jurisdiction

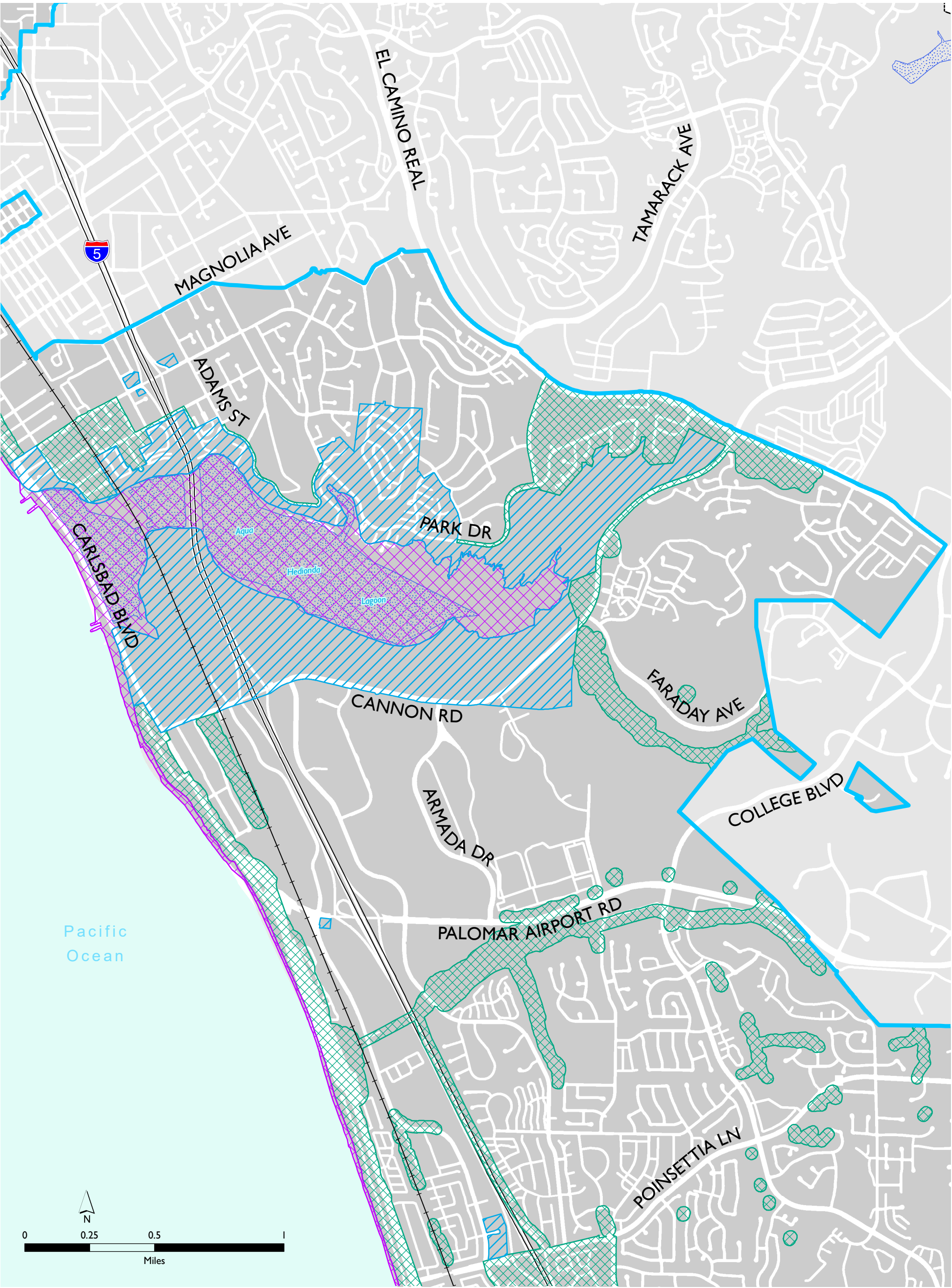
- Coastal Zone
- City Limit
- Lagoon
- Railroad
- Appeal Jurisdiction
- Area of Deferred Certification
- Permit Jurisdiction

CA COASTAL COMMISSION APPEAL AND PERMIT JURISDICTION

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CITY OF CARLSBAD

LOCAL COASTAL PROGRAM



Source: Michael Baker International, 2016; SANGIS, 2016; City of Carlsbad, 2019

12/6/2021 JN M:\945as\149652\GIS\MXD\Carlsbad_MXD\LCP_2019\Chapter 1\Figure 1-4B CCC Appeal and Permit Jurisdiction 11x17.mxd

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Coastal Zone

City Limit

Lagoon

Railroad

California Coastal Commission Appeal and Permit Jurisdiction

Appeal Jurisdiction

Area of Deferred Certification

Permit Jurisdiction

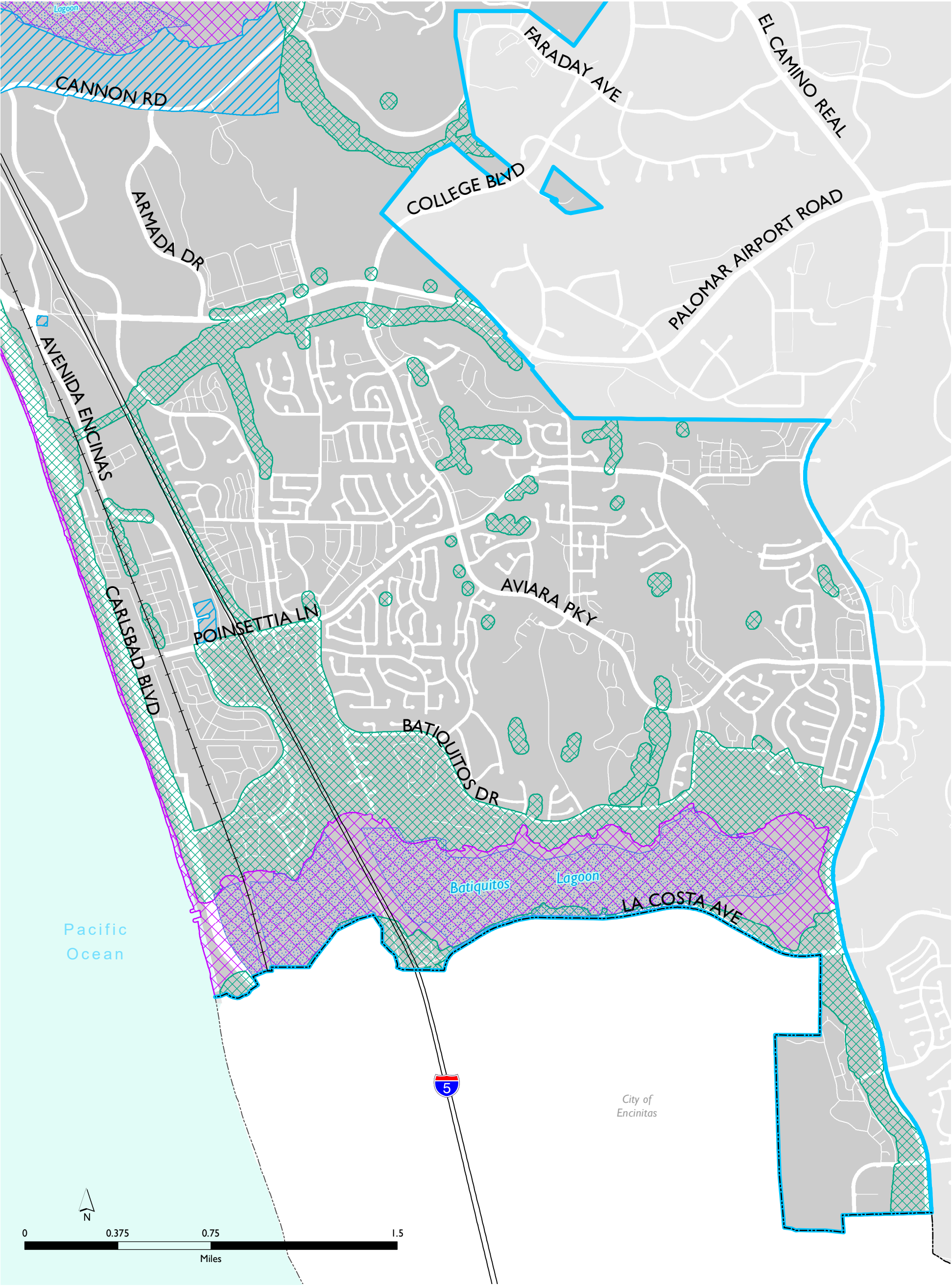
FIGURE I-4B

CA COASTAL COMMISSION APPEAL AND PERMIT JURISDICTION

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CITY OF CARLSBAD

LOCAL COASTAL PROGRAM



Source: Michael Baker International, 2016; SANGIS, 2016; City of Carlsbad, 2019

12/6/2021 J:\M\Mapdata\149632\GIS\MXD\Carlsbad_MXD\LCP_2019\Chapter 1\Figure 1-4C CCC Appeal and Permit Jurisdiction 11x17.mxd

LEGEND

- | | |
|--------------|---|
| Coastal Zone | California Coastal Commission Appeal and Permit Jurisdiction |
| City Limit | Appeal Jurisdiction |
| Lagoon | Area of Deferred Certification |
| Railroad | Permit Jurisdiction |

FIGURE I-4C

CA COASTAL COMMISSION APPEAL AND PERMIT JURISDICTION

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1.3 Carlsbad Community Vision

The Carlsbad Community Vision is the foundation for the Carlsbad General Plan (adopted by the city in 2015); the vision is also a guiding factor in the policies of this Local Coastal Program Land Use Plan. The vision is based on nine core values that represent the qualities and characteristics of Carlsbad that community members aspire to protect, maintain, improve, change, or achieve in the future. The core values of the vision are summarized below, most of which reflect coastal planning considerations.

- **Small Town Feel, Beach Community Character, and Connectedness.** “Enhance Carlsbad’s defining attributes—its small town feel and beach community character. Build on the city’s culture of civic engagement, volunteerism, and philanthropy.”
- **Open Space and the Natural Environment.** “Prioritize protection and enhancement of open space and the natural environment. Support and protect Carlsbad’s unique open space and agricultural heritage.” This core value recognizes:
 - **Access to Recreation and Active, Healthy Lifestyles.** “Promote active lifestyles and community health by furthering access to trails, parks, beaches, and other recreation opportunities.”
 - **The Local Economy, Business Diversity, and Tourism.** “Strengthen the city’s strong and diverse economy and its position as an employment hub in North San Diego County. Promote business diversity, increased specialty retail and dining opportunities, and Carlsbad’s tourism.”
 - **Walking, Biking, Public Transportation, and Connectivity.** “Increase travel options through enhanced walking, bicycling, and public transportation systems. Enhance mobility through increased connectivity and intelligent transportation management.”
 - **Sustainability.** “Build on the city’s sustainability initiatives to emerge as a leader in green development and sustainability. Pursue public/private partnerships, particularly on sustainable water, energy, recycling, and foods.”
 - **History, the Arts, and Cultural Resources.** “Emphasize the arts by promoting a multitude of events and productions year-round, cutting-edge venues to host world-class performances, and celebrate Carlsbad’s cultural heritage in dedicated facilities and programs.”
 - **High-Quality Education and Community Services.** “Support quality, comprehensive education and life-long learning opportunities, provide housing and community services for a changing population, and maintain a high standard for citywide public safety.”

- **Neighborhood Revitalization, Community Design, and Livability.** “Revitalize neighborhoods and enhance citywide community design and livability. Promote a greater mix of uses citywide, more activities along the coastline, and link density to public transportation. Revitalize the Village as a community focal point and a unique and memorable center for visitors, and rejuvenate the historic Barrio neighborhood.”

1.4 Plan Organization

Chapters

This Local Coastal Program Land Use Plan is organized by chapters that topically follow the sections of the Coastal Act, as follows:

1. **Introduction.** Summary of plan's background, purpose, state requirements, relationships to other plans, plan organization, and requirements for administration of the plan.
2. **Land Use.** This chapter describes how land and development are regulated in Carlsbad's Coastal Zone to ensure that future land use decisions and development are consistent with the California Coastal Act. It includes the Local Coastal Program Land Use Map, land use designations, standards for density and intensity, and land use-related policies to help define the Coastal Zone's future physical development.
3. **Recreation and Visitor-Serving Uses.** The protection of recreational use of the coastline, as well as visitor-serving uses, is a priority of the California Coastal Act. The purpose of this chapter is to identify policies to ensure that community members and visitors have continued access to coastal recreational opportunities and accommodations.
4. **Coastal Access.** Ensuring public access to the coast is a priority of the California Coastal Act. This chapter identifies and discusses Carlsbad's coastal access conditions, including vertical and lateral access, parking, and active transportation access. The chapter concludes with policies to ensure the city maintains and enhances the public coastal access consistent with the Coastal Act.
5. **Agriculture, Cultural, and Scenic Resources.** The Coastal Act places high importance on the protection of agricultural lands, cultural resources (including paleontological and archeological resources), and scenic resources. This chapter describes the agricultural, cultural, and scenic resources found in Carlsbad's Coastal Zone and provides policies that guide the city in the protection of such resources.
6. **Environmentally Sensitive Habitat Areas and Water Quality.** This chapter describes the natural coastal resources found in Carlsbad's Coastal Zone, which include environmentally sensitive habitat areas and marine and coastal water quality. Protecting these natural resources is a high priority of the Coastal Act. The chapter concludes with policies that guide the city in the protection of such resources.
7. **Coastal Hazards.** Managing development to respond to coastal hazards is a key objective of the Coastal Act. Consistent with the Coastal Act, this chapter identifies hazards in Carlsbad

(related to sea level rise, flooding, geology, and fire) and provides policies that guide new development to reduce risks to life and property and protect coastal resources and natural land forms.

8. **Glossary.** This chapter defines words/terms used in the Local Coastal Program Land Use Plan that are technical or specialized, or that may not reflect common usage.

Each chapter of this Local Coastal Program Land Use Plan includes concise background information to establish the context for the policies in the chapter. This background material is not a comprehensive statement of existing conditions, nor is it considered adopted policy, unless noted otherwise. The background information is followed by policies which are specific statements that guide decision making. Policies may refer to existing programs and development standards or call for the establishment of new ones.

The policies in this plan articulate a direction for Carlsbad's Coastal Zone, in alignment with the Carlsbad Community Vision and the California Coastal Act. Generally, the policies apply to the entire Coastal Zone; however, some policies may be geographic-specific, as identified in each chapter.

Numbering System

Policies are organized using a two-part numbering system. Each policy number is preceded by "LCP" (Local Coastal Program) followed by the applicable chapter number, then a "P" (policy), and finally, the numerical order of the policy. For example, the first policy in Chapter 2 is LCP-2-P.1.

Figures

There are several figures in the Local Coastal Program Land Use Plan that explain the information described in each chapter, such as land use designations, special planning areas, recreational opportunities, natural and cultural resources, and hazards. These visual aids help to explain key planning issues and policies applicable to the Coastal Zone.

Appendices

The following appendices are components of this Local Coastal Program Land Use Plan and are referenced in the related chapters of this plan.

- Appendix A: North Coast Corridor Public Works Plan Overlay
- Appendix B: City of Carlsbad Sea Level Rise Vulnerability Assessment

1.5 Plan Administration

The city is responsible for implementing the Local Coastal Program (land use plan and implementation plan) consistent with the Coastal Act. The Local Coastal Program is intended to be dynamic. As such, it may be amended over time to address site-specific or comprehensive needs, to respond to changes in state or federal law, or to modify policies that may become obsolete or unrealistic over time.

Amendments to the Local Coastal Program

Amendments to the Local Coastal Program require approval by the city and the Coastal Commission or the executive director of the Coastal Commission, as specified in Coastal Act Section 30514.

Implementation

The policies of this Local Coastal Program Land Use Plan are implemented by the Local Coastal Program Implementation Plan, which consists of the following regulations:

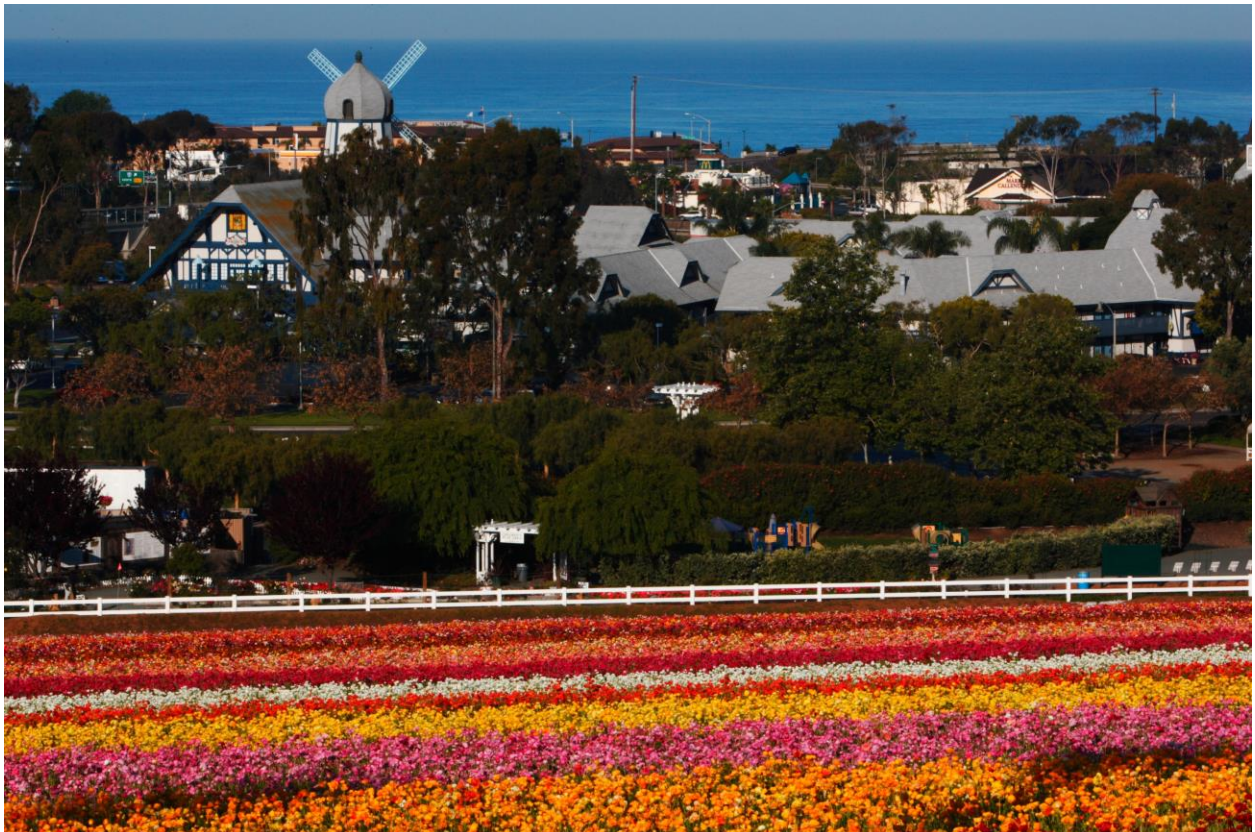
- Carlsbad Municipal Code
 - Title 21 Zoning
 - Chapter 15.12 Stormwater Management and Discharge Control
 - Chapter 15.16 Grading and Erosion Control
- Development-Specific Plans
 - Car Country Specific Plan (SP 19)
 - Carlsbad Ranch Specific Plan (SP 207)
 - La Costa Downs Specific Plan (SP 201)
 - North County Plaza Specific Plan (SP 187)
 - Poinsettia Properties Specific Plan (SP 210)
 - Zone 20 Specific Plan (SP 203)
- Development Master Plans
 - Aviara Master Plan (MP 177)
 - Village and Barrio Master Plan
 - Green Valley Master Plan (MP 92-01)
 - Poinsettia Shores Master Plan (MP 175)
- Other
 - Carlsbad Habitat Management Plan
 - City of Carlsbad Drainage Master Plan

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2

Land Use

This chapter describes how land and development are regulated in Carlsbad's Coastal Zone to ensure that future land use decisions and development are consistent with the California Coastal Act. It includes the Local Coastal Program Land Use Map, land use designations, standards for density, and land use-related policies to help define the Coastal Zone's future physical development.



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2.1 Introduction

The Land Use Chapter of this Carlsbad Local Coastal Program Land Use Plan directs the location, form, and character of future development in the city's Coastal Zone, consistent with the Carlsbad General Plan and the California Coastal Act.

The California Coastal Act establishes priorities and regulations for land uses located within the Coastal Zone. This chapter addresses Coastal Act guidance regarding new development within existing developed areas and providing adequate infrastructure to accommodate the needs of land uses in the Coastal Zone, including the Coastal Act sections shown below. Other aspects of the Coastal Act's guidance on land use, including priority for visitor-serving uses and recreation, conservation of marine and land resources, and protection of development against hazards, are covered in other chapters of this Local Coastal Program Land Use Plan.

Section 30222.5 Oceanfront lands; aquaculture facilities; priority

Oceanfront land that is suitable for coastal dependent aquaculture shall be protected for that use, and proposals for aquaculture facilities located on those sites shall be given priority, except over other coastal dependent developments or uses.

Section 30250 Location; existing developed area

- (a) New residential, commercial, or industrial development, except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources. In addition, land divisions, other than leases for agricultural uses, outside existing developed areas shall be permitted only where 50 percent of the usable parcels in the area have been developed and the created parcels would be no smaller than the average size of surrounding parcels.
- (b) Where feasible, new hazardous industrial development shall be located away from existing developed areas.
- (c) Visitor-serving facilities that cannot feasibly be located in existing developed areas shall be located in existing isolated developments or at selected points of attraction for visitors.

Section 30254 Public works facilities

New or expanded public works facilities shall be designed and limited to accommodate needs generated by development or uses permitted consistent with the provisions of this division; provided, however, that it is the intent of the Legislature that State Highway Route 1 in rural areas of the coastal zone remain a scenic two-lane road. Special districts shall not be formed or expanded except where assessment for, and provision of, the service would not induce new development inconsistent with this division. Where existing or planned public works facilities can accommodate only a limited amount of new development, services to coastal-dependent land use, essential public services and basic industries vital to the economic health of the region, state, or nation, public recreation, commercial recreation, and visitor-serving land uses shall not be precluded by other development.

Section 30255 Priority of coastal-dependent developments

Coastal-dependent developments shall have priority over other developments on or near the shoreline. Except as provided elsewhere in this division, coastal-dependent developments shall not be sited in a wetland. When appropriate, coastal-related developments should be accommodated within reasonable proximity to the coastal-dependent uses they support.

Section 30260 Location or expansion [industrial development]

Coastal-dependent industrial facilities shall be encouraged to locate or expand within existing sites and shall be permitted reasonable long-term growth where consistent with this division. However, where new or expanded coastal-dependent industrial facilities cannot feasibly be accommodated consistent with other policies of this division, they may nonetheless be permitted in accordance with this section and Sections 30261 and 30262 if (1) alternative locations are infeasible or more environmentally damaging; (2) to do otherwise would adversely affect the public welfare; and (3) adverse environmental effects are mitigated to the maximum extent feasible.

Section 30264 Thermal electric generating plants

Notwithstanding any other provision of this division except subdivisions (b) and (c) of Section 30413, new or expanded thermal electric generating plants may be constructed in the coastal zone if the proposed coastal site has been determined by the State Energy Resources Conservation and Development Commission to have greater relative merit pursuant to the provisions of Section 25516.1 than available alternative sites and related facilities for an applicant's service area which have been determined to be acceptable pursuant to the provisions of Section 25516.

2.2 Summary of Existing Coastal Zone Land Uses

The Coastal Zone in Carlsbad is approximately 9,220 acres, including the three lagoons. Existing land uses in the Coastal Zone include open space, residential, commercial, industrial, office, and public uses.

Open Space Uses

Open space areas include natural resources such as sensitive habitat and lagoons; recreational areas such as beaches and parks; and agricultural uses. Three natural lagoons are located in the Coastal Zone: Buena Vista Lagoon at the northern Coastal Zone boundary; Batiquitos Lagoon at the southern boundary; and Agua Hedionda Lagoon in the center of the Coastal Zone area. Agricultural lands in the Coastal Zone include the Flower Fields and the strawberry fields along Cannon Road, east of Interstate 5. Recreational lands include public beaches, numerous public parks, and public golf courses.

Residential Uses

Residential neighborhoods are distributed throughout the city's Coastal Zone but are primarily concentrated between Buena Vista and Agua Hedionda lagoons and between Palomar Airport Road and Batiquitos Lagoon.

Nonresidential Uses

Nonresidential uses, including commercial, industrial, office, and visitor accommodations, are primarily concentrated along Palomar Airport Road and Interstate 5. These areas include several regional commercial retailers and car dealerships accessible from the interstate. Hotels, motels, and resorts are located near Carlsbad Boulevard in the northern and southern portions of the Coastal Zone, as well as near Cannon Road, Palomar Airport Road, and Interstate 5. A portion of the Carlsbad Village is in the Coastal Zone, including a mix of residential, commercial, office, and visitor-serving uses.

Coastal-Dependent Uses

Some commercial, industrial, and recreational uses are coastal-dependent. These uses include fishing, marinas/boating, aquaculture, and water desalination facilities. Fishing is permitted along limited areas of the Agua Hedionda and Batiquitos lagoon shorelines (refer to Chapter 3 for more information). Publicly accessible boat launching facilities are located on Agua Hedionda Lagoon (inner lagoon). Private boat launching facilities are also available to residents of the Bristol Cove neighborhood (north shore of Agua Hedionda Lagoon). Refer to Chapter 3 for more information about opportunities for boating. In addition to boating and fishing, Agua Hedionda Lagoon is used to support a fish hatchery, shellfish cultivation, and a desalination plant.

Other Uses

Other uses in the Coastal Zone include transportation, communication, utilities, education, institutional uses, and undeveloped land. Although some undeveloped land is available for development, certain sections may not be developable due to site constraints, such as steep slopes or protected natural habitat pursuant to the city's Habitat Management Plan.

2.3 Coastal Zone Land Use Strategy

Within the Coastal Zone, the Local Coastal Program Land Use Plan supports the Carlsbad General Plan land use vision to create an increasingly balanced community within the Coastal Zone, with a full range and variety of land uses, protection and enhancement of valued open spaces and coastal resources, and varied opportunities for residents and visitors to enjoy Carlsbad's coastal setting.

The following descriptions apply to the land use designations in the Coastal Zone and are shown with color, shade, or symbol on the Land Use Map; refer to Figure 2-1. The land use designations are consistent with land use designations described in the city's General Plan. They are meant to be broad enough to give the city flexibility in implementing the Local Coastal Program Land Use Plan, but clear enough to provide direction regarding the expected type, location, and relation of land uses planned in the city. The Local Coastal Program Implementation Plan (as described in Chapter 1) contains more detailed provisions and standards. More than one zoning district may be consistent with a single land use designation. As specified in the Zoning Ordinance, land use designations may include public facilities, such as community centers, city libraries, and parks and open spaces.

Residential Land Uses

R-1.5 Residential

Areas intended to be developed with detached single-family dwellings on parcels one-half acre or larger, at a density between 0 to 1.5 dwelling units per acre. The typical housing type will be detached single-family (one dwelling per lot); however, on sites containing sensitive biological resources, as identified in the Carlsbad Habitat Management Plan, development may be clustered on smaller lots and may consist of more than one detached single-family dwelling on a lot, two-family dwellings (two attached dwellings, including one unit above the other) or multifamily dwellings (three or more attached dwellings), subject to specific review and community design requirements.

R-4 Residential

Areas intended to be developed with detached single-family homes at a density between 0 to 4 dwelling units per acre. The typical housing type will be detached single-family (one dwelling per lot); however, on sites containing sensitive biological resources, as identified in the Carlsbad Habitat Management Plan, development may be clustered on smaller lots and may consist of more than one detached single-family dwelling on a lot, two-family dwellings (two attached dwellings, including one unit above the other), or multifamily dwellings (three or more attached dwellings), subject to specific review and community design requirements.

R-8 Residential

Areas intended to be developed with housing at a density between 4 to 8 dwelling units per acre. Housing types may include detached single-family dwellings (one or more dwellings per lot), two-family dwellings (two attached dwellings, including one unit above the other) and multifamily dwellings (three or more attached dwellings).

R-15 Residential

Areas intended to be developed with housing at a density between 8 to 15 dwelling units per acre. Housing types may include two-family dwellings (two attached dwellings, including one unit above the other) and multifamily dwellings (three or more attached dwellings); detached single-family dwellings may be permitted on small lots or when developed as two or more units on one lot, subject to specific review and community design requirements.

R-23 Residential

Areas intended to be developed with housing at a density between 15 to 23 dwelling units per acre. Housing types may include two-family dwellings (two attached dwellings, including one unit above the other) and multifamily dwellings (three or more attached dwellings); detached single-family dwellings may be permitted when developed as two or more units on one lot, subject to specific review and community design requirements.

R-30 Residential

Areas intended to be developed with housing at a density between 23 to 30 dwelling units per acre. Housing types may include two-family dwellings (two attached dwellings, including one unit above the other) and multifamily dwellings (three or more attached dwellings); detached single-family dwellings may be permitted when developed as two or more units on one lot, subject to specific review and community design requirements.

Nonresidential and Mixed Use

Village (V)

This designation applies to the heart of “old” Carlsbad, in the area sometimes referred to as the downtown. Retail stores, offices, financial institutions, restaurants, visitor-serving facilities, residential uses, and mixed uses are permitted. The Village area is regulated by the Carlsbad Village and Barrio Master Plan.

Local Shopping Center (L)

This designation includes shopping centers with tenants that serve the daily needs of the surrounding local neighborhoods. Uses that are more community serving in nature, as well as mixed use (neighborhood-serving commercial uses and residential dwellings), may also be allowed.

General Commercial (GC)

This designation includes sites that provide general commercial uses that may be neighborhood serving and/or serve a broader area of the community than local shopping centers. Sites with this designation may be developed with a stand-alone general commercial use, two or more general commercial uses, or mixed use (general commercial uses and residential dwellings).

Regional Commercial (R)

This designation includes shopping centers with anchor and secondary tenants that are region-serving, as well as mixed use (regional commercial uses and residential dwellings).

Visitor Commercial (VC)

This designation is intended to provide sites for commercial uses that serve the travel, retail, shopping, entertainment, and recreation needs of visitors, tourists, and residents.

Office (O)

This designation provides for a wide range of general office, medical, and other professional uses. Ancillary commercial uses are also permitted.

Planned Industrial (PI)

This designation is intended to provide and protect industrial lands primarily for corporate office, research and development (R&D), and manufacturing uses. Ancillary commercial uses are also permitted.

Public (P)

This designation is intended to provide for schools, government facilities (civic buildings, libraries, maintenance yards, police and fire stations), public/quasi-public utilities, and other facilities that have a public/quasi-public character.

Open Space (OS)

This designation includes natural resource areas (e.g., habitat, nature preserves, wetlands, floodplains, beaches, bluffs, natural steep slopes, and hillsides); areas for production of resources (e.g., agriculture and aquaculture); recreation and aesthetic areas (e.g., parks, beaches, greenways, trails, campgrounds, golf courses, and buffers between land uses).

Community Facilities (CF)

This designation is intended to provide community-serving facilities, such as child-care centers, places of worship, and youth and senior citizen centers.

Transportation Corridor (TC)

This designation is applied to major transportation corridors such as the Interstate 5 freeway and the North San Diego County Transit District railroad and its right-of-way.

Residential Density Standards

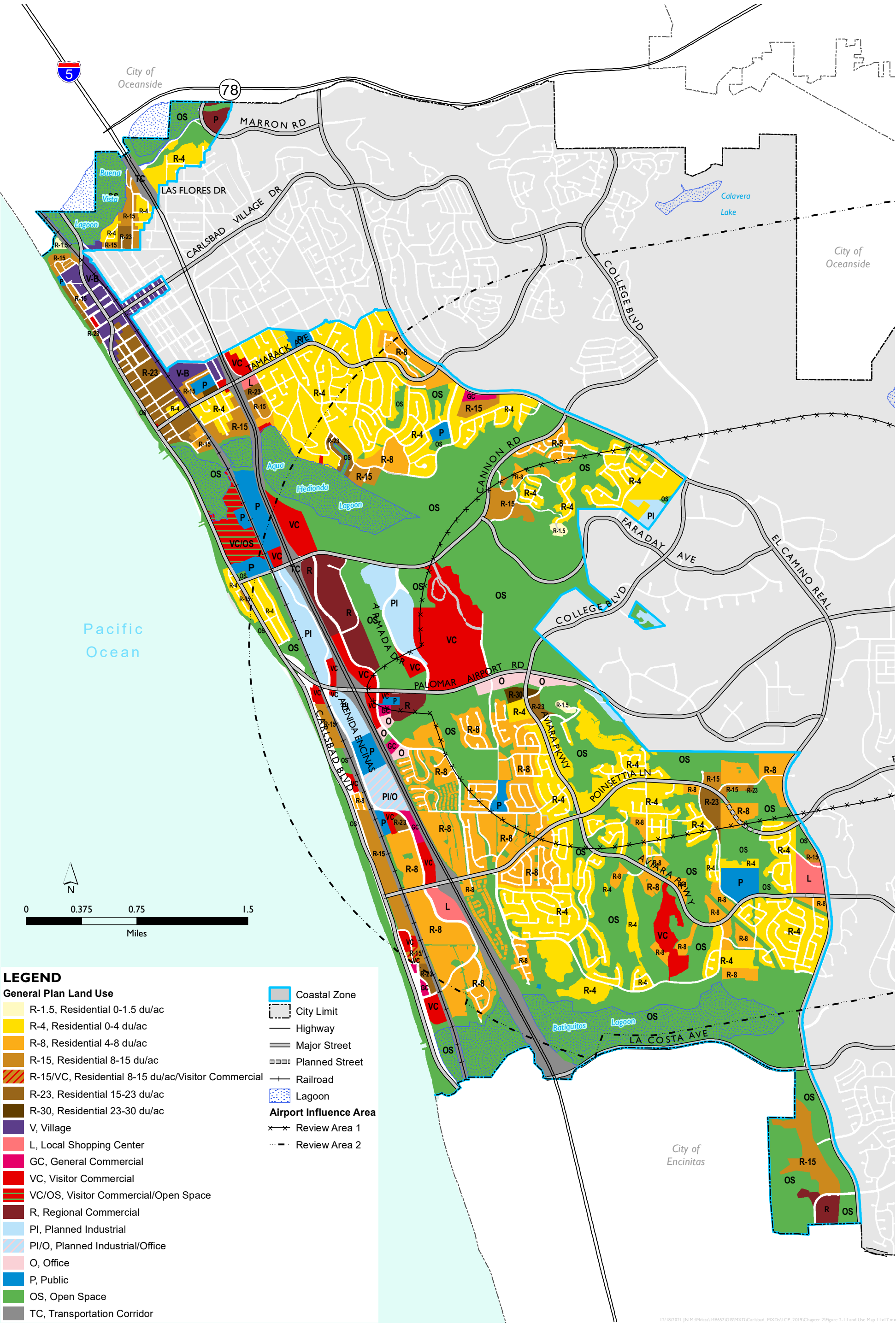
Table 2-1 presents a summary of the residential density standards. Where a density range is specified, development is required to be within that range (minimum to maximum), unless otherwise specified in this chapter.

Table 2-1, Residential Density Standards		
Land Use Designation	Label	Residential Density Range (minimum¹ to maximum² dwelling units/acre)
Residential		
R-1.5 Residential	R-1.5	0 to 1.5
R-4 Residential	R-4	0 to 4
R-8 Residential	R-8	4 to 8
R-15 Residential	R-15	8 to 15
R-23 Residential	R-23	15 to 23
R-30 Residential	R-30	23 to 30
Mixed Use		
Local Shopping Center	L	15 to 30 ³
General Commercial	GC	15 to 30 ³
Regional Commercial	R	15 to 30 ³
Village	V	District 1-4: 28 to 35 District 5-9: 18 to 23

1. Residential development shall not be approved below this density, unless findings are made pursuant to California Government Code Section 65863.
2. Residential development above the maximum density may be approved: a) when the implementing zone would permit a slightly higher dwelling unit yield than the maximum density (only applicable in the R-1.5 and R-4 land use designations); or b) when a density increase is authorized pursuant to the city's inclusionary housing or density bonus regulations.
3. Residential dwellings are allowed as a secondary use at a minimum density of 15 dwelling units per acre (based on 25 percent of developable acreage).

CITY OF CARLSBAD

LOCAL COASTAL PROGRAM



Source: Michael Baker International, 2016; SANGIS, 2016; City of Carlsbad, 2019

12/18/2021 J:\N\MapData\149652\GIS\MXD\Carlsbad_MXD\LCPP_2019\Chapter 2\Figure 2-1 Land Use Map 11x17.mxd

FIGURE 2-1
LAND USE MAP

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2.4 Special Planning Considerations

There are several areas within the Coastal Zone that require special consideration. These areas are described below and shown on Figures 2-2A, 2-2B, and 2-2C.

Sea Level Rise

For more information and policies related to sea level rise, see Chapter 7, Coastal Hazards.

There is broad agreement in the scientific community that the earth is predicted to warm and that sea levels will rise as a result. Rising sea levels result in erosion, flooding, and inundation of lands near the ocean shoreline. Appendix B, “City of Carlsbad Sea Level Rise Vulnerability Assessment,” provides a Carlsbad-specific sea level rise analysis that evaluates the degree to which important community assets (i.e., beaches, public access ways, parcels, critical infrastructure, transportation, etc.) are vulnerable to the adverse effects of projected sea level rise. The assessment identifies the assets that are likely to be impacted in years 2050 and 2100 and the causes and components of each asset’s vulnerability. Chapter 7, Coastal Hazards, requires analysis of and restricts the location, design, and type of development on land that is vulnerable to sea level rise.

Habitat Management Plan

For more information and policies related to the city’s Habitat Management Plan, see Chapter 6, Environmentally Sensitive Habitat Areas and Water Quality.

The City of Carlsbad and six other cities in northern San Diego County participated in the preparation of the Multiple Habitat Conservation Program (MHCP), which was adopted and certified by the SANDAG Board of Directors in March 2003. The City of Carlsbad prepared a subarea plan as a part of the MHCP, the Habitat Management Plan for Natural Communities in the City of Carlsbad (HMP), which was adopted by the City Council in November 2004. The HMP outlines specific conservation, management, facility siting, land use, and other measures that the city will take to preserve the diversity of habitat and protect sensitive biological resources in the city while also allowing for additional development and growth as anticipated under the city’s General Plan. As part of the HMP, a total of 6,478 acres of land within the city’s jurisdictional boundaries are to be conserved for habitats and an additional 308 acres of habitat (outside of the city’s boundary) are to be conserved for the coastal California gnatcatcher.

McClellan-Palomar Airport

McClellan-Palomar Airport was built in 1959 atop the mesa just south of the Agua Hedionda valley and lagoon. The runway lies on an east–west axis, oriented to take advantage of the on-shore winds. Although the airport is not in the Coastal Zone, the associated glide path, crash hazard, and noise

impact areas around the airport significantly influence the type and intensity of development across the entire central area of the city, including portions of the Coastal Zone. This area of influence extends generally in a broad band east and west of the runway, and to a lesser degree, north and south of the airport. For health and safety reasons, residential development and most institutional land uses (hospitals, schools, etc.) must be limited in this area of airport influence.

Cannon Road Open Space, Farming, and Public Use Corridor

For more information on the Cannon Road Open Space, Farming, and Public Use Corridor, see Chapter 5, Agricultural, Cultural, and Scenic Resources.

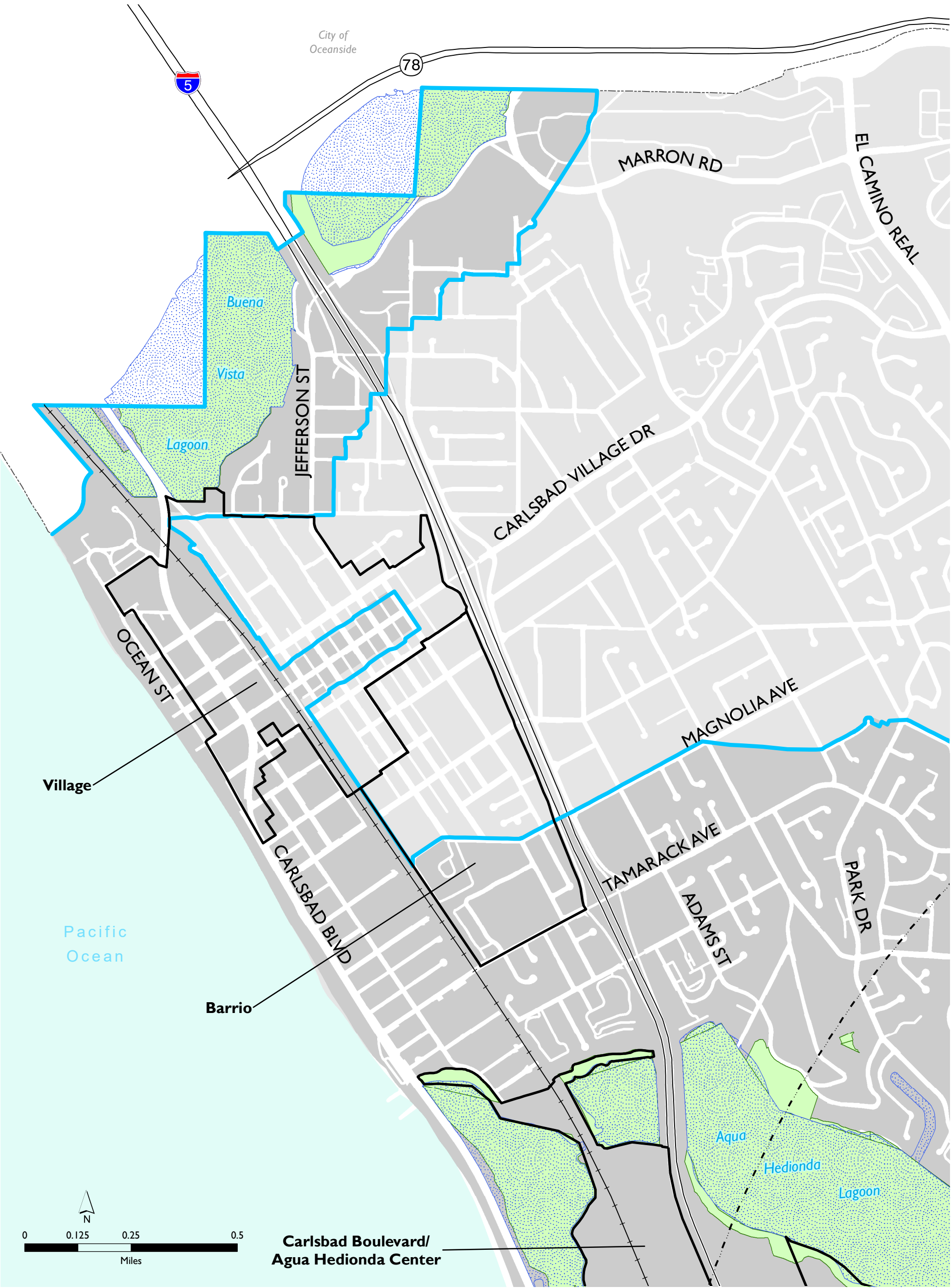
In 2006, Carlsbad voters approved “Proposition D - Preserve the Flower and Strawberry Fields and Save Carlsbad Taxpayers’ Money.” The area affected by Proposition D is referred to as the Cannon Road Open Space, Farming and Public Use Corridor and is located along Cannon Road east of Interstate 5. The corridor consists primarily of open space and existing farming operations, including the Flower Fields located to the south of Cannon Road and the strawberry fields located to the north of Cannon Road. Approximately 49 acres of the strawberry fields located adjacent to the east side of Interstate 5 are not within the corridor and are not subject to Proposition D.

The open space areas within the corridor on the north side of Cannon Road provide scenic views of the Agua Hedionda Lagoon and contain environmentally sensitive natural habitat areas that need to be permanently protected. Designating the existing Flower Fields and the strawberry fields as open space uses provides for productive use of portions of the corridor area that enhance the cultural heritage and history of the city. Although the Flower Fields are restricted to agricultural use, Proposition D requires the city to utilize all existing programs and land use protections and explore other possible new mechanisms to keep the Flower Fields in production. Proposition D also requires the city to ensure that other farming uses within the corridor are allowed to continue as long as it is economically viable for the landowner.

The corridor is recognized for its significant open space opportunities; however, it currently lacks adequate public access and public use areas so the community can enjoy open space opportunities to the fullest potential. Proposition D identified that a public trail connecting the corridor north and south of Cannon Road could greatly enhance public access in the area. Proposition D also identified that park and recreation uses that create public gathering spaces and are compatible with other open space uses could offer opportunities for more community use and enjoyment of the area. Pursuant to Proposition D, residential use is not appropriate for the area within the corridor. Commercial and industrial-type uses other than those normally associated with farming operations are also not appropriate.

CITY OF CARLSBAD

LOCAL COASTAL PROGRAM



Source: Michael Baker International, 2016; SANGIS, 2016; City of Carlsbad, 2016

12/6/2021 J:\M\MapData\49652\GIS\MXD\Carlsbad_MXD\LCP_2019\Chapter 2\Figure 2-2A Special Planning Areas 11x17.mxd

LEGEND

- Coastal Zone
- City Limit
- Lagoon
- Railroad
- Special Planning Area
- Areas Subject to the HMP

Airport Influence Area
Review Area 2

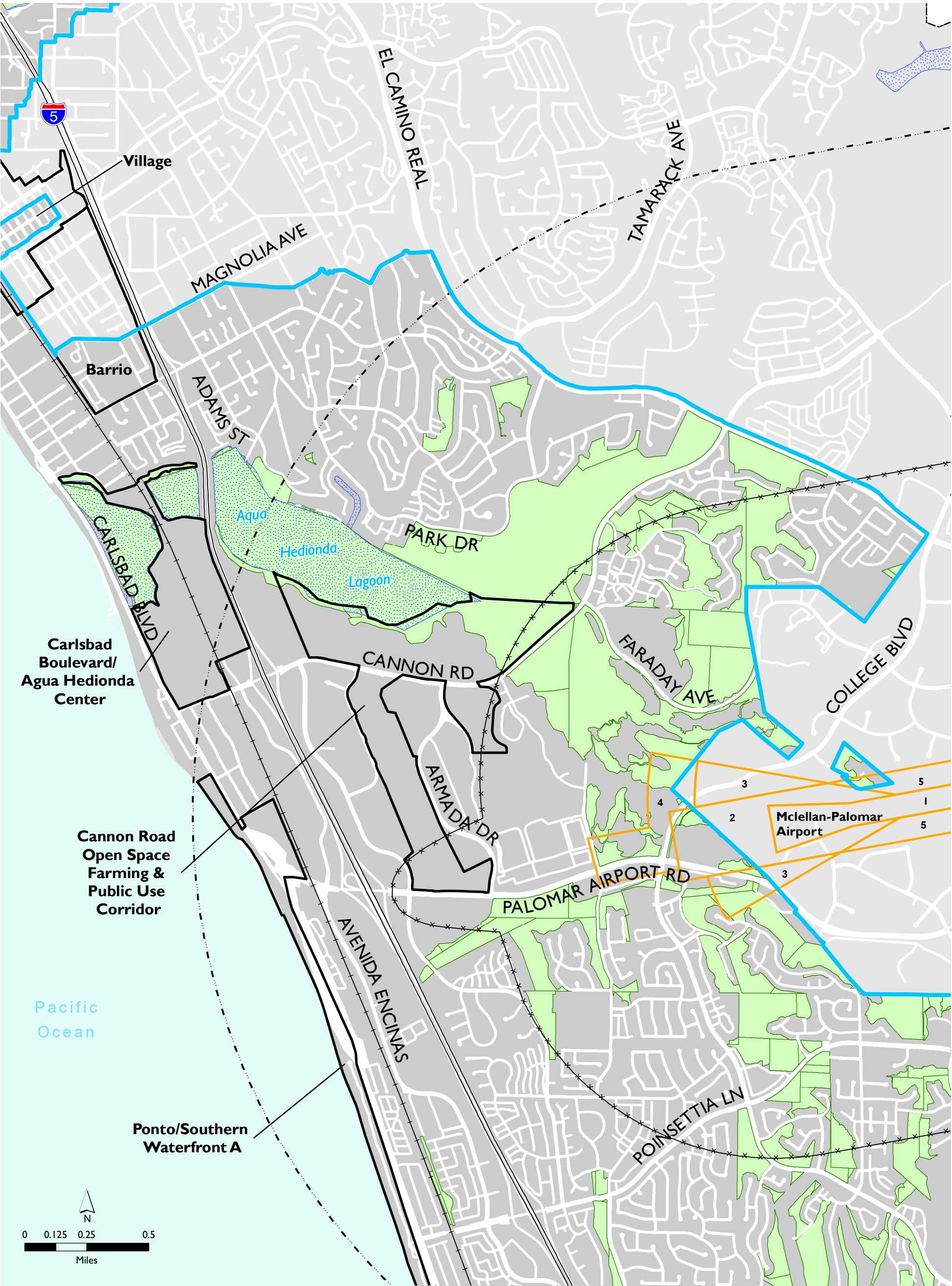
See Appendix B - City of Carlsbad Sea Level Rise Vulnerability Assessment, for figures showing areas vulnerable to sea level rise hazards

FIGURE 2-2A
SPECIAL PLANNING AREAS

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CITY OF CARLSBAD

LOCAL COASTAL PROGRAM



Source: Michael Baker International, 2016; SANGIS, 2016; City of Carlsbad, 2016

12/6/2021 JN M:\Mdata\149652\GIS\MXD\Carlsbad_MXD\LCP_2019\Chapter 2\Figure 2-2B Special Planning Areas 11x17.mxd

LEGEND

- Coastal Zone
- City Limit
- Lagoon
- Railroad
- Special Planning Area
- Areas Subject to the HMP

- Airport Safety Zones (1-5)
- Airport Influence Area
- Review Area 1
- Review Area 2

See Appendix B - City of Carlsbad Sea Level Rise Vulnerability Assessment, for figures showing areas vulnerable to sea level rise hazards

FIGURE 2-2B
SPECIAL PLANNING AREAS

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CITY OF CARLSBAD

LOCAL COASTAL PROGRAM



Source: Michael Baker International, 2016; SANGIS, 2016; City of Carlsbad, 2016

12/6/2021 J:\M:\Data\1149652\GIS\MXD\Carlsbad_MXD\LCP_2019\Chapter 2\Figure 2-2C Special Planning Areas 11x17.mxd

LEGEND

- Coastal Zone
- City Limit
- Lagoon
- Railroad
- Special Planning Area
- Special Planning Subarea

- Areas Subject to the HMP
- Airport Safety Zones (1-5)
- Airport Influence Area
- Review Area 1
- Review Area 2

See Appendix B - City of Carlsbad Sea Level Rise Vulnerability Assessment, for figures showing areas vulnerable to sea level rise hazards

FIGURE 2-2C
SPECIAL PLANNING AREAS

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Following voter approval of Proposition D, the city conducted a public planning process that occurred from November 2007 through June 2008, which resulted in the report titled “Creating a Community Vision for the Cannon Road Agriculture and Open Space (Prop D) Lands Final Report September 23, 2008.” This community vision was used to create the Cannon Road Agricultural/Open Space Zone, which establishes the permitted uses and standards for the corridor. In 2017, the Coastal Commission approved the Cannon Road Agriculture/Open Space Zone as part of the Local Coastal Program Implementation Plan (implementing the Open Space land use designation). However, the Coastal Commission’s approval applied the zone only to the area of the corridor located south of Cannon Road. To fully implement Proposition D, the city will need to seek Coastal Commission approval to apply the Cannon Road Agriculture/Open Space Zone to the area of the corridor located north of Cannon Road.

Village and Barrio

Portions of the Carlsbad Village and Barrio neighborhood are in the northwest area of the Coastal Zone. The Carlsbad Village—the community’s downtown—is the oldest and most walkable neighborhood in the city. The Village is home to most of Carlsbad’s historic and cultural resources, including the Old Santa Fe Train Depot and Army and Navy Academy. Many sites in the Village have been developed at a low intensity and are designed to meet the needs of a car-oriented lifestyle, not in keeping with the vibrant, active, pedestrian-oriented core that many would like to see define the Village experience. As the Village continues to evolve, it will be important to redevelop and strategically focus improvements in the neighborhood to best express the city’s small-town, beach-community character; take advantage of key opportunities to connect to transit, the ocean, and the Barrio neighborhood to the south; and add new residents and life into downtown Carlsbad.

The Barrio neighborhood is just south of the Village and was established in the 1920s. The Barrio neighborhood first served as a residential enclave for new immigrants supporting the agriculture economy of the city. Today, the Barrio reflects elements of its past in its many cultural markers and historic buildings, as well as in its long-time residents and cohesive community. Within the Coastal Zone, land use in the Barrio neighborhood is primarily residential with a range of housing types, from single-family and two-family dwellings on small lots to higher density multi-family residential development. Other uses include an elementary school and visitor-serving commercial uses. As future development/redevelopment occurs in the Barrio, it will be important that future improvements are sensitive to the neighborhood’s walkable, residential character, its history, and cultural resources.

Carlsbad Boulevard/Agua Hedionda Center

This area contains the Encina Power Station (EPS), with a 400-foot exhaust stack landmark near the edge of Agua Hedionda Lagoon and the ocean since the mid-1950s. Pursuant to a settlement agreement dated January 14, 2014, between the City of Carlsbad and the Carlsbad Municipal Water District

(CMWD), Cabrillo Power I LLC and Carlsbad Energy Center LLC, and San Diego Gas and Electric Company (SDG&E), the EPS is slated for decommissioning and demolition in the near future. The EPS ceased operations in December 2018.

After demolition of the EPS, future use of the site will be guided by the General Plan and Local Coastal Program Land Use Plan, which envision redevelopment of the EPS site west of the railroad track, as well as the adjacent SDG&E North Coast Service Center site, with visitor-serving commercial and open space uses to offer the public enhanced opportunities for coastal access and services, reflecting the California Coastal Act's goal of "maximizing public access to the coast."

A portion of the area west of the railroad tracks contains the Claude "Bud" Lewis Carlsbad Desalination Plant. The seawater desalination facility provides a portion of the city's potable water needs. Additionally, SDG&E operates the Encina substation on approximately 10 acres of the EPS site west of the railroad tracks. The substation is expected to continue operations for the foreseeable future.

East of the railroad tracks and west of Interstate 5, the Carlsbad Energy Center was built to replace the EPS. Carlsbad Energy Center, a natural gas "peaker" plant, generates over 500 megawatts of flexible power to the region. Compared to the EPS, the Carlsbad Energy Center has a significantly reduced visual profile and reduced hours of operation, noise, air pollutant and greenhouse gas emissions, and no longer uses ocean water for cooling.

Ponto/Southern Waterfront

This area consists of a 3.5-mile coastal frontage north of Batiquitos Lagoon along the Pacific Ocean and Carlsbad Boulevard. The largest development opportunity in this area is between Batiquitos Lagoon and Ponto Road, where envisioned land uses include a mix of hotels, commercial, and residential uses.

The southbound portion of Carlsbad Boulevard may be realigned with a shift to the east, which would provide an opportunity for a linear park/promenade along Carlsbad Boulevard. The street realignment may also provide additional park and gathering opportunities along the ocean and may reduce sea level rise-related impacts to Carlsbad Boulevard. Sea level rise-related impacts are discussed further in Chapter 7, Coastal Hazards.

Murphy

This area consists of three parcels totaling approximately 36 acres located north of Batiquitos Lagoon and east of Batiquitos Drive. The northern parcel is designated for low- to medium-density (0 to 4 dwelling units per acre) residential uses and open space, and the southern parcel is designated for medium-density (4 to 8 dwelling units per acre) residential uses and open space. The site's overall

potential residential density will be clustered to provide an open space buffer between development and the lagoon.

2.5 Land Use Policies

The following policies provide additional land use direction to ensure that development in the Coastal Zone is consistent with the Coastal Act. Some of the following policies are directly related to the Coastal Act sections referred to in Section 2.1 of this chapter; reference to those Coastal Act sections is noted at the end of the applicable policies.

General Policies

- LCP-2-P.1 Ensure location and type of new development occurs consistent with the land use designations identified on Figure 2-1 [related to Coastal Act Section 30250].

- LCP-2-P.2 Balance development with preservation and enhancement of open space and coastal resources.

- LCP-2-P.3 Ensure that adequate public facilities and services are provided to accommodate the needs generated by development or uses permitted consistent with this land use plan [related to Coastal Act Section 30254].

- LCP-2-P.4 Consider density and development right transfers in instances where a property owner is preserving open space for purposes of environmental enhancement (complying with the city's Habitat Management Plan) or otherwise leaving developable property in its natural condition. The density/development potential of the property being left in open space shall be reserved for and used on the remainder of the project site or, through an agreement with the city, may be transferred to another property.

- LCP-2-P.5 Designate sites for "visitor commercial" uses in locations generally near major transportation corridors and proximate to key tourist/visitor draws, such as hotels, the ocean, lagoons, the Village, LEGOLAND, and other recreation venues. Regional, general, and local shopping center uses may be adjacent to or, as a secondary use, integrated into a visitor commercial center to also serve the daily convenience needs of tourists, visitors, and residents (when such uses are integrated into a visitor commercial center, visitor commercial uses shall be the primary use of the site). [Related to Coastal Act Section 30250(c)].

- LCP-2-P.6 Find consistency with the Local Coastal Program before issuing a discretionary permit for development in the Coastal Zone. In the event of a conflict between the provisions of the Local Coastal Program Land Use Plan and General Plan, the terms of the Local Coastal Program Land Use Plan shall prevail. The General Plan may be more restrictive

than the Local Coastal Program if development remains consistent with Local Coastal Program policies.

- LCP-2-P.7 Maintain consistency between the Local Coastal Program Land Use Plan, Local Coastal Program Implementation Plan, and the General Plan.
- LCP-2-P.8 Monitor and update land use policy, as necessary, based on the best available sea level rise science, state guidance, and the sea level rise policies in Chapter 7 of this Local Coastal Program.
- LCP-2-P.9 Encourage development of sustainable energy sources and emerging technologies—such as hydroelectricity, geothermal, solar, wind power, fuel cells, and battery back-up—on developable land to meet the community’s energy needs.

Cannon Road Open Space, Farming, and Public Use Corridor

Policies LCP-2-P.10 through LCP-2-P.15 are in accordance with “Proposition D – Preserve the Flower and Strawberry Fields and Save Carlsbad Taxpayers’ Money” and are applicable only to the area within the Cannon Road Open Space, Farming and Public Use Corridor:

- LCP-2-P.10 Create a unique, community-oriented open space area along the Cannon Road corridor located immediately to the east of the Interstate 5 freeway including the existing flower fields and strawberry fields.
- LCP-2-P.11 In coordination with land owners, protect and preserve this area as an open space corridor. Permit only open space, farming, and compatible public uses in the area. Permitted uses shall be as follows:
- A. Open space
 - B. Farming and other related agricultural support uses, including flower and strawberry production
 - C. Public trails
 - D. Active and passive parks, recreation, and similar facilities available to the public (except on the existing Flower Fields)
 - E. Electrical transmission facilities

- LCP-2-P.12 Prohibit residential development in the area; and prohibit commercial and industrial-type uses in the area other than those normally associated with or in support of farming operations and open space uses.
- LCP-2-P.13 Enhance public access and public use in the area by allowing compatible public trails, community gathering spaces, and public and private active and passive park and recreation uses.
- LCP-2-P.14 Allow farming to continue in the area for as long as economically viable for the landowner. With the exception of the Flower Fields, and subject to approval of a specific plan, agricultural lands may convert to another use allowed within the corridor, subject to applicable policies relating to agricultural conversion.
- LCP-2-P.15 Utilize all existing programs and land use protections and explore possible new mechanisms, as well as grant programs and other outside financial assistance, to keep the existing Flower Fields in permanent farming and flower production.
- LCP-2-P.16 Seek approval from the Coastal Commission to apply the Cannon Road Agriculture/Open Space Zone to the area of the corridor north of Cannon Road.

Carlsbad Boulevard/Agua Hedionda Center

- LCP-2-P.17 West of the railroad tracks:
- A. Decommission, demolish, remove, and remediate the Encina Power Station site, including the associated structures, the black start unit, and exhaust stack according to the provisions of a settlement agreement dated January 14, 2014, between and among the City of Carlsbad and the Carlsbad Municipal Water District (CMWD), Cabrillo Power I LLC and Carlsbad Energy Center LLC, and San Diego Gas and Electric Company (SDG&E).
 - B. The desalination plant shall remain on approximately 11 acres (6 acres for the desalination plant and approximately 5 acres of nonexclusive easements) west of the railroad tracks.
 - C. Redevelop the Encina Power Station site, along with the SDG&E North Coast Service Center site, with a mix of visitor-serving commercial uses, such as retail and hotel uses, and with new community-accessible open spaces along Agua Hedionda Lagoon and the waterfront (Carlsbad Boulevard). Encourage community gathering spaces, outdoor dining, and other features to maximize potential views of the ocean and the lagoon. Encourage shared parking arrangements so that a greater

proportion of development can be active space rather than parking. In the design of future redevelopment, consider opportunities to recognize the history of the power station site, such as a small museum, signage, and observation tower.

- D. Determine specific uses, development standards, infrastructure, public improvements, site planning, and amenities through a comprehensive planning process (e.g., specific plan, master plan) resulting in a redevelopment plan approved by the City Council and Coastal Commission. The redevelopment plan boundaries should include the Encina Power Station and the SDG&E North Coast Service Center sites.
- E. Work with SDG&E to identify a mutually acceptable alternative location for its North Coast Service Center. Work with SDG&E, as part of a long-term plan, to identify and ultimately permit an alternate site for its Encina Power Station substation.

LCP-2-P.18 Between I-5 and the railroad tracks:

- A. Ensure the Carlsbad Energy Center continues to include the following characteristics:
 - 1. Power output is limited to approximately 600 megawatts.
 - 2. The energy center shall not operate between the hours of midnight and 6 a.m., except to the extent reasonably required for reliability-related purposes or as otherwise required by the Independent System Operator tariff.
 - 3. Generator units shall be below grade to minimize the power plant's visual profile.
 - 4. The energy center shall utilize current peaker-plant technology that significantly reduces noise, air pollutant and greenhouse gas emissions, and eliminates the use of ocean water for cooling.
 - 5. Other features as described in said settlement agreement.
- B. Maintain an open space buffer along the lagoon's south shore between the railroad tracks and I-5.

Village and Barrio

LCP-2-P.19 Apply the Carlsbad Village and Barrio Master Plan as the guide for land use planning and design in the Village and Barrio neighborhood.

Ponto/Southern Waterfront

LCP-2-P.20 Promote development of recreation uses and improved public access to the beach, as well as activity centers with restaurants, cafes, and shopping along Carlsbad Boulevard as opportunities arise in appropriate locations.

LCP-2-P.21 Ensure that development of the area titled “Ponto/Southern Waterfront-B” on Figure 2-2C is consistent with the requirements of the Poinsettia Shores Master Plan and all other applicable requirements of the Local Coastal Program, including the following:

A. Area 1, as shown on Figure 2-2C:

1. The primary use of the site is intended for general commercial uses (retail and commercial service uses) and may include a community amenity use such as an arts/nature/activity center.
2. If the site is developed as a mixed-use site:
 - a. Residential dwellings are allowed as a secondary use at a minimum density of 15 dwelling units per acre (based on 25 percent of developable acreage).
 - b. Vertical mixed-use (commercial, office, and residential in the same multi-story building) – ground floor uses shall be limited to retail and commercial service uses and upper floor uses may include uses allowed on the ground floor, as well as office and residential uses.
 - c. Horizontal mixed-use (commercial, office, and residential in separate buildings) – commercial uses shall be primary use located along primary street frontages.
3. A 40-foot landscape setback shall be provided along the west side of the planning area/east side of Carlsbad Boulevard; the width of the landscape setback may be reduced due to site constraints or protection of environmental resources. A meandering multi-use public path shall be provided within the landscape setback.

4. A multi-level above and below ground parking garage may be considered along Avenida Encinas. If a parking garage is provided, shops and services should line the first story of the garage's north and west sides to maintain pedestrian activity along and to the planning area.
5. Development of the site shall include internal public-gathering plazas and walkways that provide pedestrian access to surrounding sites and Carlsbad Boulevard.

B. Area 2, as shown on Figure 2-2C

1. This site shall be developed with dwellings per the R-23 land use designation (15 to 23 dwellings per acre).
2. Development of the site shall include internal walkways that provide pedestrian access to surrounding sites.

C. Area 3, as shown on Figure 2-2C:

1. This site is designated for visitor commercial use and is intended to be developed with a resort hotel(s) – with meeting facilities, restaurants, and a small amount of visitor-serving retail for guest and public convenience.
2. Development of the site shall include public-gathering plazas and walkways that provide pedestrian access to the commercial development to the north and Carlsbad Boulevard.
3. A 40-foot landscape setback shall be provided along the west side of the planning area, east side of Carlsbad Boulevard; the width of the landscape setback may be reduced due to site constraints or protection of environmental resources. A meandering multi-use public path shall be provided within the landscape setback.
4. A public trail around the perimeter of planning areas shall be provided. The trail shall:
 - a. Provide public access to views of the lagoon and ocean.
 - b. Include interpretive signage and occasional seating.
 - c. Be designated to connect to the city's trail system.

D. Area 4, as shown on Figure 2-2C

1. This site is designated as open space and the portions of the site subject to the city's Habitat Management Plan shall be protected as a wildlife preserve.
2. Public trails and viewpoints may be permitted, subject to the habitat protection and other applicable policies and requirements of the Local Coastal Program.
3. The existing desilting basin shall be maintained on the site.

Murphy

- LCP-2-P.22 Allow the property's overall residential development capacity, as indicated by the land use designations on the Land Use Map, to be clustered toward the northern portion of the site to create an open space buffer and recreational trail on the southerly third of the site.
- LCP-2-P.23 Ensure that any existing mature native trees are preserved.
- LCP-2-P.24 Require, as a condition of a coastal development permit, an offer to dedicate land for a public trail in favor of the City of Carlsbad or State Coastal Conservancy. The public trail shall be located parallel to the lagoon and designed consistent with applicable city and Coastal Act requirements.

Coastal-Dependent Uses

- LCP-2-P.25 Support and encourage coastal-dependent developments located on or near the shoreline, except within wetland areas; support coastal-related developments located within reasonable proximity to the coastal-dependent uses they support [related to Coastal Act Section 30255].
- LCP-2-P.26 Designate oceanfront land, which is suitable for coastal-dependent aquaculture uses, as open space on the LCP land use map. On those suitable sites, proposals for aquaculture facilities shall be given priority except over other coastal-dependent development or uses [related to Coastal Act Section 30222.5].
- LCP-2-P.27 Encourage coastal-dependent industrial facilities to locate or expand within existing industrial sites; if new or expansion of coastal-dependent industrial facilities cannot be accommodated on existing industrial sites, they may be permitted subject to the provisions of California Coastal Act Chapter 3, Article 7 [related to Coastal Act Section 30260].

Other Land Use Policies

- LCP-2-P.28 Approve a specific plan prior to developing the 45-acre parcel (designated Visitor Commercial (VC)) located on the south shore of Agua Hedionda Lagoon immediately east of Interstate-5. The specific plan shall be consistent with and implement the policies of this land use plan.
- LCP-2-P.29 Ensure that development of the state-owned property (located between the railroad and Carlsbad Boulevard, north of Palomar Airport Road and south of Manzano Drive) protects coastal resources and enhances opportunities for public recreation and access to the coast, including public parking.

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Recreation and Visitor-Serving Uses

The protection of recreation and visitor-serving uses are priorities, both for the community and the California Coastal Act. The purpose of this chapter is to describe Carlsbad's existing public recreational resources and visitor-serving uses and attractions and identify policies to ensure that community members have continued access to coastal recreational opportunities and accommodations.



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3.1 Introduction

Carlsbad offers a rich array of recreation opportunities and amenities that draw visitors. These recreation opportunities and visitor amenities include the coastal setting—the ocean, beaches, lagoons and natural habitat areas—as well as an extensive system of parks, trails, and golf courses, and a wide variety of visitor accommodations, shopping, and dining. Carlsbad’s natural coastal resources are vital components of the city’s setting and are engines of tourism.

The California Coastal Act places a high priority on protecting and maximizing recreation and visitor-serving land uses, including lower-cost facilities. California Coastal Act policies especially relevant to this chapter, which address the topics of recreation and visitor-serving uses, include the following:

Section 30213 Lower cost visitor and recreational facilities; encouragement and provision; overnight room rentals

Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred. The commission shall not: (1) require that overnight room rentals be fixed at an amount certain for any privately owned and operated hotel, motel, or other similar visitor-serving facility located on either public or private lands; or (2) establish or approve any method for the identification of low or moderate income persons for the purpose of determining eligibility for overnight room rentals in any such facilities.

Section 30220 Protection of certain water-oriented activities

Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.

Section 30221 Oceanfront land; protection for recreational use and development

Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.

Section 30222 Private lands; priority of development purposes

The use of private lands suitable for visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation shall have priority over private residential, general industrial, or general commercial development, but not over agriculture or coastal-dependent industry.

Section 30223 Upland areas

Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.

Section 30224 Recreational boating use; encouragement; facilities

Increased recreational boating use of coastal waters shall be encouraged, in accordance with this division, by developing dry storage areas, increasing public launching facilities, providing additional berthing space in existing harbors, limiting non-water-dependent land uses that congest access corridors and preclude boating support facilities, providing harbors of refuge, and by providing for new boating facilities in natural harbors, new protected water areas, and in areas dredged from dry land.

Section 30234 Commercial fishing and recreational boating facilities

Facilities serving the commercial fishing and recreational boating industries shall be protected and, where feasible, upgraded. Existing commercial fishing and recreational boating harbor space shall not be reduced unless the demand for those facilities no longer exists or adequate substitute space has been provided. Proposed recreational boating facilities shall, where feasible, be designed and located in such a fashion as not to interfere with the needs of the commercial fishing industry.

Section 30252(6) Maintenance and enhancement of public access

The location and amount of new development should maintain and enhance public access to the coast by... (6) assuring that the recreational needs of new residents will not overload nearby coastal recreation areas by correlating the amount of development with local park acquisition and development plans with the provision of onsite recreational facilities to serve the new development.

3.2 Coastal Recreation

Carlsbad is an active community with valuable recreational resources, such as beaches, numerous parks and sports fields, and proximate hillsides, many with trails. The city has a high proportion of dedicated open space land available for passive and active recreational uses. This chapter identifies the importance of supporting and enhancing coastal recreation uses. More information about public access to these recreation areas is addressed in Chapter 4.

Beaches

Carlsbad's beaches are an important component of community identity and a key recreational resource for residents and visitors. Carlsbad residents and visitors walk and jog along the beaches and the beach walkways; they also camp and often watch the sun set. The Pacific Ocean is used to swim, surf, sail, fish, kayak, stand-up paddleboard, splash, and wade.

The city has seven miles of beach and coastline divided into three main sections: north Carlsbad beaches, Carlsbad State Beach, and South Carlsbad State Beach (see Figure 3-1). The California Department of Parks and Recreation owns and manages most of the beaches and provides lifeguard/public safety service for most beach areas, maintenance of public restrooms and picnic areas, and operation of the South Carlsbad State Beach Campground and various beach parking lots. Beaches in the city are described briefly below.

North Carlsbad Beaches

North Carlsbad beaches stretch from the northern city boundary to Pine Avenue, near Carlsbad Village. These beaches do not have lifeguard services, restrooms, showers, or other amenities. North beaches can be accessed at Carlsbad Village Drive, Grand Avenue, Christiansen Way, Beech Avenue, and Rue des Chateaux.

Carlsbad State Beach

Carlsbad State Beach, from Pine Avenue south to Cannon Road, includes Frazee State Beach, Tamarack Surf State Beach, and Warm Water Jetty Beach (in front of the power plant). This stretch of Carlsbad's shoreline is one of San Diego County's most popular beaches. Many people fish off the Carlsbad jetties near Tamarack beach. Amenities include public parking, restrooms with rinse-off facilities, picnic areas, and lifeguard towers.

South Carlsbad State Beach

South Carlsbad State Beach stretches from La Costa Avenue to just north of Terramar Point and includes the popular 220-site campground and two day-use areas. Beach areas within South Carlsbad

State Beach include the North Ponto and South Ponto beaches and Terramar Beach. Amenities include public parking, restrooms (one at the state campground and one at the South Ponto Beach parking lot), and lifeguard towers.

Lagoons

Lagoons are a valuable part of the city's open space network and provide various public benefits, such as hiking trails, scenic viewsheds, nature preserves, fishing, and water recreation. The three lagoons, totaling more than 1,000 acres, are summarized below in order from north to south.

Buena Vista Lagoon

Active recreational uses are not permitted on Buena Vista Lagoon; however, many bird watching opportunities are available to the public at Maxton Brown Park on Laguna Avenue and State Street; at the Ecological Wildlife Viewing Area on Jefferson Street and Marron Road; and at the Buena Vista Audubon Society Nature Center on Coast Highway in Oceanside. Fishing in the lagoon from Carlsbad Boulevard is another popular activity. Future restoration of the lagoon could include public access improvements.

Agua Hedionda Lagoon

Agua Hedionda Lagoon allows active use such as boating, water skiing and wake boarding, personal watercraft use, sailing, windsurfing, and fishing. Agua Hedionda Lagoon is the only lagoon in San Diego County where recreational boating is permitted.

The lagoon comprises three interconnected lagoons divided by the railroad and Interstate 5—the outer lagoon (between the coast and railroad), middle lagoon (between the railroad and Interstate 5), and inner lagoon (east of Interstate 5).

- Outer lagoon – the 66-acre outer lagoon provides opportunities for shore fishing along its western boundary.
- Middle lagoon – the 27-acre middle lagoon is the only portion of the lagoon where fishing from shore and swimming is allowed; The Magdalena Ecke Family YMCA is located along this part of the lagoon.
- Inner lagoon – the 295-acre inner lagoon may be used for boating; permitted crafts include jet skis, power boats, and passive vessels such as sailboats, stand-up paddleboards, and kayaks. The inner lagoon has one public boat launch, which is privately owned and operated by California Water Sports and is located at the northwest end of the inner lagoon. Fees for daily lagoon use permits, boat launching, and parking can be paid here. Public access for launching passive

vessels is located at the south end of Bayshore Drive. The Bayshore Drive public access also provides access to the beach along the shoreline and fishing from shore only.

Private boat launch facilities are a recreational amenity for residents of the Bristol Cove neighborhood on the north shore of the inner lagoon between Cove Drive and Marina Drive.

Trails along the north shore of the lagoon provide opportunities for recreation along the lagoon shoreline. Refer to Chapter 4, Coastal Access, for more information about trails.

Batiquitos Lagoon

Like Buena Vista Lagoon, active recreational uses are not permitted on Batiquitos Lagoon. Fishing is allowed in one location at the rock jetties at the mouth of the lagoon. Trails along the north shore are popular for nature walks. Refer to Chapter 4, Coastal Access, for more information about trails.

Public Parks, Other Recreation Facilities, and Golf Courses

As shown on Figure 3-1, Carlsbad has numerous public parks, recreation facilities, and public golf courses in the Coastal Zone that provide passive and active recreation opportunities for residents and visitors. Public parks and recreation facilities include active and passive use amenities, as well as individual picnic areas, turf open areas, swim facilities, skate parks, dog parks, multi-purpose playfields, and tennis courts. School playfields, which operate under a joint-use facility agreement between the City of Carlsbad and a school district, also provide recreation opportunities for residents and visitors.

City parks are planned and constructed to meet the recreation needs of residents. In addition to existing parks, the city plans to construct a 91.5-acre Veteran's Memorial Park in the Coastal Zone (northeast of Faraday Avenue and Cannon Road). Construction of Veteran's Memorial Park will meet the future buildout need for parks, based on estimated citywide population. Per the land uses planned by this Local Coastal Program and the citywide General Plan, the citywide population at buildout is estimated to be 131,523 persons.

In addition to parks, there are several special resource areas in the city's Coastal Zone that offer places for recreation. Special resource areas have citywide and potentially regional significance related to the quality of the site, such as a natural feature (geological, ecological, hydrological), historical resource (architectural, archaeological), or some combination thereof.

Public trails in the Coastal Zone are also a significant recreation resource. More information about trails and a map showing the location of trails are provided in Chapter 4, Coastal Access.

The southbound lanes of Carlsbad Boulevard may be realigned with a shift to the east, which would provide an opportunity to create additional recreation areas (e.g., parks and other recreation facilities and amenities), that could better adapt to sea level rise impacts. Sea level rise impacts are discussed further in Chapter 7, Coastal Hazards.

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CITY OF CARLSBAD

LOCAL COASTAL PROGRAM



Source: Michael Baker International, 2016; SANGIS, 2016; City of Carlsbad, 2016

12/6/2021 J:\M:\data\149652\GIS\MXD\Carlsbad_MXD\LCP_2019\Chapter 3\Figure 3-1 Coastal Recreation 11x17.mxd

LEGEND

- Coastal Zone
- City Limit
- Lagoon
- Railroad
- Existing Park/Recreation Facility
- Future Park/Recreation Facility
- Existing Special Resource Areas
- Existing Golf Courses

FIGURE 3-1
COASTAL RECREATION

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3.3 Visitor-Serving Uses

Carlsbad is a world-famous destination offering vast visitor-serving opportunities, including scenic outdoor recreation, numerous retail shopping opportunities, golf courses, and resorts. The Coastal Act protects public access to the coast, and visitor-serving uses provide such access (see Chapter 4, Coastal Access, for more information about access to the coast).

Visitor Attractions

Visitors are drawn to Carlsbad for its many attractions, including nearly seven miles of coastline and beaches, lagoons, over 40 miles of trails, the Flower Fields, and LEGOLAND California. There are also two public golf courses (The Crossings and Rancho Carlsbad) and two private golf courses (La Costa and Aviara). Of these, The Crossings and Aviara are in the Coastal Zone. Other attractions include visitor-attracting shopping and dining, such as The Forum Carlsbad, Carlsbad Premium Outlets, and Carlsbad Village. Carlsbad hosts several major annual events that draw visitors, including Carlsbad Village Faire, Carlsbad 5,000, and the Carlsbad Marathon.

Visitor Accommodations

Carlsbad is a major center for hotels—as of October 2018, Smith Travel Research data shows that Carlsbad offers lodging for visitors at 36 hotels with over 4,751 rooms (24 hotels and 2,989 rooms in the Coastal Zone). This number of rooms is significant, as no other city in San Diego County except the City of San Diego offers such a high number of rooms and a wide variety of visitor accommodations. In addition to hotels, South Carlsbad State Beach provides a popular 220-site campground and two day-use areas.

Lower-Cost Overnight Accommodations

Coastal Act Section 30213 requires coastal communities to protect, encourage, and, where feasible, provide lower-cost visitor and recreation facilities. Carlsbad's many recreational facilities and opportunities are described above, most of which are low-cost or no-cost to the public. The focus of this section is on lower-cost overnight visitor accommodations.

As of 2018 there are 24 hotels providing 2,989 hotel rooms within Carlsbad's Coastal Zone, as well as a state campground that offers 222 campsites. Table 3-1 identifies the accommodations in the Coastal Zone and their cost scale (economy, midscale, upper midscale, upscale, and luxury) according to Smith Travel Research.

Including the campground, there are 589 economy scale accommodations in Carlsbad's Coastal Zone, which is significant compared to the number of hotel rooms in neighboring coastal cities. In

Oceanside's coastal zone, there are 975 hotel rooms (346 of which are economy scale); in Encinitas' coastal zone, there are 634 hotel rooms (320 of which are economy scale).¹ Carlsbad's Coastal Zone has three to five times more accommodations overall and 70 percent to 80 percent more economy scale accommodations compared to Oceanside and Encinitas. This comparison demonstrates that Carlsbad accommodates more visitors and provides significantly more economy scale accommodations compared to neighboring coastal cities. Carlsbad's high number of accommodations, and specifically its high number of economy scale accommodations, sufficiently meets Coastal Act Section 30213 requirements.

To ensure that Carlsbad continues to provide lower cost accommodations, the policies of this chapter protect the inventory of economy scale hotels, as identified by Smith Travel Research, as well as the campground. New development that proposes to remove an existing economy scale hotel is required to replace the economy scale rooms with an equal number of lower-cost hotel rooms. The new lower cost hotel rooms must be made available at a lower cost rate, which is the annual average daily rate for economy scale hotels, as identified by Smith Travel Research.² The 2017 annual average daily rate for economy hotels in Carlsbad was \$86.29; in 2018 (January to September), the average daily rate was \$87.10. The lower cost rate will vary from year to year and will be determined, if required by the policies of this chapter at the time of a project proposal.

¹ Smith Travel Research (October 2018)

² California Coastal Commission staff report, *Public Workshop: Lower Cost Visitor Serving Accommodations*, (October 2016)

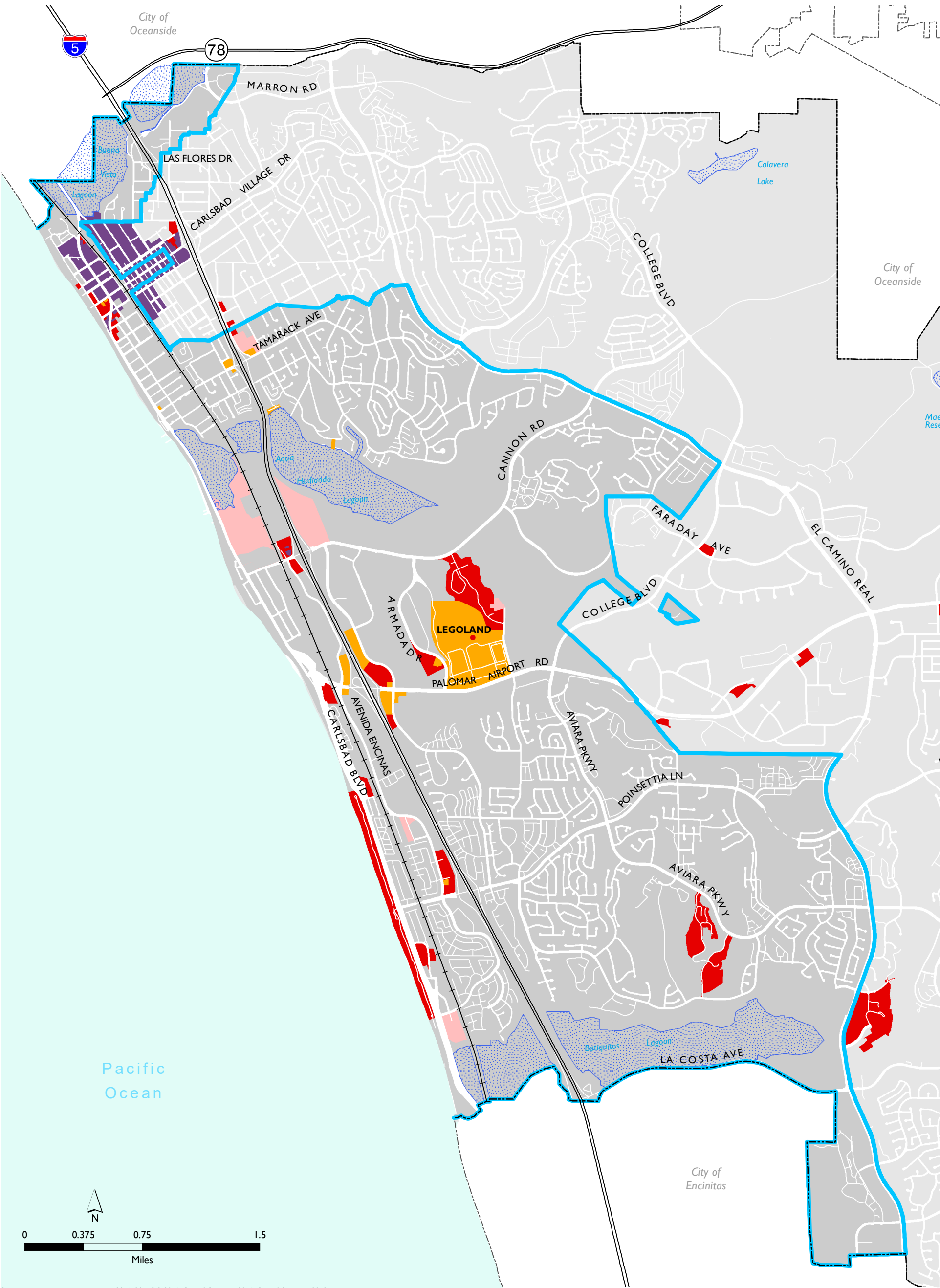
Table 3-1, Carlsbad Coastal Zone Hotel Inventory		
Property	Smith Travel Research Cost Scale	Rooms
Days Inn Carlsbad	Economy	45
Scandia Motel	Economy	20
Motel 6 Carlsbad East	Economy	140
Motel 6 Carlsbad South	Economy	162
Ramada Carlsbad	Midscale	121
La Quinta Inns & Suites Carlsbad Legoland Area	Midscale	110
Best Western Plus Beach View Lodge	Upper Midscale	41
Carlsbad by the Sea Resort	Upper Midscale	145
Holiday Inn Express & Suites Carlsbad Beach	Upper Midscale	120
Carlsbad Inn Beach Resort	Upper Upscale	62
Westin Carlsbad Resort & Spa	Upper Upscale	208
Sheraton Hotel Carlsbad Resort & Spa	Upper Upscale	169
West Inn & Suites @ Carlsbad	Upper Upscale	86
Cape Rey Carlsbad, a Hilton Resort	Upper Upscale	215
Legoland Castle Hotel	Upscale	250
Grand Pacific Palisades Resort	Upscale	90
Hyatt House San Diego Carlsbad	Upscale	98
Hilton Garden Inn Carlsbad Beach	Upscale	161
Ocean Palms Beach Resort	Upscale	56
Tamarack Beach Resort	Luxury	23
Legoland California Resort Hotel	Luxury	250
Beach Terrace Inn	Luxury	48
Four Seasons Residence Club Aviara	Luxury	42
Park Hyatt Aviara Resort	Luxury	327
Total Hotel Rooms		2,989
South Carlsbad State Beach Campground	Lower-Cost (per the average daily rate for "Economy" hotels)	222
Total Accommodations		3,211

Source: Smith Travel Research, October 2018

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CITY OF CARLSBAD

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Source: Michael Baker International, 2016; SANGIS, 2016; City of Carlsbad, 2016, City of Carlsbad, 2019

12/17/2021 J:\N:\M\data\149652\GIS\MXD\Carlsbad_MXD\LC_P_2019\Chapter 3\Figure 3-2 Visitor Serving Commercial Areas 11x17.mxd

LEGEND

- | | |
|--------------|---|
| Coastal Zone | Existing Visitor Accommodations |
| City Limit | Other Existing Visitor Serving Commercial |
| Lagoon | Future Visitor Serving Commercial |
| Railroad | Village |

Note: see Figure 3-1 for coastal recreation areas

FIGURE 3-2
VISITOR SERVING COMMERCIAL AREAS

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3.4 Recreation and Visitor-Serving Uses Policies

The following policies provide additional direction to ensure that development in the Coastal Zone is consistent with Coastal Act requirements related to recreation and visitor-serving uses. Some of the following policies are directly related to the Coastal Act sections referred to in Section 3.1 of this chapter; reference to those Coastal Act sections is noted at the end of the applicable policies.

Recreational Use Policies

- LCP-3-P.1 Maintain a diversified, comprehensive system of open space for outdoor recreation, including, but not limited to, parks, beaches, areas for organized sports, connecting corridors containing trails, water recreation areas (beaches, lagoons, lakes), unique conservation areas for nature study, and semi-developed areas for camping.
- LCP-3-P.2 Seek funding opportunities from state, federal, and local agencies to improve the recreational and educational potential of the city's three lagoons and other special resource areas.
- LCP-3-P.3 Work collaboratively with the California Department of Parks and Recreation to improve and maintain high-quality beaches by enhancing beach access, facilities, and services along Carlsbad's entire coastline.
- LCP-3-P.4 Work collaboratively with the California Department of Parks and Recreation on a development plan for South Carlsbad State Beach to maximize public recreational opportunities.
- LCP-3-P.5 Support and encourage recreational use of oceanfront land [related to Coastal Act Section 30221].
- LCP-3-P.6 Support and encourage water-oriented recreational activities in coastal areas that are suited for such use. Support and encourage the continuation of existing recreational uses on Agua Hedionda Lagoon and support expansion of such uses, if expansion is feasible [related to Coastal Act Section 30220].
- LCP-3-P.7 Encourage recreational boating use of coastal waters by supporting development of facilities that support boating use. On Agua Hedionda Lagoon, if demand for boating/launching facilities cannot be met by existing facilities and additional boating use of the lagoon will not adversely affect the lagoon environment or public safety, support opportunities to provide additional or enhanced public boating facilities [related to Coastal Act Section 30224].

- LCP-3-P.8 Support and encourage recreational fishing activities in the Coastal Zone, including the continuation of public fishing along the western boundaries of Agua Hedionda Lagoon and Batiquitos Lagoon [related to Coastal Act Section 30234.5].
- LCP-3-P.9 Ensure that development in areas adjacent to public parks and recreation uses is located, designed, and maintained to prevent significant degradation of the public park and recreation uses [related to Coastal Act Section 30240].
- LCP-3-P.10 Ensure that adequate park facilities are provided by developing Veteran’s Memorial Park and other parks, as needed, to meet the recreational needs of the citywide population at buildout, based on planned land uses [related to Coastal Act Section 30252].
- LCP-3-P.11 Require that construction above the mean high tide line of private boat docks, boat storage, and launching facilities, where permitted (e.g., Agua Hedionda Lagoon), be subject to city approval of a coastal development permit. Coastal development permits for construction of boat docks/storage/launching, within areas below the mean high tide line or on public trust lands, shall be subject to Coastal Commission approval.
- LCP-3-P.12 Work with the California Department of Parks and Recreation to enhance public access and recreation along the Carlsbad Boulevard coastal corridor. Principal objectives should be to create additional recreational opportunities, public waterfront amenities and services (e.g., restrooms and showers), as well as modernization and expansion of the campgrounds to serve as lower-cost visitor and recreational facilities; improve coastal access for all; conserve coastal resources; and enhance public safety, including addressing threats to the campground from bluff erosion and sea level rise (see Chapter 7 for policies regarding seal level rise hazards).
- LCP-3-P.13 Ensure that adequate recreation/visitor support facilities are provided in and near recreation areas (e.g., public restrooms, picnic tables).
- LCP-3-P.14 Consider, as part of the evaluation of realigning the southern lanes of Carlsbad Boulevard inland, opportunities to create additional recreation areas (e.g., parks and other recreation facilities and amenities).

Visitor-Serving Use Policies

- LCP-3-P.15 Protect, encourage, and, where feasible, provide for development of new (and retention of existing) lower-cost overnight accommodations and recreation facilities, such as through regulatory incentives (e.g., development standards modifications). Consider amenities that reduce the cost of stay when evaluating the affordability of any new or

redeveloped overnight visitor accommodations; and encourage and support developments that provide public recreational opportunities within the Coastal Zone [related to Coastal Act Section 30213].

- LCP-3-P.16 Accommodate continued growth of visitor-serving land uses to meet visitor demand for accommodations, recreation, entertainment, shopping, etc. Key sites that can accommodate future growth of visitor-serving uses include the Carlsbad Boulevard/Agua Hedionda Center and the Ponto/Southern Waterfront area (see Chapter 2, Figure 2-2). Other appropriate sites may also provide opportunities for the development of visitor-serving uses.
- LCP-3-P.17 Designate private lands, which are suitable for visitor-serving commercial use, as Visitor Commercial (VC) on the Local Coastal Program land use map; ensure that visitor-serving commercial uses on those lands are given priority over residential, general industrial, or general commercial development, but not over agriculture or coastal-dependent industry [related to Coastal Act Section 30222].
- LCP-3-P.18 On land designated Visitor Commercial (VC) on the Local Coastal Program land use map, limited-use overnight accommodations, such as timeshares, shall be subject to the following:
- A. At least twenty-five (25%) percent of the units within any given facility shall be made available each day for transient overnight accommodations during the summer season (beginning the day before the Memorial Day weekend and ending the day after Labor Day).
 - B. The timeshare facility shall operate in the same manner as a hotel, including requirements for a centralized reservations system, check-in services, advertising, security, and daily housecleaning.
 - C. No person shall occupy any unit or units within a given facility for more than sixty (60) days per calendar year and no more than thirty (30) days during the summer season (beginning the day before the Memorial Day weekend and ending the day after Labor Day).
- LCP-3-P.19 Define “lower-cost” overnight accommodations as accommodations available at an annual average daily rate that is equal to or less than the annual average daily rate provided by Smith Travel Research for the “economy” hotel segment within the hotel market area. The market area shall include only the hotels in Carlsbad’s Coastal Zone.

If Smith Travel Research requires more economy hotels than are within Carlsbad's Coastal Zone to identify the annual average daily rate, the market area may be expanded, to the extent necessary, to include economy hotels in Carlsbad outside the Coastal Zone and the nearest economy hotels in the Coastal Zones of adjacent cities.

- LCP-3-P.20 Work collaboratively with the California Department of Parks and Recreation and other relevant agencies to protect, improve, and expand, where feasible, the state campground facilities and other lower-cost visitor-serving uses. Other campground facilities and lower-cost, visitor-serving uses (public or private) may include sites and uses not connected to the existing state campground system, such as near the lagoons or other recreational area.

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4

Coastal Access

One of the Coastal Act's primary goals is to "maximize public access to and along the coast." This chapter describes the Coastal Act's requirements related to coastal public access and identifies Carlsbad's existing and future coastal access network and barriers to public access. This chapter concludes with city policies that ensure coastal access is protected and enhanced, consistent with the Coastal Act.



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4.1 Introduction

The California Coastal Act places a high priority on maximizing public access to and along the coast. Coastal Act policies related to public access include the following:

Section 30210 Access; recreational opportunities; posting

In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

Section 30211 Development not to interfere with access

Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

Section 30212 New development projects

- (a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where: (1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources, (2) adequate access exists nearby, or, (3) agriculture would be adversely affected. Dedicated accessway shall not be required to be opened to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway.
- (b) For purposes of this section [Article 2 of the Coastal Act], "new development" does not include:
 - (1) Replacement of any structure pursuant to the provisions of subdivision (g) of Section 30610.
 - (2) The demolition and reconstruction of a single-family residence; provided, that the reconstructed residence shall not exceed either the floor area, height or bulk of the former structure by more than 10 percent, and that the reconstructed residence shall be sited in the same location on the affected property as the former structure.
 - (3) Improvements to any structure which do not change the intensity of its use, which do not increase either the floor area, height, or bulk of the structure by more than 10 percent, which do not block or impede public access, and which do not result in a seaward encroachment by the structure.
 - (4) The reconstruction or repair of any seawall; provided, however, that the reconstructed or repaired seawall is not a seaward of the location of the former structure.
 - (5) Any repair or maintenance activity for which the commission has determined, pursuant to Section 30610, that a coastal development permit will be required unless the commission determines that the activity will have an adverse impact on lateral public access along the beach.

As used in this subdivision "bulk" means total interior cubic volume as measured from the exterior surface of the structure.

- (c) Nothing in this division shall restrict public access nor shall it excuse the performance of duties and responsibilities of public agencies which are required by Sections 66478.1 to 66478.14, inclusive, of the Government Code and by Section 4 of Article X of the California Constitution.

Section 30212.5 Public facilities; distribution

Wherever appropriate and feasible, public facilities, including parking areas or facilities, shall be distributed throughout an area so as to mitigate against the impacts, social and otherwise, of overcrowding or overuse by the public of any single area.

Section 30214 Implementation of public access policies; legislative intent

- (a) The public access policies of this article [Article 2 of the Coastal Act] shall be implemented in a manner that takes into account the need to regulate the time, place, and manner of public access depending on the facts and circumstances in each case including, but not limited to, the following:
 - (1) Topographic and geologic site characteristics.
 - (2) The capacity of the site to sustain use and at what level of intensity.
 - (3) The appropriateness of limiting public access to the right to pass and repass depending on such factors as the fragility of the natural resources in the area and the proximity of the access area to adjacent residential uses.
 - (4) The need to provide for the management of access areas so as to protect the privacy of adjacent property owners and to protect the aesthetic values of the area by providing for the collection of litter.
- (b) It is the intent of the Legislature that the public access policies of this article [Article 2 of the Coastal Act] be carried out in a reasonable manner that considers the equities and that balances the rights of the individual property owner with the public's constitutional right of access pursuant to Section 4 of Article X of the California Constitution. Nothing in this section or any amendment thereto shall be construed as a limitation on the rights guaranteed to the public under Section 4 of Article X of the California Constitution.
- (c) In carrying out the public access policies of this article [Article 2 of the Coastal Act], the commission and any other responsible public agency shall consider and encourage the utilization of innovative access management techniques, including, but not limited to, agreements with private organizations which would minimize management costs and encourage the use of volunteer programs.

Section 30252(1) to (5) Maintenance and enhancement of public access

The location and amount of new development should maintain and enhance public access to the coast by (1) facilitating the provision or extension of transit service, (2) providing commercial facilities within or adjoining residential development or in other areas that will minimize the use of coastal access roads, (3) providing nonautomobile circulation within the development, (4) providing adequate parking facilities or providing substitute means of serving the development with public transportation, (5) assuring the potential for public transit for high intensity uses such as high-rise office buildings...

4.2 Vertical and Lateral Pedestrian Coastal Access

Pedestrians can access Carlsbad's beaches and lagoon shorelines by vertical accessways (access from inland) or lateral accessways (access along the beach). This section describes the vertical and lateral accessways in Carlsbad; refer to Figures 4-1A, 4-1B, and 4-1C, Vertical and Lateral Pedestrian Access.

Vertical Pedestrian Access to the Coast

From north to south, the City of Carlsbad maintains 12 public pedestrian beach accessways at Rue des Chateaux, Beech Avenue, Christiansen Way, Grand Avenue, Carlsbad Village Drive, Ocean Street parking lot, Pine Avenue, Sycamore Avenue, Maple Avenue, Cherry Avenue, Hemlock Avenue, and Tamarack Avenue. There are two additional public pedestrian beach accessways, which are privately maintained, at Cypress Avenue and Oak Avenue.

In addition, the Carlsbad Sea Wall provides public pedestrian access to the beach from Carlsbad Boulevard at several points between Pine Avenue and Tamarack Avenue. The Carlsbad Sea Wall creates a pedestrian connection between visitor-serving amenities in Carlsbad Village and the Carlsbad State Beach parking lot and separates pedestrians from both traffic and sand. At Tamarack Avenue, an additional sidewalk/sea wall extends the pedestrian pathway past Agua Hedionda Lagoon to the power plant site. South of Agua Hedionda Lagoon, public pedestrian beach access becomes more informal as Carlsbad Boulevard descends to sea level. Formal public pedestrian beach accessways are available at the south side of Terramar Beach and at the state campgrounds near the city's southern boundary.

Opportunities for future new vertical accessways and accessway improvements may be possible, such as improving existing accessways and adding new accessways as part of street improvement projects. For example, improved/new accessways north of the Terramar neighborhood are anticipated as part of future improvements to Carlsbad Boulevard.

Lateral Pedestrian Access along the Coast

Lateral pedestrian access along the Carlsbad coastal shoreline is generally unimpeded; however, there are limited areas where lateral pedestrian access may be impeded. Jetties protecting the inlet to Agua Hedionda Lagoon block lateral coastal access along the beach; however, pedestrians can move around the jetties via Carlsbad Boulevard. South of Cannon Road, lateral access in front of the Terramar residential neighborhood can be obstructed during high tide. The state owns most of Carlsbad's beach area; however, there are areas where private property extends onto the beach (north beaches and Terramar beach area); lateral access easements allow public access across these private properties.

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CITY OF CARLSBAD

LOCAL COASTAL PROGRAM



Source: Michael Baker International, 2016; SANGIS, 2016; City of Carlsbad, 2016

12/6/2021 JN M:\P\data\149652\GIS\MXD\Carlsbad_MXD\LCP_2019\Chapter 4\Figure 4-1A Vertical and Lateral Coastal Pedestrian Access 11x17.mxd

LEGEND

- Coastal Zone
- City Limit
- Lagoon
- Vehicle Access (Major Streets and Highways)
- Railroad
- Existing Vertical Pedestrian Access
- Existing Lateral Pedestrian Access
- Future Lateral Pedestrian Access

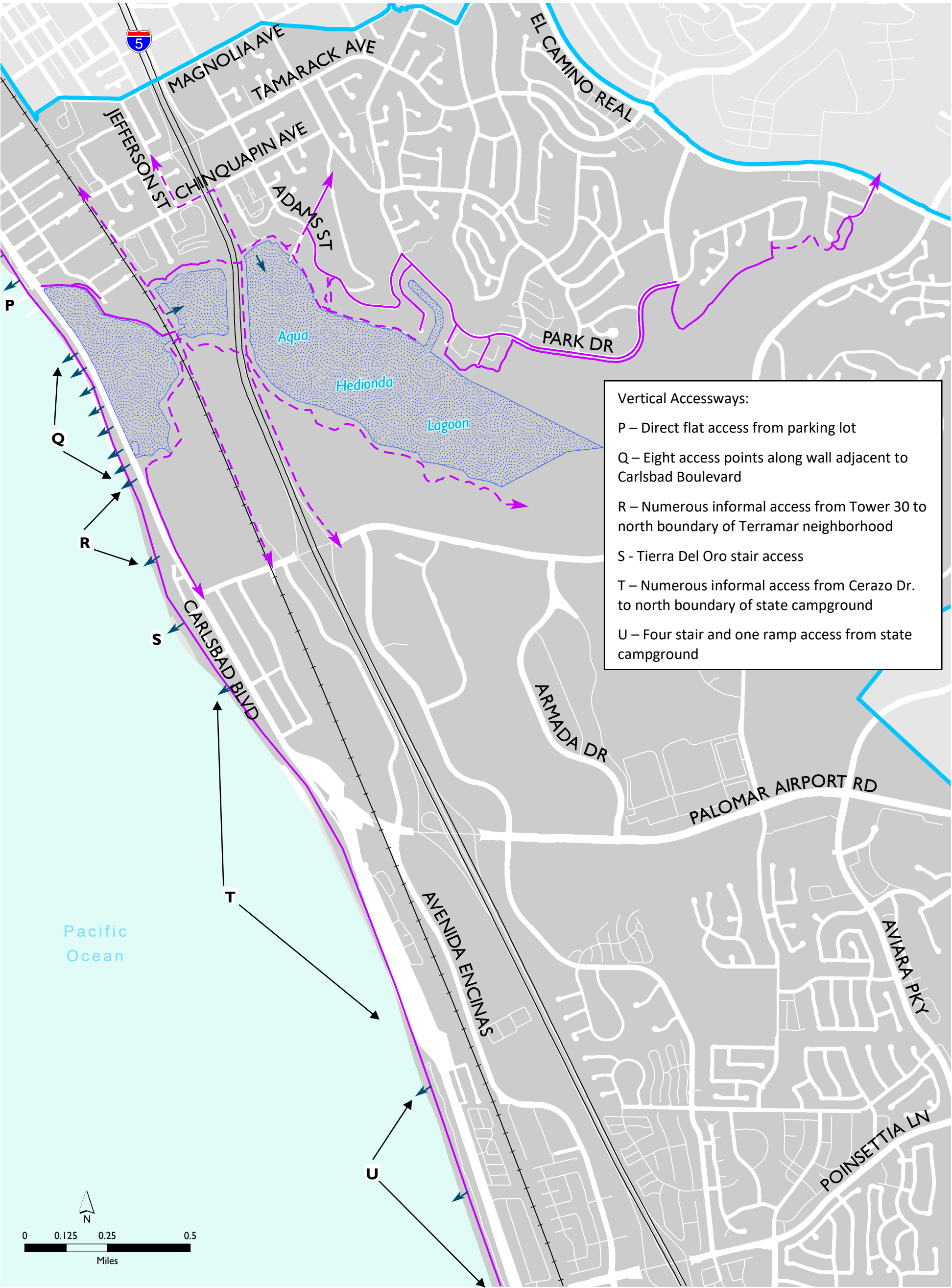
FIGURE 4-1A

VERTICAL AND LATERAL PEDESTRIAN COASTAL ACCESS

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CITY OF CARLSBAD

LOCAL COASTAL PROGRAM



Source: Michael Baker International, 2016; SANGIS, 2016; City of Carlsbad, 2016

12/6/2021 J:\M:\P\Map\149652\GIS\MXD\Carlsbad_MXD\LCP_2019\Chapter 4\Figure 4-1B Vertical and Lateral Coastal Pedestrian Access 11x17.mxd

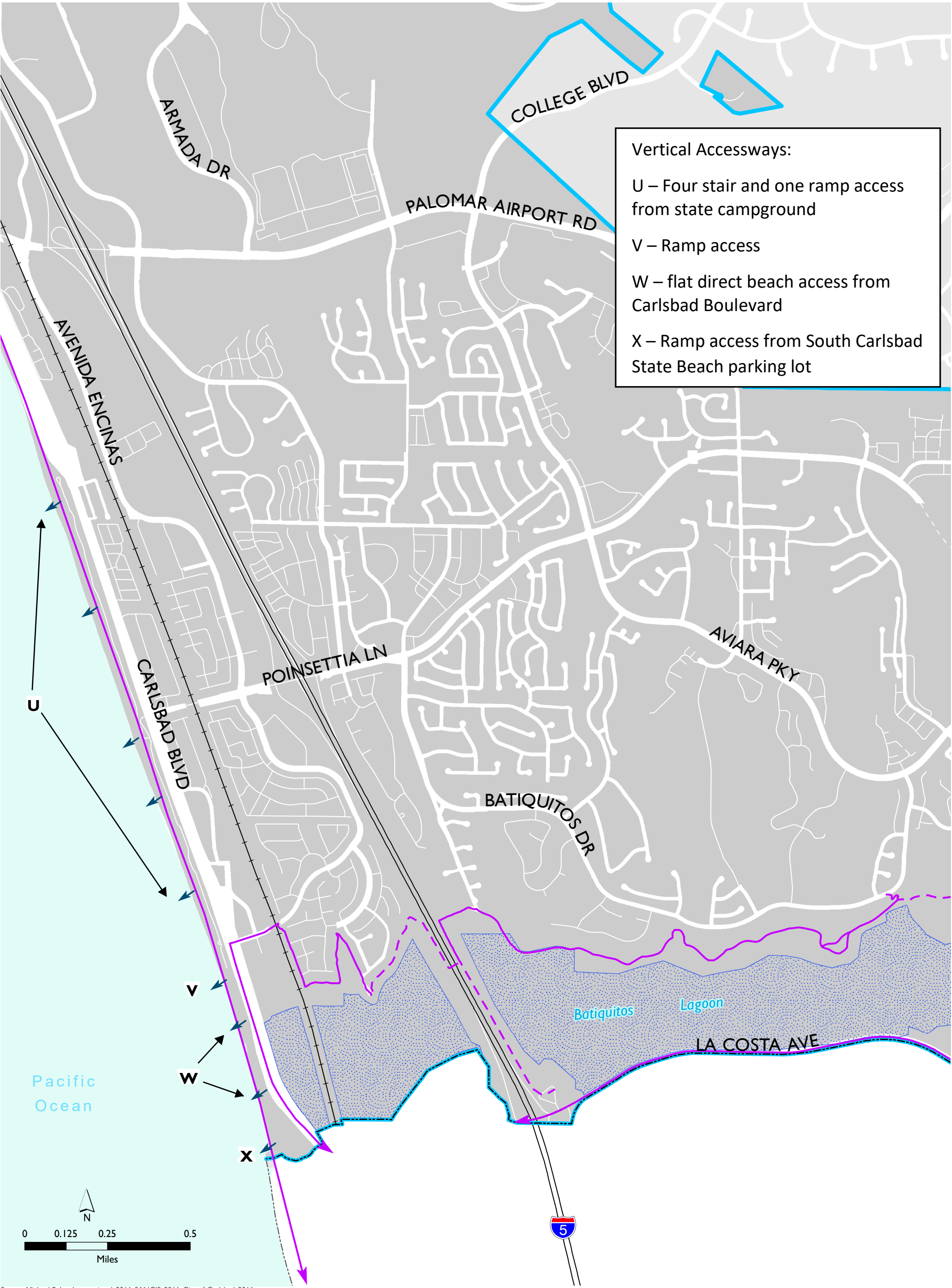
FIGURE 4-1B

VERTICAL AND LATERAL PEDESTRIAN COASTAL ACCESS

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CITY OF CARLSBAD

LOCAL COASTAL PROGRAM



Source: Michael Baker International, 2016; SANGIS, 2016; City of Carlsbad, 2016

12/6/2021 JN M:\91d\0149652\GIS\MXD\Carlsbad_MXD\LCP_2019\Chapter 4\Figure 4-1C Vertical and Lateral Coastal Pedestrian Access 11x17.mxd

LEGEND

- Coastal Zone
- City Limit
- Lagoon
- Vehicle Access (Major Streets and Highways)
- Railroad
- Existing Vertical Pedestrian Access
- Existing Lateral Pedestrian Access
- Future Lateral Pedestrian Access

FIGURE 4-1C
VERTICAL AND LATERAL PEDESTRIAN COASTAL ACCESS

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Pedestrian Access to Lagoons

In addition to beach and coastal shoreline accessibility, there are also numerous access points to Carlsbad's three lagoons: Buena Vista Lagoon, Agua Hedionda Lagoon, and Batiquitos Lagoon. Vertical access to lagoons typically occurs through residential neighborhoods. Lateral access along the lagoon shoreline typically occurs in the form of trails. The following is an overview of the walking trails, paved sidewalks, and bikeways that provide access to and along each of the city's lagoons:

- Buena Vista Lagoon
 - Along the southern lagoon boundary between Marron Road and Interstate 5, a sidewalk and bikeway are provided adjacent to Jefferson Street. Pedestrians and bicyclists can also cross between the south and north shores of the lagoon using the sidewalk and bikeway adjacent to Carlsbad Boulevard.
 - A public park (Maxton Brown Park) also provides walking paths and passive public recreation located adjacent to the southern boundary of the lagoon at State Street and Laguna Drive.
- Agua Hedionda Lagoon
 - Outer lagoon. A trail exists along the northern lagoon boundary between the coast and the railroad. Pedestrians and bicyclists can also access the lagoon's western boundary using the sidewalk and bikeway adjacent to Carlsbad Boulevard.
 - Middle lagoon. Access is available at the North Coast YMCA Aquatic Park next to the railroad tracks; there is boating access for the YMCA Aquatic Park.
 - Inner lagoon. A trail exists along the northern lagoon boundary between Bayshore Drive and Marina Drive; a public sidewalk along Cove Drive provides access to the lagoon's north shore. The Agua Hedionda Lagoon Discovery Nature Center provides access to the lagoon's eastern boundary. Access to boating and water sports is available at the California Watersports site located on the lagoon's north shore adjacent to Interstate 5.
- Batiquitos Lagoon
 - Existing trails provide public access along most of the lagoon's north shore. Pedestrians and bicyclists are also able to access the lagoons southern and western boundaries using the sidewalks and bikeways adjacent to La Costa Avenue and Carlsbad Boulevard.

Public Access Through Potential Prescriptive Rights

Along the California coast, the public has historically used private land to access the ocean, such as informal trails to the beach, parking areas, and bluff tops. Per California law, under certain conditions,

long-term public access across private property may result in a permanent public easement—a public prescriptive right of access.

Per the California Coastal Commission's Coastal Public Access Program, the Coastal Commission researches and inventories the historic public use of areas with the potential for significant public access benefits. Where research shows that the public use is substantial enough to create potential prescriptive rights, the state's Attorney General's Office can take legal action to protect those areas for public use.

In Carlsbad, the Attorney General has not established prescriptive rights. However, there may be areas in Carlsbad where the public has historically used land to access the coast, and where the Coastal Commission and Attorney General could establish prescriptive rights of use.

Future Vertical and Lateral Pedestrian Accessway Improvements

As of 2016, the City of Carlsbad has approved permits and funding to make improvements to seven beach accessways located along Ocean Street, including the privately maintained accessways at Cypress Avenue and Oak Avenue. Once the improvements are complete, the city intends to assume maintenance responsibility of the Cypress Avenue and Oak Avenue accessways.

Additional lateral access along the lagoons and coast will be provided through the construction of new trails and bikeways, as described below.

4.3 Active Transportation Access

Active transportation is defined as human-powered modes of transportation, such as walking and bicycling. Walking and bicycling environments are critical to Carlsbad's high quality of life, especially in areas that have a high demand for those services (such as along the coast and near the lagoons). In addition to sidewalks adjacent to streets, which provide active pedestrian access to the coast, Carlsbad offers an extensive network of trails and bikeways that provide active transportation access to the coast, lagoons, coastal open space, and coastal views.

Trails

While the rolling topography of Carlsbad's Coastal Zone can be challenging for pedestrians and bicyclists, the city's open space areas, three lagoons, coastline, and Mediterranean climate make it an ideal location for an extensive trail system. Trails connect residents and visitors to the city's beaches, coastal resources, and activities, as well as to the three lagoons.

Existing and Future Trails

In general, Carlsbad's trails are divided into two main categories: open space and mobility trails. Open space trails include nature trails, recreation trails, and wide dirt/utility roadbed trails. Mobility trails include roadside trails, sidewalks, and multi-use paved paths. Figure 4-2 shows the location of existing trails in the Coastal Zone and Table 4-1 identifies the name and length of each trail.

Figure 4-2 and Table 4-1 also identify future trails planned in the Coastal Zone. These future trails will close gaps in the citywide trail network and improve access to the city's beaches, lagoons, parks, and other open space areas. In addition to the planned future trails shown on Figure 4-2, opportunities for other trails may arise in the future that the city could consider, such as a trail along Agua Hedionda Lagoon's southern shoreline.

Regional Trails Projects

North Coast Corridor Public Works Plan

Caltrans' Interstate 5 North Coast Corridor Public Works Plan proposes to enhance all Interstate 5 interchanges and crossings to better integrate and accommodate bicyclists and pedestrians in and outside of the Coastal Zone. The proposed bicycle and pedestrian improvements will create or substantially improve many trail connections, including highway over- and under-crossings that will be reconstructed with pedestrian bridges and enhanced sidewalks/bike lanes. These improvements will provide safe, non-automobile-dependent routes to and within the Coastal Zone. Most important for improving access to and along the coastline, the planned trails/bikeways include the Coastal Rail Trail and the North Coast Bike Trail.

North Coast Bike Trail

A key component of the North Coast Corridor Public Works Plan is the proposed North Coast Bike Trail, a new bicycle facility that will run the 27-mile length of the north coast corridor, roughly parallel to Interstate 5. Caltrans will construct portions of the bikeway fall within the Interstate 5 right-of-way and coordinate with local jurisdictions to ensure connectivity to trail segments outside of the interstate right-of-way. Figure 4-2 shows future segments of the North Coast Bike Trail (segments 7F and 12C). Refer to Figure 4-3 for a composite of future regional trail projects, including the anticipated alignment of the North Coast Bike Trail.

Coastal Rail Trail

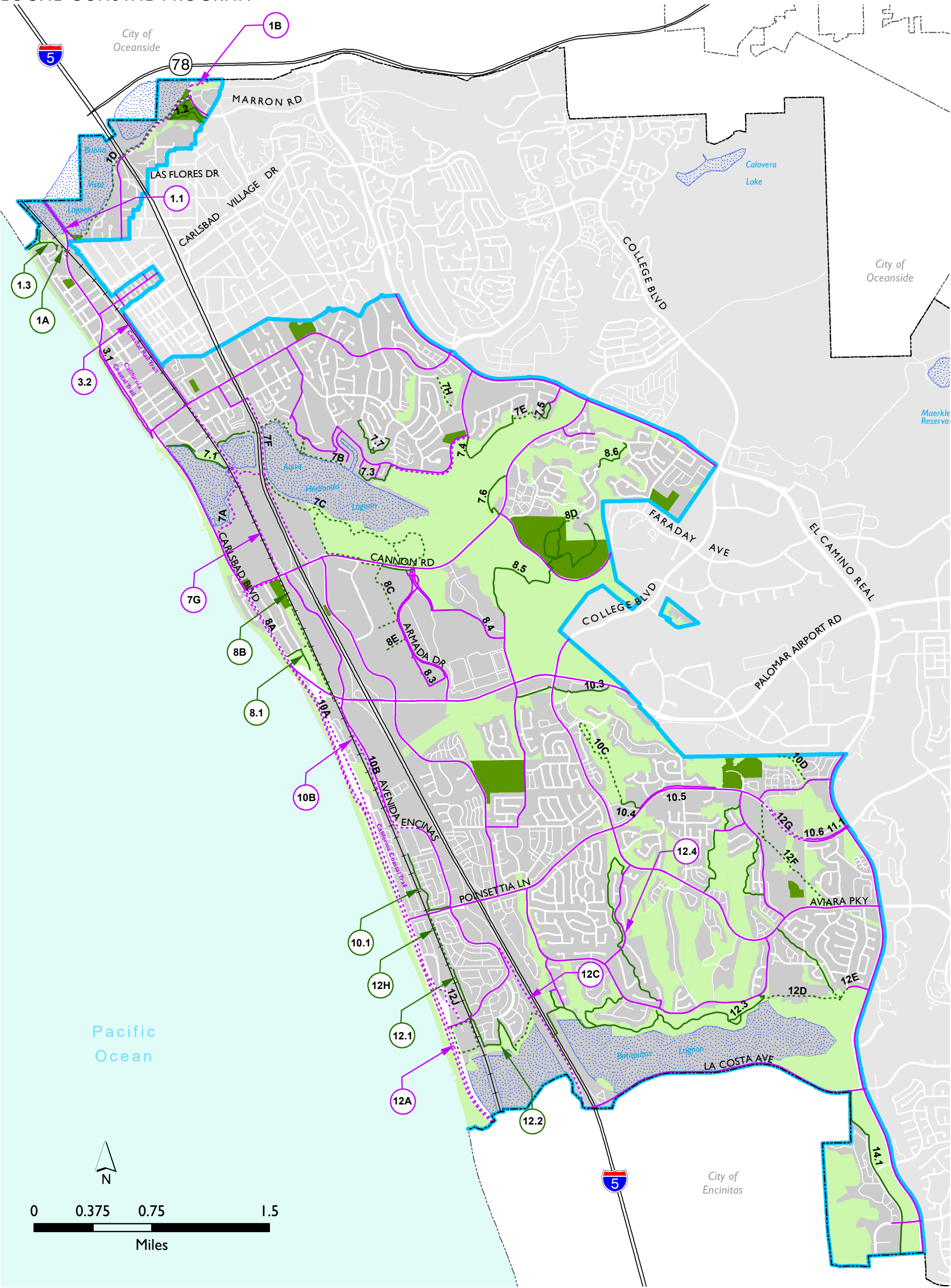
The Coastal Rail Trail is a dedicated bicycle facility along the San Diego region's coastal corridor, with most segments located in or adjacent to the railroad right-of-way. Once fully completed, the Coastal Rail Trail will provide a continuous north-south bicycle route with direct access to coastal resources and recreational facilities. Figure 4-2 shows future segments of the North Coast Bike Trail (segments 7G, 8B, and 10B). Figure 4-3 shows the approved planned alignment of the Coastal Rail Trail. South of the Carlsbad Village, the trail follows the railroad right-of-way all the way to the Poinsettia Coaster Station. South of the Poinsettia Coaster Station, the trail runs along Avenida Encinas and Carlsbad Boulevard to the city's southern border. As part of the North Coast Corridor Public Works Plan, Caltrans and SANDAG have identified opportunities to complete approximately seven miles of the Coastal Rail Trail along the San Diego coastal corridor. These segments also will contribute to the completion of the California Coastal Trail.

California Coastal Trail

The California Coastal Conservancy is leading the effort to establish the California Coastal Trail, a 1,200-mile trail network spanning the entire California coastline. The anticipated Carlsbad segment is not well-defined, but as shown in Figure 4-3, is likely to follow parts of the Coastal Rail Trail across Buena Vista Lagoon and then follow a series of streets through Carlsbad Village continuing south along or near Carlsbad Boulevard.

The trail may be located on a variety of terrains, including the beach, bluff edge, hillsides providing scenic vantage points, and within street rights-of-way. The alignment can take many forms, including informal footpaths, paved sidewalks, and separate bicycle paths. When no other alternative exists, the alignment sometimes connects along the shoulder of the road. While primarily for pedestrians, the trail may also accommodate a variety of user groups including bicyclists, wheelchair users, equestrians, and others as opportunities allow.

CITY OF CARLSBAD
LOCAL COASTAL PROGRAM



Source: Michael Baker International, 2016; SANGIS, 2016; City of Carlsbad, 2019

12/6/2021 JN M:\Data\1149652\GIS\MXD\Carlsbad_MXD\LCPP_2019\Chapter 4\Figure 4-2 Coastal Trails 11x17.mxd

LEGEND

- Coastal Zone
- City Limit
- Lagoon
- Existing and Future Parks
- Open Space
- Railroad

- Off Street Trails**
- Existing
 - Future
- Roadside Trails**
- Existing
 - Future

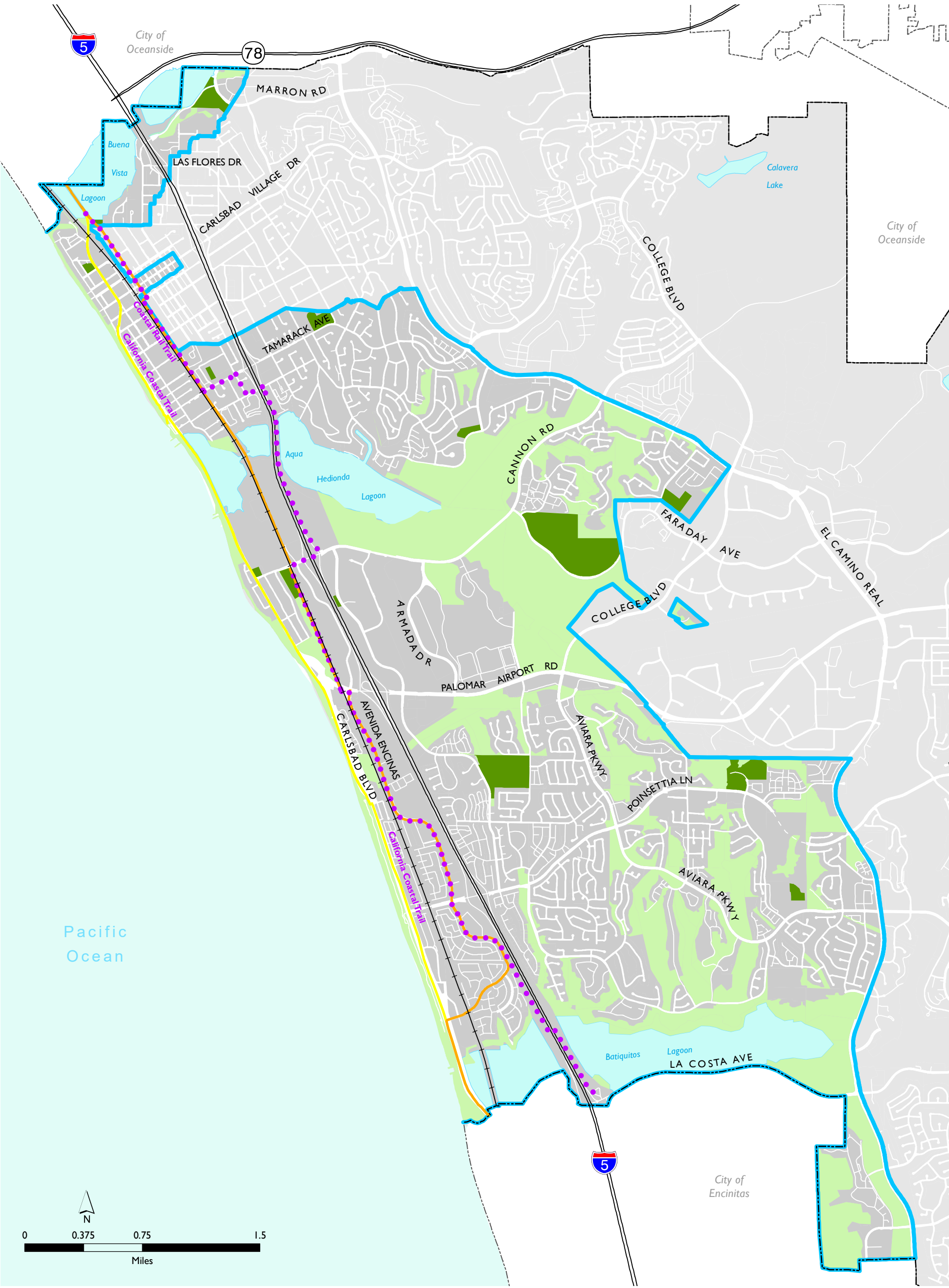
NOTE: The alignment of the trails depicted on this figure is not precise. The alignment of future trails may be adjusted as warranted, as information becomes available through additional fieldwork, environmental analysis, and more detailed planning

FIGURE 4-2
COASTAL TRAILS

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CITY OF CARLSBAD

LOCAL COASTAL PROGRAM



Source: Michael Baker International, 2016; SANGIS, 2016; City of Carlsbad, 2019

12/6/2021 J:\M\Mapa\149652\GIS\MXD\Carlsbad_MXD\LCP_2019\Chapter 4\Figure 4-3 Regional Trails Projects 11x17.mxd

LEGEND









- | | |
|--|---|
|  Coastal Zone |  Railroad |
|  City Limit |  North Coast Bike Trail (Caltrans) |
|  Existing and Future Parks |  Coastal Rail Trail |
|  Open Space |  California Coastal Trail |

FIGURE 4-3
REGIONAL TRAIL PROJECTS

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Table 4-1, Existing and Future Trails in Carlsbad's Coastal Zone¹

Trail #	Status	Trail Name	Trail Length (Mi.)	Trail Type
1.1	Existing	Coastal Rail Trail (Reach 1)	0.2	Type 6
1.2	Existing	Hosp Grove	0.7 ²	Type 1
1.3	Existing	North Beach Trail	0.3	Type 1
1A	Future	Carlsbad Boulevard Lagoon Overlook Area	0.1	Type 2
1B	Future	Haymar Road	0.1 ²	Type 1
1D	Future	Buena Vista Lagoon South Shore Trail	1.3	Type 1
3.1	Existing	Sea Wall	0.7	Type 6
3.2	Existing	Coastal Rail Trail (Reach 2)	0.7	Type 6
7.1	Existing	Agua Hedionda North Shore Hubbs Trail	0.5	Type 3
7.2	Existing	Agua Hedionda Harbor Drive	0.2	Type 1
7.3	Existing	Agua Hedionda Bayshore Drive Trail	0.3	Type 2
7.4	Existing	Agua Hedionda Kelly Trail (Hallmark East)	0.6	Type 3
7.5	Existing	Agua Hedionda Summerwind Trail	0.3	Type 2
7.6	Existing	Agua Hedionda Nature Center	0.4	Type 2
7.7	Existing	Sunnyhill Drive Trail	0.5	Type 2
7A	Future	Coastal Corridor Trail (Cannon Park to Encinas Power Station)	1.2	Type 6
7B	Future	North Shore Agua Hedionda Lagoon Trail (I-5 to Cove Drive)	1.1	Type 1
7C	Future	South Shore Agua Hedionda Lagoon Trail	2.4	Type 2
7D	Future	Park Drive Trail	0.7	Type 4
7E	Future	Hallmark East Trail (connecting to Kelly Trail)	0.2	Type 1
7F ³	Future	I-5 North Coast Bike Trail (Chinquapin to Cannon Road)	1.1	Type 6
7G	Future	Coastal Rail Trail (Tamarack Avenue to Cannon Road) Reach 3	1.2	Type 6
7H	Future	Shayan Property Trail (High Ridge Avenue to Aura Circle)	0.2	Type 1
8.1	Existing	Manzano Trail	0.2	Type 2
8.2	Existing	Flower Fields (along Cannon Road)	0.2	Type 2
8.3	Existing	Armada Drive Trail	1.7	Type 6
8.4	Existing	Legoland	0.5	Type 6
8.5	Existing	The Crossings/Veterans Park	2.1	Type 2/3
8.6	Existing	Kelly Ranch	0.3	Type 1
8A	Future	Coastal Corridor Trail (Cannon Road to Palomar Airport Road)	0.8	Type 6
8B	Future	Coastal Rail Trail (Cannon Road to Palomar Airport Road) Reach 4	0.9	Type 6
8C	Future	Floral Trade Center Trail	0.6	Type 2
8D	Future	Ocean View Point Trail (connection to Veterans Memorial Park)	0.1	Type 2
8E	Future	Carlsbad Ranch	0.3	Type 2
10.1	Existing	Water's End	0.5	Type 2
10.2	Existing	Hidden Valley Road	0.4	Type 2
10.3	Existing	24 Hour Fitness	0.3	Type 2
10.4	Existing	Calvary Chapel Trail	0.2	Type 3
10.5	Existing	Poinsettia Lane (Aviara Park to Brigantine)	0.5	Type 4
10.6	Existing	Poinsettia Lane (El Camino Real to Skimmer Court)	0.3	Type 4

Table 4-1, Existing and Future Trails in Carlsbad's Coastal Zone¹

Trail #	Status	Trail Name	Trail Length (Mi.)	Trail Type
10A	Future	Coastal Corridor Trail (Palomar Airport Road to Poinsettia Lane)	1.8	Type 6
10B	Future	Coastal Rail Trail (Palomar Airport Road to Poinsettia COASTER Station) Reach 5	1.0	Type 4
10C	Future	SDG&E Utility Road (Plum Tree Court to Poinsettia Lane)	0.8	Type 3
10D	Future	SDG&E Utility Road (Casia Road to Camino Vida Roble)	0.3	Type 3
12.1	Existing	San Pacifico	0.3	Type 1
12.2	Existing	Batiquitos Lagoon North Bluff	0.7	Type 2
12.3	Existing	Batiquitos Lagoon North Shore	2.7	Type 1/2
12.4	Existing	Aviara Trails	3.1	Type 2
12A	Future	Coastal Corridor Trail (Poinsettia Lane to La Costa Avenue)	1.4	Type 6
12B	Future	Rosalena Trail (north shore of Batiquitos Lagoon, near Navigator Circle to I-5)	0.3	Type 2
12C ³	Future	I-5 North Coast Bike Trail (La Costa Avenue to Avenida Encinas)	1.2	Type 6
12D	Future	Batiquitos Lagoon Extension (Batiquitos Drive to Arenal Drive)	0.5	Type 1
12E	Future	Batiquitos Lagoon Trail (Choya Point to Arenal Drive)	0.2	Type 1
12F	Future	SDG&E Utility Road (Poinsettia Lane to Aviara Parkway)	0.9	Type 3
12G	Future	Poinsettia Lane/Poinsettia 61	0.8	Type 4
12H	Future	Lakeshore Gardens	0.4	Type 1
12I	Future	South Ponto Trail	0.6	Type 1
12J	Future	Ponto Drive Trail	0.4	Type 4
14.1	Existing	La Costa Glen	1.1	Type 2
TOTAL MILES OF EXISTING TRAILS IN COASTAL ZONE			19.7	
TOTAL MILES OF FUTURE TRAILS IN COASTAL ZONE			22.9	
TOTAL MILES OF EXISTING AND FUTURE TRAILS IN COASTAL ZONE			42.6	

1. As shown on Figure 4-2 Trails

2. This is the length within the Coastal Zone; the trail extends outside the Coastal Zone

3. This trail segment is proposed as part of the Caltrans North Coast Corridor Public Works Plan

Table 4-2, Trail Design Guidelines

Trail Type	Primary Intended Use¹	Typical Width	Surface Material	Amenity Examples
Open Space Type 1	Nature trail	4 feet	<ul style="list-style-type: none"> Crushed rock, sand, or gravel Uncompacted native soil or decomposed granite 	<ul style="list-style-type: none"> Minor kiosk with map Trail name and regulatory signs Interpretive facilities Vista pullouts/viewpoints Benches Trash receptacles/dog waste dispenser
Open Space Type 2	Multi-use recreation trail	6 – 8 feet	<ul style="list-style-type: none"> Compacted chipped stone Compacted or emulsified decomposed granite 	<ul style="list-style-type: none"> Minor/major kiosk with info/map Trail name and regulatory signs Gateway monument Shade structures Interpretive facilities Vista pullouts/viewpoints Picnic tables Benches Trash receptacles/dog waste dispenser Bike racks
Open Space Type 3	Wide dirt trails Utility roadbeds	8 – 14 feet	<ul style="list-style-type: none"> Crushed rock, sand, or gravel Uncompacted native soil or decomposed granite Compacted chipped stone Compacted or emulsified decomposed granite 	<ul style="list-style-type: none"> Minor kiosk with map Trail name and regulatory signs Vista pullouts/viewpoints Trash receptacles/dog waste dispenser
Mobility Type 4	Roadside or connector trails	8 – 12 feet	<ul style="list-style-type: none"> Compacted chipped stone Compacted or emulsified decomposed granite Asphalt, concrete, or permeable concrete 	<ul style="list-style-type: none"> Minor/major kiosk with info/map Trail name and regulatory signs Gateway monument Shade structures Vista pullouts/viewpoints Benches Trash receptacles/dog waste dispenser Drinking fountain
Mobility Type 5	Connector sidewalks or special street crossings	5 feet	<ul style="list-style-type: none"> Asphalt, concrete, or permeable concrete 	<ul style="list-style-type: none"> Benches Trash receptacles/dog waste dispenser

Table 4-2, Trail Design Guidelines				
Trail Type	Primary Intended Use ¹	Typical Width	Surface Material	Amenity Examples
Mobility Type 6	Paved multi-use trails	10-14 feet	<ul style="list-style-type: none"> Asphalt, concrete, or permeable concrete 	<ul style="list-style-type: none"> Restrooms Minor/major kiosk with info/map Trail name and regulatory signs Gateway monument Shade structures Interpretive facilities Vista pullouts/viewpoints Picnic tables Benches Trash receptacles/dog waste dispenser Bike racks Drinking fountain
<p>1. Trails within the City of Carlsbad are typically open to all non-motorized uses unless otherwise stated or restricted for resource protection and conditioned by resource agencies. Bicycle use on the Batiquitos Lagoon North Shore Trail is prohibited.</p>				

As described in the California Coastal Conservancy's 2003 report to the state legislature, "Completing the California Coastal Trail," the California Coastal Trail system is to be designed and implemented to:

- Provide a continuous walking and hiking trail as close to the ocean as possible.
- Provide maximum access for a variety of non-motorized uses by utilizing parallel trail segments where feasible.
- Maximize connections to existing and proposed local trail systems.
- Ensure connections to trailheads, parking areas, transit stops, and inland trail segments at reasonable intervals.
- Maximize ocean views and scenic coastal vistas.
- Provide an educational experience, where feasible, through interpretive programs, kiosks, and other facilities.

Bikeways

In addition to the bicycle trails described above, designated bikeways are present on most major streets in the Carlsbad Coastal Zone. Bikeways are designed as bike paths (Class I), bike lanes (Class II), or bike routes (Class III), as shown on Figure 4-4 Bicycle Network. Caltrans defines bikeway facility types as follows:

Class I Bikeway (bike path) – provides a separated corridor that is not served by streets and highways and is away from the influence of parallel streets. Class I bikeways are for non-vehicle use only with opportunities for direct access and recreational benefits, right-of-way for the exclusive use of bicycles and pedestrians, and cross-flow conflicts are minimized.

Class II Bikeway (bike lane) – provides a delineated right-of-way assigned to bicyclists to enable more predictable movements, accommodating bicyclists through corridors where insufficient room exists for side-by-side sharing of existing streets by motorists and bicyclists.

Class III Bikeway (bike route) – shared facility that serves either continuity to other bicycle facilities or designates preferred routes through high-demand corridors.

In addition to the designated bikeways described above, a number of local streets without designated bikeways also provide for safe and efficient bicycle travel in the Coastal Zone. These streets typically do not have a bikeway designation; however, the entire street system may be fully adequate for safe and efficient bicycle travel. These are most commonly found along local streets with low vehicle speeds, which enables bicycle travel to be accommodated with vehicle travel.

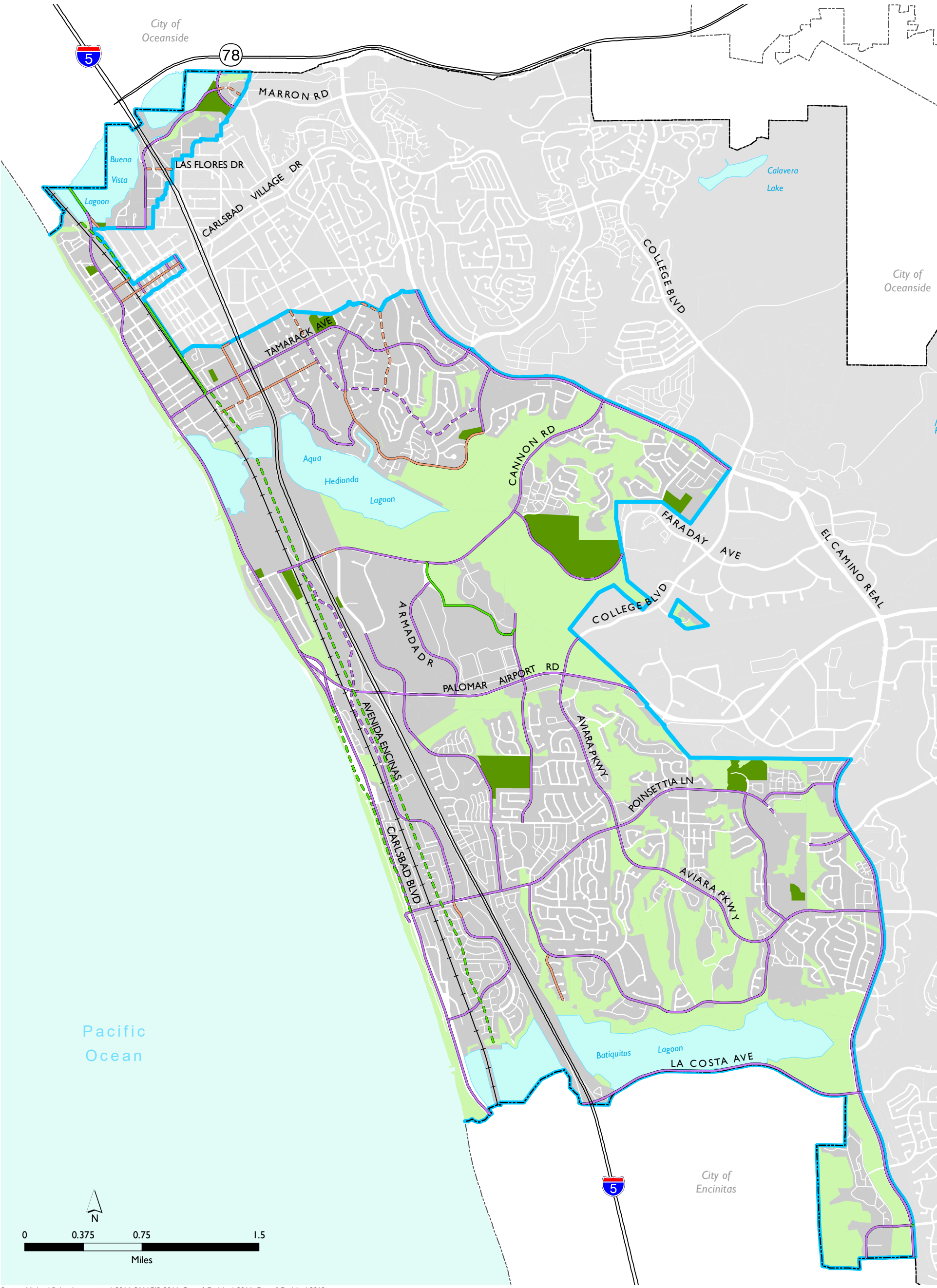
Future Bikeway Improvements

In addition to incorporating additional routes into the bikeway network, as shown on Figure 4-4, clear directional/way-finding signage and secure bicycle parking at schools, shopping centers, beaches, employment centers, and transit stops will encourage more people to ride bicycles and enhance the level of comfort for all.

While most of the streets within the Coastal Zone currently include a bicycle facility within the right-of-way, there are gaps in some locations. In particular, bicycle lanes are discontinuous along Palomar Airport Road, just east of Carlsbad Boulevard, and within many of the Interstate-5 interchanges and crossings. Gaps and other barriers, such as the railroad and freeway, diminish connectivity to the coastline for cyclists. As described above, the Caltrans Interstate 5 North Coast Corridor Public Works Plan proposes additional trail connections across lagoons and along the freeway, and to enhance all interchanges and crossings to better integrate and accommodate bicyclists and pedestrians.

CITY OF CARLSBAD

LOCAL COASTAL PROGRAM



Source: Michael Baker International, 2016; SANGIS, 2016; City of Carlsbad, 2016, City of Carlsbad 2019

LEGEND

- Coastal Zone
- City Limit
- Railroad
- Existing and Future Parks
- Open Space

Existing Bike Trails

- Bike Path - Class I
- Bike Lane - Class II
- Bike Route - Class III

Future Bike Trails

- Bike Path - Class I
- Bike Lane - Class II
- Bike Route - Class III

FIGURE 4-4
BICYCLE NETWORK

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4.4 Vehicular Access

Streets

Vehicle access to the coast is provided via Carlsbad's system of freeways, regional streets, and local streets. North/south facilities in the Coastal Zone include Interstate 5, El Camino Real, Carlsbad Boulevard, College Boulevard, Paseo del Norte, and Avenida Encinas. East/west facilities include Carlsbad Village Drive, Chestnut Avenue, Tamarack Avenue, Cannon Road, Faraday Avenue, Palomar Airport Road, Poinsettia Lane, Aviara Parkway, and La Costa Avenue. While State Route 78 does not run within the city limits of Carlsbad, it provides a regional east-west freeway just north of Carlsbad that provides vehicle access to the coast from Interstate 15 in Escondido.

Future Street Improvements

Most major streets in the city's Coastal Zone are constructed and provide access to the coast; however, one segment of Poinsettia Lane is not yet constructed (between Cassia Road and Skimmer Court). Construction of the Poinsettia Lane segment is planned by the city as part of its street system; completion of the street will provide direct access to the coast from El Camino Real.

Coastal Visitor Parking

Visitors to Carlsbad's beaches can find numerous opportunities to park a vehicle adjacent to or in close proximity to the beach. Carlsbad offers numerous public beach parking lots and on-street parking along streets directly adjacent to the beach, as well as other nearby public parking lots and street parking. Both public off-street parking and on-street parking are shown in Figure 4-5, Vehicle and Transit Access.

Public Off-Street Parking

Four public parking lots directly serve Carlsbad's beaches, as shown on Figure 4-5. The city owns and maintains the parking lot at the south end of Ocean Street; the state owns and maintains the other parking lots identified on Figure 4-5. These parking lots provide 524 parking spaces for beach visitors, including 62 spaces at Ocean Street, 127 spaces at Tamarack, 90 spaces at Palomar Airport Road, and 245 spaces at South Ponto. Two parking lots offer free parking (Ocean Street and Palomar Airport Road) and two require a fee to park (Tamarack and South Ponto).

Additional public parking lots are located in areas within close proximity to the beach, such as the Village, Barrio, and beach neighborhoods north of Agua Hedionda Lagoon; these nearby areas provide over 600 additional parking spaces in public parking lots.

Public On-Street Parking

Carlsbad Boulevard is located parallel and adjacent to most of Carlsbad's coastline. Along the boulevard, there are an additional 587 on-street parking spaces (parallel and angled parking within the street right-of-way); refer to Figure 4-5.

In addition to Carlsbad Boulevard, there are numerous public streets near the beach, particularly within the neighborhoods north of Agua Hedionda Lagoon, that provide on-street parking within a short walking distance of the beach. A 2016 parking study conducted by the city identified 1,743 on-street parking spaces within the beach area north of Agua Hedionda Lagoon and generally west of the railroad (in addition to the parking available on Carlsbad Boulevard). The study also identified 3,191 on-street parking spaces within the nearby Village and Barrio neighborhoods.

Parking Availability

The Carlsbad Village, Barrio, and Beach Area Parking Study (conducted in May and July 2016) concluded there is adequate parking capacity in the study area (generally north of Tamarack Avenue to the northern city boundary between the beach and Interstate 5). The study found 54 percent of parking spaces throughout the study area were occupied during peak periods, well below a typical parking occupancy threshold of 85-90 percent. While parking occupancy in the study area is generally low, some parking areas close to the beach can experience high occupancy rates during times of peak demand. The parking study found that a number of on-street and off-street facilities close to the beach experienced occupancies greater than 90 percent.

Reduce Parking Demand

In addition to providing off-street and on-street public parking spaces, implementing methods to reduce parking demand will assist in providing public access to the coast. One method to reduce parking demand is transportation demand management (TDM). TDM consists of strategies to reduce the demand for the single-occupant vehicle. Common TDM strategies include carpool programs, car-sharing and bike-sharing programs, flexible work hours, telecommute provisions, shuttle services to nearby transit stations, installation of bicycle facilities (lockers, racks, lanes, showers at employment areas, etc.), or other measures that would reduce the demand to drive; thereby, reducing the demand for parking.

4.5 Transit Access

Transit in Carlsbad includes bus service, ADA paratransit service, COASTER commuter rail, and Amtrak rail service. Indirectly, transit service is also provided by the Sprinter light rail system and Metrolink commuter rail.

- **Bus Service.** Bus service is provided by the North County Transit District (NCTD), which operates the BREEZE and FLEX bus service within Carlsbad. The BREEZE currently operates nine bus routes within the city. Route 101 runs along Carlsbad Boulevard between the city's northern and southern borders. The FLEX provides bus service by reservation; the FLEX travels anywhere within the southern portion of Carlsbad's Coastal Zone (south of Cannon Road).
- **Paratransit Service.** The NCTD also offers LIFT, a curb-to-curb service for eligible disabled persons who are unable to utilize the BREEZE.
- **COASTER Commuter Rail.** This north-south commuter rail transit service connects north San Diego County to the City of San Diego. Carlsbad is served by two COASTER stations, one located north of Poinsettia Lane (just west of Interstate 5) and the other is in the Carlsbad Village area. COASTER stations are shown on Figure 4-5, Vehicle and Transit Access.
- **Sprinter.** This east-west light rail transit service connects Escondido to the Oceanside coast. Although the Sprinter does not run within the city limits, it is just north of Carlsbad. Connections to Carlsbad are offered via the COASTER and BREEZE services and by bicycle.
- **Amtrak.** Amtrak is a national passenger rail service connecting San Diego to San Luis Obispo. Six Amtrak trains per day currently stop in Carlsbad. Amtrak and the COASTER commuter rail share the Poinsettia and Carlsbad Village stations. Amtrak stations are shown on Figure 4-5, Vehicle and Transit Access.
- **Metrolink.** Metrolink is a commuter rail service serving Ventura, Los Angeles, Orange, San Diego, Riverside, and San Bernardino counties. Metrolink's Orange County line connects to the COASTER line in Oceanside.

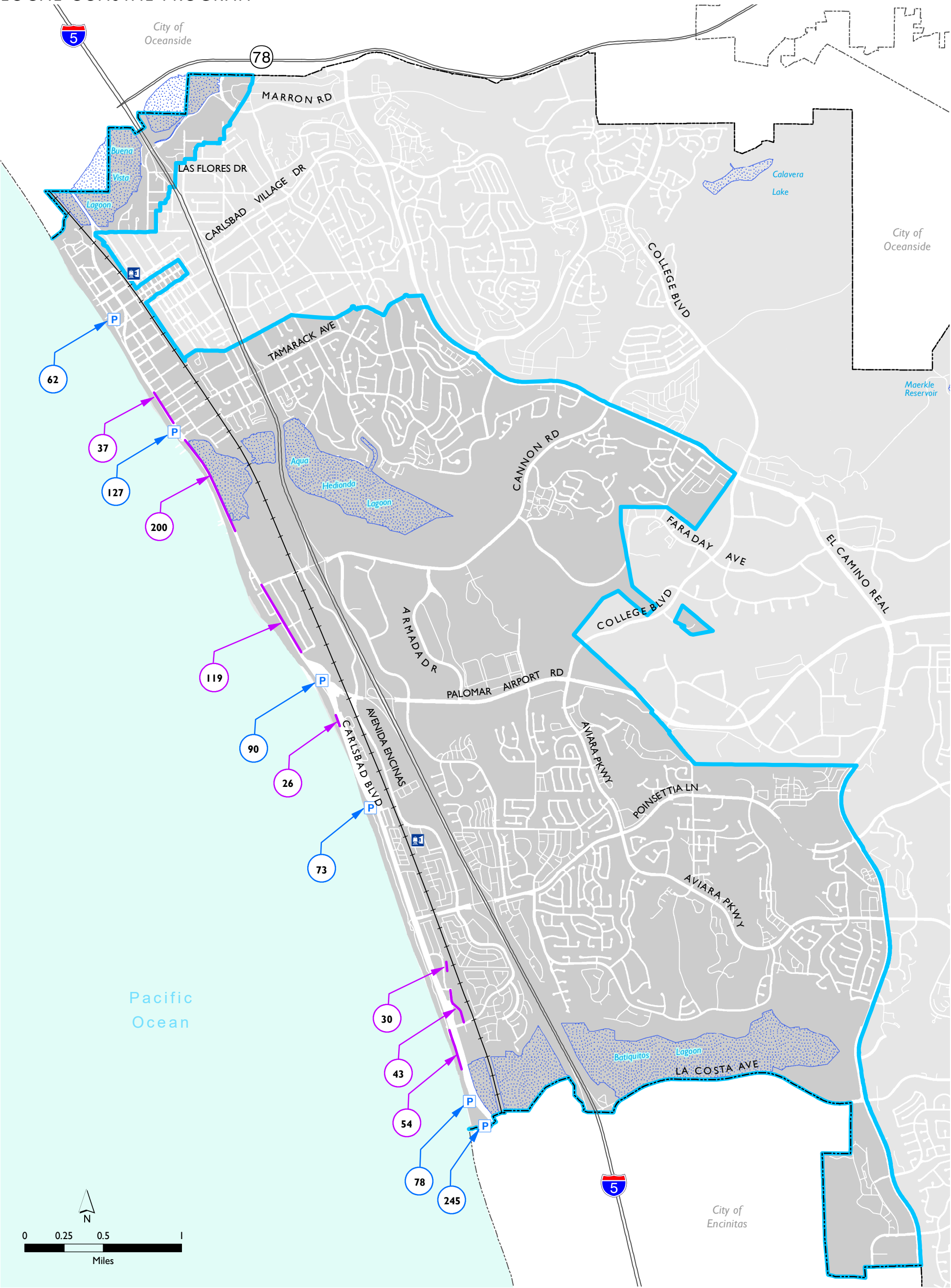
Transit Improvements

Future transit service and improvements in the Coastal Zone will primarily be coordinated by NCTD. Improvements to transit service will continue to advance transit infrastructure and facilitate improved

access to Carlsbad's beaches and coastline. The following is a summary of some of the local and regional planning efforts that focus on improving transit along the coast:

- The city is evaluating opportunities to improve connections to transit and transit alternatives, including opportunities to work with private and public transport providers to improve "first and last mile" connections and frequency of transit services.
- The city is studying the potential of a trolley service that could connect Carlsbad's beaches and coastline to the Village and Barrio areas.
- As part of the North Coastal Corridor Public Works Plan, rail and transit improvements are proposed in Carlsbad. Bus service is proposed to be enhanced along Carlsbad Boulevard; and rail service is proposed to be improved by the addition of 0.75 miles of second mainline rail track across Batiquitos Lagoon from Avenida Encinas to La Costa Avenue. Rail improvements include replacing a wooden trestle bridge, built in the 1930s, with a modern, double-track concrete rail bridge.
- Coastal rail improvements are proposed for the tracks serving the COASTER and Surfliner trains in San Diego County. These proposed improvements include double tracking, bridge replacements, and station improvements. Improvements to the COASTER service (2020 and 2030) are also proposed to increase service and reduce headways. The city and San Diego Association of Governments (SANDAG) are exploring the feasibility of grade-separating a portion of the rail line through Carlsbad.
- Bus route 440 (2050) is a proposed rapid bus that will provide frequent service between Carlsbad and Escondido via Palomar Airport Road. This route will operate with 10-minute headways during peak and off-peak hours. In Carlsbad, this rapid bus route is envisioned to be accommodated through signal priority at intersections.
- Bus route 477 (2050) is a proposed rapid bus that will provide frequent service between Carlsbad and Camp Pendleton via College Boulevard. This route will operate with 10-minute headways during peak and off-peak hours. In Carlsbad, this rapid bus route is envisioned to be accommodated through signal priority at intersections.

CITY OF CARLSBAD
LOCAL COASTAL PROGRAM



Source: Michael Baker International, 2016; SANGIS, 2016; City of Carlsbad, 2016

12/6/2021 JN M:\Data\149652\GIS\MXD\Carlsbad_MXD\LCP_2019\Chapter 4\Figure 4-5 Vehicle and Transit Access 1x17.mxd

LEGEND

- Coastal Zone
- City Limit
- Lagoon
- Railroad
- Vehicle Access (Major Streets and Highways)
- Railroad and Coaster Station

Parking Type

- On Street Parking
- Public Parking Lots

- On Street Parking Spaces
- Parking Lot Spaces

FIGURE 4-5
VEHICLE AND TRANSIT ACCESS

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4.6 Livable Streets

As described above, Carlsbad provides many alternative ways to access the coast (pedestrian trails and paths, bikeways, streets, and transit). These access alternatives promote the objectives of the California Complete Streets Act (2008), which requires cities in California to plan for a balanced, multi-modal transportation system that meets the needs of all travel modes. In 2015, the city established a livable streets approach to planning for the mobility needs of pedestrians, cyclists, and transit users. The livable streets approach recognizes the street as a public space and ensures that the public space serves all users of the system (elderly, children, bicycles, pedestrians, etc.). In the Coastal Zone, pedestrians and cyclists will have access along all streets. Pedestrian and bicycle access are required to meet minimum standards to ensure pedestrians and cyclists are safe and feel encouraged to walk or bike along those streets. The city's livable streets plan also ensures that bus transit is accommodated and encouraged along Carlsbad Boulevard and all streets within ½ mile of the Village and Poinsettia COASTER stations. This emphasis on accommodating the mobility needs of pedestrians, cyclists, and transit users will improve and encourage non-automobile access to the coast.

4.7 Potential Access Restrictions

Physical Barriers

There are physical barriers that impede pedestrian, bicycle, and vehicle access to the coast, including the railroad and Interstate 5 corridors, high-volume/high-speed streets, incomplete or missing street segments, missing sidewalk segments, and missing bikeway segments. Barriers to transit access include limited bus service/routes, particularly limited transit connections between transit services (bus, rail, etc.).

Special Events

While special temporary events draw people to the coast, they can also limit use of the coast by the general public, especially when large areas are utilized for special events during peak coastal use periods (e.g., summer weekends). The City of Carlsbad annually hosts several special events, such as the Carlsbad 5K, Carlsbad Village Faire, and Carlsbad Music Festival. Events are held in public spaces and many occur in the Coastal Zone near the beach. The city manages events to minimize disruption to the affected areas and to ensure adequate access, circulation, and emergency services are provided.

Protecting Coastal Resources

In some cases, the presence of coastal resources requires restrictions or prohibitions to be placed on public access. To protect coastal resources as well as maintain public safety, the city may be selective in the location of access and choose to limit access to passive, low-impact activities, such as observation, education, or research.

Sea Level Rise

For more information on sea level rise, see Chapter 7, Coastal Hazards, and the City of Carlsbad Sea Level Rise Vulnerability Assessment.

In support of this Local Coastal Program Land Use Plan, the City of Carlsbad conducted a sea level rise vulnerability assessment in 2016. The assessment evaluates the degree to which important community assets are susceptible to, and/or unable to accommodate, the adverse effects of projected sea level rise, including expected inundation and flood levels, as well as potential bluff failure.

Coastal flooding and erosion have the potential to impact vertical (access to) and lateral (access along) beach accessways in the city. All types of access (vehicle, bikeway, and pedestrian) could be compromised. Refer to Chapter 7 for further discussion on vulnerable facilities in the City of Carlsbad.

4.8 Coastal Access Policies

The following policies provide additional direction to ensure that development in the Coastal Zone is consistent with Coastal Act requirements related to public coastal access. Some of the following policies are directly related to the Coastal Act sections described in Section 4.1 of this chapter; reference to those Coastal Act sections is noted at the end of the applicable policies.

General

- LCP-4-P.1 Ensure that adequate public coastal access facilities, including vertical and lateral access, trails and bikeways, parking, and streets are distributed throughout the beach area and other coastal destination areas to avoid impacts from overcrowding or overuse by the public of any single area [related to Coastal Act Section 30212.5].
- LCP-4-P.2 Ensure that the location, design and type of coastal access does not result in a significant adverse effect on coastal resource areas. To protect such resource areas, the city may be selective in the location of access and choose to limit access to passive, low-impact activities, such as observation, education, or research.

Vertical and Lateral Pedestrian Access

- LCP-4-P.3 Require that new development, as defined by Coastal Act Section 30212, which is located on property fronting the ocean or a lagoon shoreline, dedicate or provide direct dedication or irrevocable offers to dedicate vertical and lateral public access, except when:
- A. Providing public access would be inconsistent with the need to protect public safety, public rights, the rights of property owners, and natural resources; or
 - B. Agriculture would be adversely affected; or
 - C. Adequate public access exists nearby.
 - D. Dedications or offers of dedication shall be made to the City of Carlsbad, California Coastal Conservancy, another public agency, or other suitable entity. Offers to the city shall be accepted, where feasible. [Related to Coastal Act Sections 30210 and 30212].
- LCP-4-P.4 Require that, where feasible, vertical accessways be a minimum of 10 feet wide.

- LCP-4-P.5 Protect, maintain, and improve existing vertical accessways to ensure adequate and safe public access to the coast.
- LCP-4-P.6 Require that lateral public access easements along ocean shorelines include a minimum of 25 feet in width of dry sand at all times of the year or the entire sandy area if the dry sand area is less than 25 feet in width; the easement shall not extend further inland than any shoreline protective device or toe of coastal bluff or come closer than 10 feet to an existing single-family home.
- LCP-4-P.7 Require that lateral public access easements along lagoon shorelines be a minimum of 25 feet wide and easily identifiable; the entire easement area should be ambulatory. The city may require additional width if it is needed for public safety, buffers, or other purposes. The width of the access easement shall be measured from the mean high tide line (from the wetland boundary for Buena Vista Lagoon).
- LCP-4-P.8 Design accessways to and along lagoons to accommodate pedestrians and bicycles (where bicycle access would be feasible).
- LCP-4-P.9 Provide, to the extent feasible, adequate buffer area and landscaping along accessways to minimize conflicts with adjacent private uses.
- LCP-4-P.10 Require that dedicated public accessways be opened to public use at the time a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway [related to Coastal Act Section 30212].
- LCP-4-P.11 Seek funding opportunities from state, federal, and local agencies to provide additional access points to the beach, the city's three lagoons, and other special resource areas.
- LCP-4-P.12 Encourage and coordinate with the California Department of Parks and Recreation in efforts to:
- A. Improve and maintain existing, ill-defined vertical accessways to South Carlsbad State Beach.
 - B. Construct an additional vertical accessway to South Carlsbad State Beach near the intersection of Carlsbad Boulevard and Palomar Airport Road.
 - C. Improve underutilized portions of state beach lands to provide recreational facilities and additional beach accessways.

- LCP-4-P.13 Ensure that the oceanfront parcel, which is located north of Cannon Road between the state-owned beach to the north and the Terramar neighborhood to the south, is protected for public beach access. A dedicated, improved, and maintained vertical beach accessway from this parcel should be provided to discourage public use/creation of informal vertical beach accessways.
- LCP-4-P.14 Identify opportunities to provide and maintain continuous lateral public access, where feasible and safe to do so, along the south shore of Buena Vista Lagoon, and the north and south shores of Agua Hedionda Lagoon and Batiquitos Lagoon. The provision of such access shall include seeking lateral access across developed lands in addition to requiring such access as conditions of new development. The provision of lateral access along the lagoons shall minimize grading and avoid and/or minimize impacts to environmentally sensitive habitat areas.
- LCP-4-P.15 Require that structures located within 100 feet of a lateral access along Agua Hedionda Lagoon be set back from the nearest point of the public accessway a distance that is at a minimum twice the height of the structure above finished grade. Such structures shall also provide landscaping to minimize views of the structure from the public accessway.
- LCP-4-P.16 Ensure that public accessways to the ocean and lagoons are well-maintained and identified with clear signage. Signage should utilize a consistent design [related to Coastal Act Section 30210].
- LCP-4-P.17 Consider agreements with private organizations or conservancy agencies to address the management, maintenance, monitoring, and liability of accessways.
- LCP-4-P.18 Limit development on the beach to coastal dependent facilities, public recreation and safety facilities, and public facilities that provide public access to the beach. Development on the beach shall be sited and designed to protect environmentally sensitive resources, minimize encroachment onto the beach, and avoid hazardous areas.
- LCP-4-P.19 Prohibit restrictions on public access to the beach, such as signs that deter use of accessways and beaches, and closures or curfews of public beaches, parking lots, or accessways, unless otherwise permitted by a coastal development permit.
- LCP-4-P.20 Ensure that development does not interfere with the public's right of access to the sea where such access is acquired through legislation or use, including, but not limited to,

use of beaches to the first line of terrestrial vegetation [related to Coastal Act Section 30211].

- LCP-4-P.21 Formalize public rights of access acquired through use (prescriptive rights). New development, as defined by Coastal Act Section 30212, that is located on property containing evidence of historic public access to the ocean or a lagoon shoreline (such as informal access trails across private property), shall be subject to the following:
- A. An investigation shall be conducted – by the California Coastal Commission in coordination with the Attorney General – to determine if there is evidence that the historic use of the property is substantial enough to create potential prescriptive rights.
 - B. If the Attorney General acts to protect public prescriptive rights of use, development shall not interfere with or diminish the public prescriptive rights of use.
 - C. If the Attorney General does not act to establish public prescriptive rights of use, development shall provide public access to the shoreline if required by the other applicable policies of this chapter.

Trails and Bikeways

- LCP-4-P.22 Construct and maintain trails per Section 4.3 of this chapter.
- LCP-4-P.23 Obtain an irrevocable offer to dedicate or a permanent easement for multi-use trails on privately owned property where feasible, and where trails are proposed as part of the Carlsbad trail system.
- LCP-4-P.24 Improve trail and bikeway connectivity through construction of new trails and bikeways (including the proposed trails and bikeways shown on Figures 4-2 and 4-5); ensure that future trails and bikeways connect off-road trails and major on-road pedestrian and bicycle routes so that improvements to the trail/bikeway system also contribute to linkages between important sites, such as beaches and lagoons.
- LCP-4-P.25 Participate with other north county coastal communities to establish a regional trail network within the Coastal Zone, including completion of the California Coastal Trail along the north county coast.
- LCP-4-P.26 Ensure that the design, location, construction, and operation of trails and bikeways avoids or minimizes adverse impacts to coastal resources, including sensitive habitats

and species, and agriculture. For example, the design and operation of the future trails on the north side of Cannon Road, south of Agua Hedionda Lagoon (as shown on Figure 4-2), shall avoid or minimize impacts to the existing agriculture on the property.

- LCP-4-P.27 Consider opportunities for future trails and bikeways, in addition to those shown on Figure 4-2, to enhance access to the coast, such as a trail along the water shoreline of Agua Hedionda Lagoon's south shore.

Livable Streets and Connectivity

- LCP-4-P.28 Ensure that streets within the Coastal Zone provide a safe, balanced, multi-modal transportation system (vehicles, pedestrians, bikes, transit), accommodating the needs of all community members and visitors including children, the elderly, and the disabled.

- LCP-4-P.29 Maintain Carlsbad Boulevard, Carlsbad Village Drive, Cannon Road, and Palomar Airport Road as the main routes to and along the coast for all travel modes - pedestrians, cyclists, buses and vehicles. Improvements to these streets shall be subject to the following:

- A. Street improvements that significantly impact coastal access shall be avoided.
- B. Improvements shall target equity and adequate circulation among all modes of travel, including walking, biking, public transportation and private vehicle.
- C. Modification to these streets shall include public access benefit enhancements promoting multi-modal access and safety for all users. Public access benefit enhancements may include, but are not limited to, improved pedestrian and cyclist access, increased access to public transportation services and increased public parking.
- D. Modifications to these streets, which would reduce vehicle capacity resulting in or worsening an existing or future vehicular level of service (LOS) E or below at one or more intersections or segments (with or without proposed development), requires a quantitative analysis and City Council approval.
 - 1. The quantitative analysis shall project the change in travel time along the roadway that results from the project to determine if coastal access is impacted.
 - 2. Available relevant circulation information from Caltrans, SANDAG and other cities along the affected roadways shall be included in the analysis.

3. The quantitative analysis shall be derived from an adequate number of travel time surveys and shall address the prime beach use and peak travel volume periods on at least two weekends between Memorial Day and Labor Day.

- LCP-4-P.30 Ensure that all public streets are designed to safely accommodate pedestrians and cyclists, enabling safe and convenient access the coast, lagoons, and other coastal destinations.
- LCP-4-P.31 Enhance walkability in the Coastal Zone by installing benches and transit shelters and adding landscaping, wayfinding, and pedestrian-scaled lighting. Consider ways to improve rail and freeway overpass areas with lighting, sidewalk improvements, and art installations.
- LCP-4-P.32 Complete Poinsettia Lane between Cassia Road and Skimmer Court; thereby ensuring the street provides direct access to the coast from El Camino Real.
- LCP-4-P.33 Improve and enhance parking, connectivity, access, and utilization for pedestrians and bicycles to COASTER stations, the beach, lagoons, and other open spaces consistent with the Coastal Act and city planning documents.
- LCP-4-P.34 Partner with other agencies and/or developers to improve transit connectivity within Carlsbad's Coastal Zone. A shuttle system could be established that connects people to key destinations along the coast and other destinations like LEGOLAND, hotels, the Village, McClellan-Palomar Airport, and the COASTER and Breeze transit stations. The system could incorporate shuttle service in adjacent coastal cities to maximize connectivity in the Coastal Zone.
- LCP-4-P.35 Ensure that new development is designed to maintain and enhance access to the coast, such as by providing pedestrian and bicycle facilities within the development that connect to nearby transportation corridors, and by enabling the use of transit [related to Coastal Act Section 30252].
- LCP-4-P.36 Engage Caltrans, the Public Utilities Commission, transit agencies, the Coastal Commission, and railroad agency(s) regarding opportunities for improved connections within the city, such as improved connections across the railroad tracks and Carlsbad Boulevard; improved pedestrian and bicycle access coastal streets; and improved beach and coastal recreation opportunities

Parking

- LCP-4-P.37 Identify opportunities to provide additional public parking near beach areas.
- LCP-4-P.38 Work with the state and other agencies to ensure continued availability of beach parking. As part of the Carlsbad Boulevard realignment project, explore feasibility of on-street parking in segments to enhance waterfront accessibility.
- LCP-4-P.39 Ensure that new development provides adequate parking facilities consistent with applicable city parking regulations [related to Coastal Act Section 30252].
- LCP-4-P.40 Ensure that adequate public parking is provided along the South Carlsbad State Beach corridor and consider opportunities to provide public shuttle or similar service to improve access to the coast when parking areas are heavily utilized.
- LCP-4-P.41 Support transportation demand management (TDM) strategies to reduce parking demand related to single-occupancy vehicle trips and to promote walking, biking, transit use, carpooling, etc.
- LCP-4-P.42 Apply the Village and Barrio Master Plan for additional policies and provisions related to parking management strategies in the master plan area.

Other Public Access Policies

- LCP-4-P.43 Work with the California Department of Parks and Recreation to provide beachfront amenities such as water fountains, bathrooms, and showers; ensure these are designed to be unobtrusive and harmonious with the natural character of the area.
- LCP-4-P.44 Provide public access to open space areas where consistent with applicable access restrictions per the Habitat Management Plan, easements, deeds, etc. When natural open lands are privately held, acquire or negotiate for public access if the land could be used for unprogrammed recreational uses. Public access shall not be provided where sensitive resources may be threatened or damaged, where public health and safety may be compromised, or where access would interfere with the managed production of resources, such as agriculture.
- LCP-4-P.45 Prohibit the abandonment of a public accessway (street, easement, etc.) that is located between the sea and the first public road unless an alternate route is made available to

the public granting equal or greater public access to the sea in the same immediate vicinity.

LCP-4-P.46 Ensure that temporary events do not significantly restrict public use or access to the beach, ocean, or lagoons; protect sensitive coastal resources during the entire event.

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Agricultural, Cultural, and Scenic Resources

The Coastal Act places high importance on the protection of agricultural, cultural, and scenic resources. This chapter describes the agricultural, cultural, and scenic resources found in Carlsbad's Coastal Zone and provides policies that guide the city in the protection of such resources.



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5.1 Introduction

The primary Coastal Act policies related to protection of agricultural, cultural, and scenic resources in Carlsbad include the following:

Section 30113 Prime agricultural land

"Prime agricultural land" means those lands defined in paragraph (1), (2), (3), or (4) of subdivision (c) of Section 51201 of the Government Code.

Section 30171.5 City of Carlsbad; local coastal program; mitigation fee for development on non-prime agricultural lands; priorities

- (a) The amount of the mitigation fee for development on nonprime agricultural lands in the coastal zone in the City of Carlsbad that lie outside of the areas described in subdivision (f) of Section 30170 and subdivision (b) of Section 30171 shall be determined in the applicable segment of the local coastal program of the City of Carlsbad, but shall not be less than five thousand dollars (\$5,000), nor more than ten thousand dollars (\$10,000), per acre. All mitigation fees collected under this section shall be deposited in the State Coastal Conservancy Fund.
- (b) All mitigation fees collected pursuant to this section are hereby appropriated to, and shall be expended by, the State Coastal Conservancy in the following order of priority:
 - (1) Restoration of natural resources and wildlife habitat in Batiquitos Lagoon.
 - (2) Development of an interpretive center at Buena Vista Lagoon.
 - (3) Provision of access to public beaches in the City of Carlsbad.
 - (4) Any other project or activity benefiting or enhancing the use of natural resources, including open field cultivated floriculture, in the coastal zone in the City of Carlsbad that is provided for in the local coastal program of the City of Carlsbad.
- (c) The State Coastal Conservancy may establish a special account in the State Coastal Conservancy Fund and deposit mitigation fees collected pursuant to this section in the special account. Any interest accruing on that money in the special account shall be expended pursuant to subdivision (b).
- (d) Not less than 50 percent of collected and bonded mitigation fees shall be expended for the purpose specified in paragraph (1) of subdivision (b).
- (e) Other than to mitigate the agricultural conversion impacts for which they are collected, none of the mitigation fees collected pursuant to this section shall be used for elements of a project which cause that project to be in compliance with this division or to mitigate a project which would otherwise be inconsistent with this division. When reviewing a potential project for consistency with this subdivision, the State Coastal Conservancy shall consult with the commission.

Section 30241 Prime agricultural land; maintenance in agricultural production

The maximum amount of prime agricultural land shall be maintained in agricultural production to assure the protection of the areas' agricultural economy, and conflicts shall be minimized between agricultural and urban land uses through all of the following:

- (a) By establishing stable boundaries separating urban and rural areas, including, where necessary, clearly defined buffer areas to minimize conflicts between agricultural and urban land uses.
- (b) By limiting conversions of agricultural lands around the periphery of urban areas to the lands where the viability of existing agricultural use is already severely limited by conflicts with urban uses or where the conversion of the lands would complete a logical and viable neighborhood and contribute to the establishment of a stable limit to urban development.
- (c) By permitting the conversion of agricultural land surrounded by urban uses where the conversion of the land would be consistent with Section 30250.
- (d) By developing available lands not suited for agriculture prior to the conversion of agricultural lands.
- (e) By assuring public service and facility expansions and nonagricultural development do not impair agricultural viability either through increased assessment costs or degraded air and water quality.
- (f) By assuring that all divisions of prime agricultural lands, except those conversions approved pursuant to subdivision (b), and all development adjacent to prime agricultural lands shall not diminish the productivity of such prime agricultural lands.

Section 30241.5 Agricultural land; determination of viability of uses; economic feasibility evaluation

- (a) If the viability of existing agricultural uses is an issue pursuant to subdivision (b) of Section 30241 as to any local coastal program or amendment to any certified local coastal program submitted for review and approval under this division, the determination of "viability" shall include, but not be limited to, consideration of an economic feasibility evaluation containing at least both of the following elements:

- (1) An analysis of the gross revenue from the agricultural products grown in the area for the five years immediately preceding the date of the filing of a proposed local coastal program or an amendment to any local coastal program.
- (2) An analysis of the operational expenses, excluding the cost of land, associated with the production of the agricultural products grown in the area for the five years immediately preceding the date of the filing of a proposed local coastal program or an amendment to any local coastal program.

For purposes of this subdivision, "area" means a geographic area of sufficient size to provide an accurate evaluation of the economic feasibility of agricultural uses for those lands included in the local coastal program or in the proposed amendment to a certified local coastal program.

- (b) The economic feasibility evaluation required by subdivision (a) shall be submitted to the commission, by the local government, as part of its submittal of a local coastal program or an amendment to any local coastal program. If the local government determines that it does not have the staff with the necessary expertise to conduct the economic feasibility evaluation, the evaluation may be conducted under agreement with the local government by a consultant selected jointly by local government and the executive director of the commission.

Section 30242 Lands suitable for agricultural use; conversion

All other lands suitable for agricultural use shall not be converted to nonagricultural uses unless (1) continued or renewed agricultural use is not feasible, or (2) such conversion would preserve prime agricultural land or concentrate development consistent with Section 30250. Any such permitted conversion shall be compatible with continued agricultural use on surrounding lands.

Section 30244 Archaeological or paleontological resources

Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.

Section 30251 Scenic and visual qualities

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural 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 Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

5.2 Agriculture

Most of Carlsbad's agricultural lands in the Coastal Zone are located along the Cannon Road corridor east of Interstate 5, including the strawberry fields north of Cannon Road and the Flower Fields to the south. Other agricultural uses are located on small individual sites south of Palomar Airport Road.

Protection and Conversion of Agriculture

As shown in Section 5.1, Coastal Act policies address how agricultural lands are to be protected and how they may be converted to other uses. Regarding agricultural lands in Carlsbad, previous city and Coastal Commission actions provide clear direction on how the city's agricultural lands are to be protected and how they may be converted to non-agricultural uses consistent with the Coastal Act. These previous actions include those listed in Table 5-1. All agricultural land in Carlsbad is subject to one or more of the actions described below.

Table 5-1, Actions that Direct Protection and Conversion of Agricultural Lands	
Date	Action
1982	Approval of Carlsbad Local Coastal Program – Agua Hedionda Segment
1984 1987 1996	Coastal Act Section 30171.5 established the Statutory Program
1985 2004	Approval of Carlsbad Agriculture Conversion Mitigation Program
2006	Voter approval of Proposition D - Preserve the Flower and Strawberry Fields and Save Carlsbad Taxpayers' Money

Agua Hedionda Lagoon

The land east of Interstate 5, along Agua Hedionda Lagoon's south shore upland area (Areas 1 and 2 on Figure 5-1), is used for agricultural cultivation and is owned by the San Diego Gas and Electric Company. Strawberries are the most commonly known agriculture crop in this area. In 1982, as part of its approval of the Agua Hedionda segment of the city's Local Coastal Program, the Coastal Commission evaluated existing agriculture use pursuant to the Coastal Act. The Coastal Commission approved a mixed-use approach to protecting agriculture in this area, allowing the 49-acre parcel adjacent to the east side of Interstate 5 (Area 1 on Figure 5-1) to convert to urban uses provided the remaining agricultural lands (Area 2 on Figure 5-1) are protected. The objective of the mixed-use approach is to protect the maximum amount of land for agricultural use, while recognizing the constraints affecting the local agricultural economy related to soil classifications (soils in this area are not prime soils), urban/agriculture conflicts, and high land costs.¹

¹ California Coastal Commission Staff Recommendation on the City of Carlsbad Agua Hedionda Land Use Plan Segment Resubmittal (Public Hearing and Commission Action for the Meeting of August 24 – 27, 1982).

This Local Coastal Program continues to protect the agricultural lands along the south shore of Agua Hedionda Lagoon consistent with the mixed-use approach approved by the Coastal Commission in 1982. The lands required to remain protected for agricultural use are also subject to Proposition D – Preserve the Flower and Strawberry Fields and Save Carlsbad Taxpayers’ Money, which provides further guidance on protecting this area for agricultural use (see below for more information on Proposition D).

Coastal Act Section 30171.5 – Statutory Program

In 1984, Assembly Bill 3744 (Bradley) was signed into law. The bill deleted the provisions of an agricultural subsidy program that applied to the previous Local Coastal Program Mello II segment (see Coastal Act Section 30171.2). The bill also added Public Resource Code Section 30171.5 to establish the parameters of an agriculture conversion mitigation fee program for development of non-prime agricultural lands located outside of the previous Local Coastal Program Mello I and Mello II segments. This conversion program became known as the “statutory program” and is administered by the California Coastal Conservancy. Coastal Act Section 30171.5 was amended in 1987 (AB 1291) and 1996 (AB 2659).

The statutory program requires payment of a fee to mitigate the conversion of agricultural lands and specifies that the fee can be used only for restoration of Batiquitos Lagoon, an interpretive center at Buena Vista Lagoon, access to public beaches, and other projects that enhance the use of natural resources, including open field cultivated floriculture (refer to Section 5.1 for the full text of Coastal Act Section 30171.5).

Most agricultural lands that were subject to the statutory program have converted to other uses. The agricultural lands described above, located on the Agua Hedionda Lagoon’s south shore upland area, are the only remaining agricultural lands that are subject to the Statutory Program (refer to Areas 1 and 2 on Figure 5-1).

Carlsbad Agriculture Conversion Mitigation Program

In 1985, the Coastal Commission approved the city’s agriculture conversion mitigation program, that allows the conversion of agricultural lands to urban uses. The program was originally approved as part of the previous Local Coastal Program Mello I and Mello II segments. Figure 5-1 identifies the agricultural lands that the program applies to. The city’s agriculture conversion program does not apply to the agricultural lands on the south shore of Agua Hedionda Lagoon, north of Cannon Road. As described above, conversion of these agricultural lands is regulated by Coastal Act Section 30171.5.

The city’s agriculture conversion program was originally modeled after Coastal Act Section 30171.5 and identifies mitigation options that include 1) preservation of prime agricultural land elsewhere in

the statewide Coastal Zone; 2) a determination of agriculture feasibility; or 3) payment of an agricultural conversion mitigation fee (\$10,000 per acre converted).

All agricultural lands that have converted to urban uses, pursuant to the city's agriculture conversion program, have done so by payment of a mitigation fee. From 1985 to 1999, the mitigation fees were deposited in a fund managed by the California Coastal Conservancy. In 1999, the conservancy transferred the funds into an account administered by the city. In 2005, the Local Coastal Program was amended to officially designate the city as the administrator of the fund. At that time, the agriculture conversion program was amended to revise the requirements for use of the funds and require that an advisory committee provide recommendations to the Carlsbad City Council on distribution of the funds.

The agriculture conversion mitigation program, as specified in the policies of this chapter, identifies how the mitigation funds may be used. Mitigation funds may be used to purchase or improve agricultural lands to support continued agriculture production, restore the coastal and lagoon environments, improve lagoon nature centers, and restore beaches for public use.

As of December 2017, approximately \$6.2 million in agriculture conversion mitigation fees have been collected and an additional \$3.5 million have been earned in interest, resulting in a total of \$9.7 million in mitigation funds. From 2007 through 2017, the City Council has awarded \$8.5 million in grant funds. Table 5-2 lists examples of the projects that have been awarded mitigation fee funds.

Table 5-2, Types of Projects Awarded Agriculture Conversion Mitigation Fee Funds

In alphabetical order

Aquaculture enhancement	Floral Trade Center improvements
Beach bluff restoration	Flower Fields projects and improvements
Beach sand nourishment	Lagoon nature center improvements
Farmworker housing development	Lagoon sediment monitoring
Field crop and orchard installation	Lagoon trails improvements

Cannon Road Open Space, Farming, and Public Use Corridor

In 2006, Carlsbad voters approved Proposition D – Preserve the Flower and Strawberry Fields and Save Carlsbad Taxpayers' Money. The area affected by Proposition D is referred to as the Cannon Road Open Space, Farming, and Public Use Corridor and, as shown in Figure 5-1, is located along Cannon Road east of Interstate 5. As of 2017, lands in the corridor consist primarily of open space and farming operations, including the Flower Fields and strawberry fields; approximately 49 acres of the existing strawberry fields located adjacent to the east side of Interstate 5 are not within the corridor and are not subject to Proposition D.

Although the Flower Fields are protected and restricted to agricultural use (pursuant to the Carlsbad Ranch Specific Plan, a part of the city's Local Coastal Program), Proposition D requires the city to utilize all existing programs and land use protections and explore other possible new mechanisms to keep the Flower Fields in production. Proposition D also requires the city to ensure that other farming uses within the corridor can continue if it is economically viable for the landowner.

Proposition D recognizes that agricultural production of these lands may become economically infeasible for the land owners, due to high land values, high water costs, urban/agriculture conflicts, and non-prime soils that limit agricultural use. If it becomes infeasible to continue agriculture on properties within the corridor, Proposition D specifies that those agricultural lands may convert only to open space uses. Residential uses are not permitted, and commercial and industrial uses are not permitted unless normally associated with agriculture operations or open space uses.

The area within the corridor is recognized for its significant open space and public access opportunities. Proposition D identified that an interconnecting public trail through the area preferably linking the south shore of Agua Hedionda Lagoon with the existing Flower Fields could greatly enhance public access in the area. Proposition D also identified that park and recreation uses that allow public gathering spaces and are compatible with other open space uses could offer opportunities for more public access and enjoyment of the area.

Proposition D promotes the priorities of the Coastal Act within the Cannon Road corridor by supporting the continuation of agriculture; if agriculture becomes infeasible, the Proposition D limits future use of the lands to open space uses that enhance public access to the coast.

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CITY OF CARLSBAD

LOCAL COASTAL PROGRAM



Source: Michael Baker International, 2016; SANGIS, 2016; City of Carlsbad, 2019

12/6/2021 JN M:\data\149652\GIS\MXD\Carlsbad_MXD\LCP_2019\Chapter 5\Figure 5-1A Agriculture in the Coastal Zone 11x17.mxd

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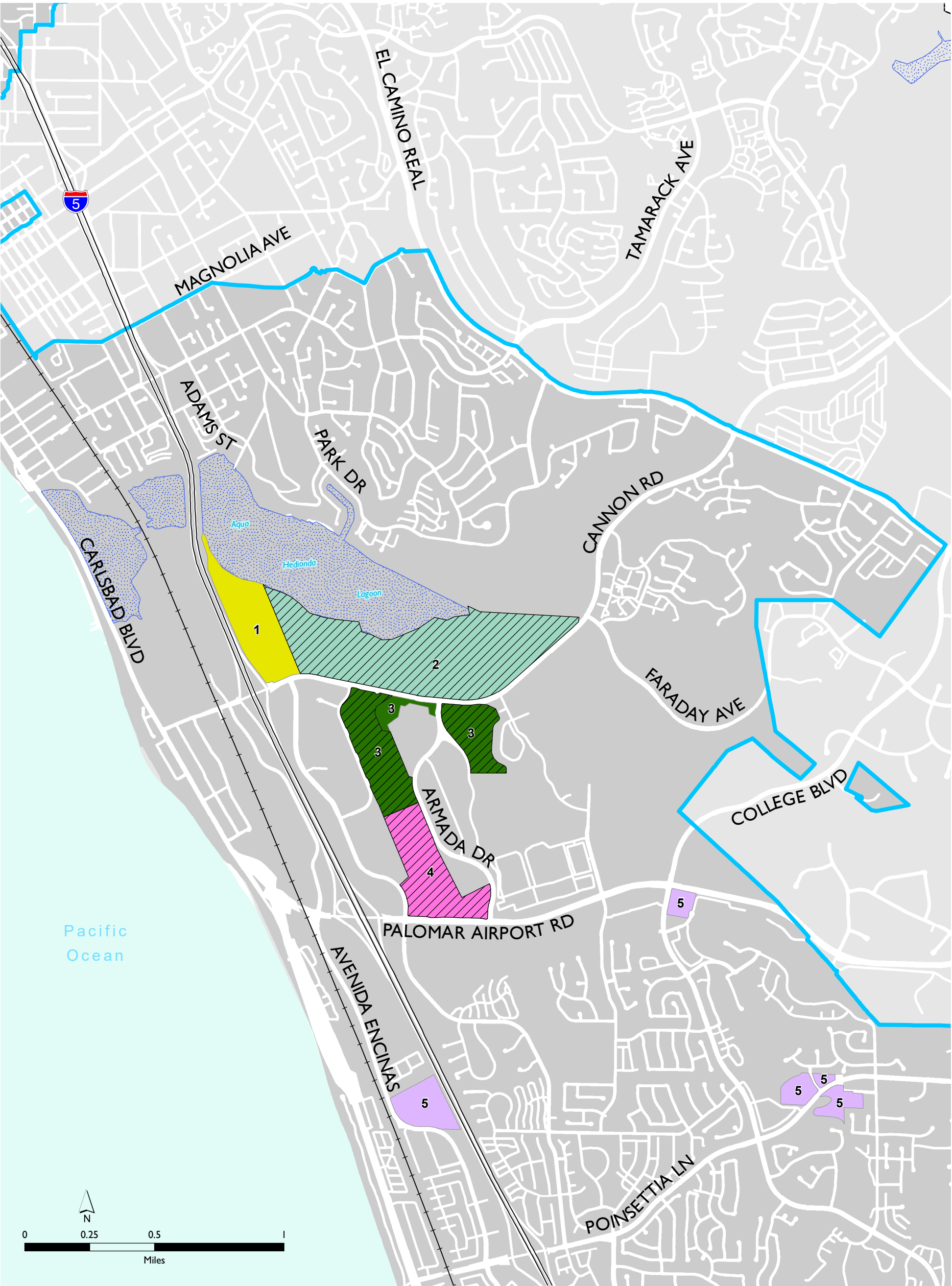
- | | |
|--------------|---|
| Coastal Zone | Subject to Coastal Act Section 30171.5 |
| City Limit | Subject to Coastal Act Section 30171.5 |
| Lagoon | Cannon Road Open Space, Farming and Public Use Corridor |
| Railroad | |

FIGURE 5-1A
AGRICULTURE IN THE COASTAL ZONE

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CITY OF CARLSBAD

LOCAL COASTAL PROGRAM



Source: Michael Baker International, 2016; SANGIS, 2016; City of Carlsbad, 2019

12/6/2021 11:01 AM M:\Data\149652\GIS\MXD\Carlsbad_MXD\LCP_2019\Chapter 5\Figure 5-1B Agriculture in the Coastal Zone 11x17.mxd

LEGEND

- Coastal Zone
- City Limit
- Lagoon
- Railroad

- 1 Subject to Coastal Act Section 30171.5
- 2 Subject to Coastal Act Section 30171.5
- 3 Subject to Carlsbad Agricultural Conversion Mitigation Program*
- 4 Flower Fields
- 5 Subject to Carlsbad Agricultural Conversion Mitigation Program*

- Cannon Road Open Space, Farming and Public Use Corridor

* Some of these lands may not currently be utilized for agriculture. However, these lands were agriculture lands when the city's agriculture conversion program was established; therefore, conversion of these lands to urban uses must be mitigated pursuant to the Agriculture Conversion Mitigation Program.

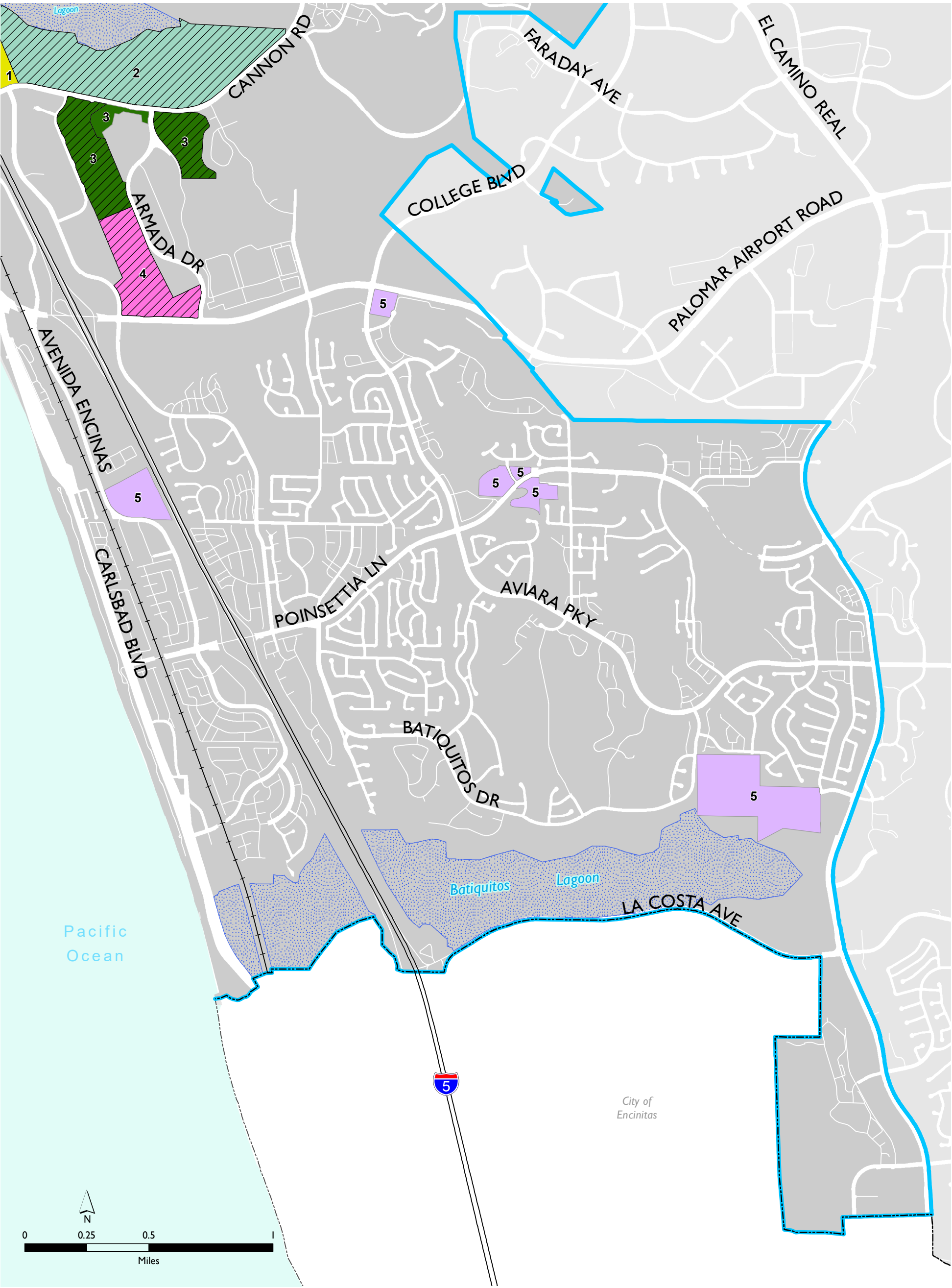
FIGURE 5-1B

AGRICULTURE IN THE COASTAL ZONE

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CITY OF CARLSBAD

LOCAL COASTAL PROGRAM



Source: Michael Baker International, 2016; SANGIS, 2016; City of Carlsbad, 2019

12/6/2021 J:\M\Mapdata\49652\GIS\MXD\Carlsbad_MXD\LCP_2019\Chapter 5\Figure 5-1C Agriculture in the Coastal Zone 11x17.mxd

LEGEND

- Coastal Zone
- City Limit
- Lagoon
- Railroad
- 1 Subject to Coastal Act Section 30171.5
- 2 Subject to Coastal Act Section 30171.5
- 3 Subject to Carlsbad Agricultural Conversion Mitigation Program*
- 4 Flower Fields
- 5 Subject to Carlsbad Agricultural Conversion Mitigation Program*

Cannon Road Open Space, Farming and Public Use Corridor

* Some of these lands may not currently be utilized for agriculture. However, these lands were agriculture lands when the city's agriculture conversion program was established; therefore, conversion of these lands to urban uses must be mitigated pursuant to the Agriculture Conversion Mitigation Program.

FIGURE 5-1C
AGRICULTURE IN THE COASTAL ZONE

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5.3 Paleontological and Cultural Resources

Coastal Act Section 30244 addresses protection of archaeological or paleontological resources that are significant to California, stipulating that where development would adversely impact these resources, reasonable mitigation measures shall be required.

Paleontological Resources

Paleontological resources are unrelated to humankind and include direct remnants of ancient life, such as fossilized bones of vertebrate animals like whales and bison, fossilized invertebrate animals like snail shells and crabs, or fossilized plant parts like pine cones and leaves. In addition, paleontological resources include indirect remnants of ancient life such as fossilized tracks and burrows. Vertebrate fossils are less commonly found compared with invertebrate and plant fossils. The formation of fossils typically involves the rapid burial of plant or animal remains and the formation of casts, molds, or impressions in the associated sediment (which subsequently becomes sedimentary rock). Because of this, the potential for fossil remains in each geologic formation can be predicted based on known fossil occurrences from similar (or correlated) geologic formations in other locations.

Carlsbad's Coastal Zone contains several geologic formations with a sequence of marine and non-marine sedimentary rock units that record portions of the last 140 million years of Earth's history. As shown in Figure 5-2, the primary geologic units in the city's Coastal Zone consist of alluvial floodplain deposits, paralic deposits, marine beach deposits, paralic estuarine deposits, the Santiago Formation, the Delmar Formation, and some metasedimentary and metavolcanic rocks.

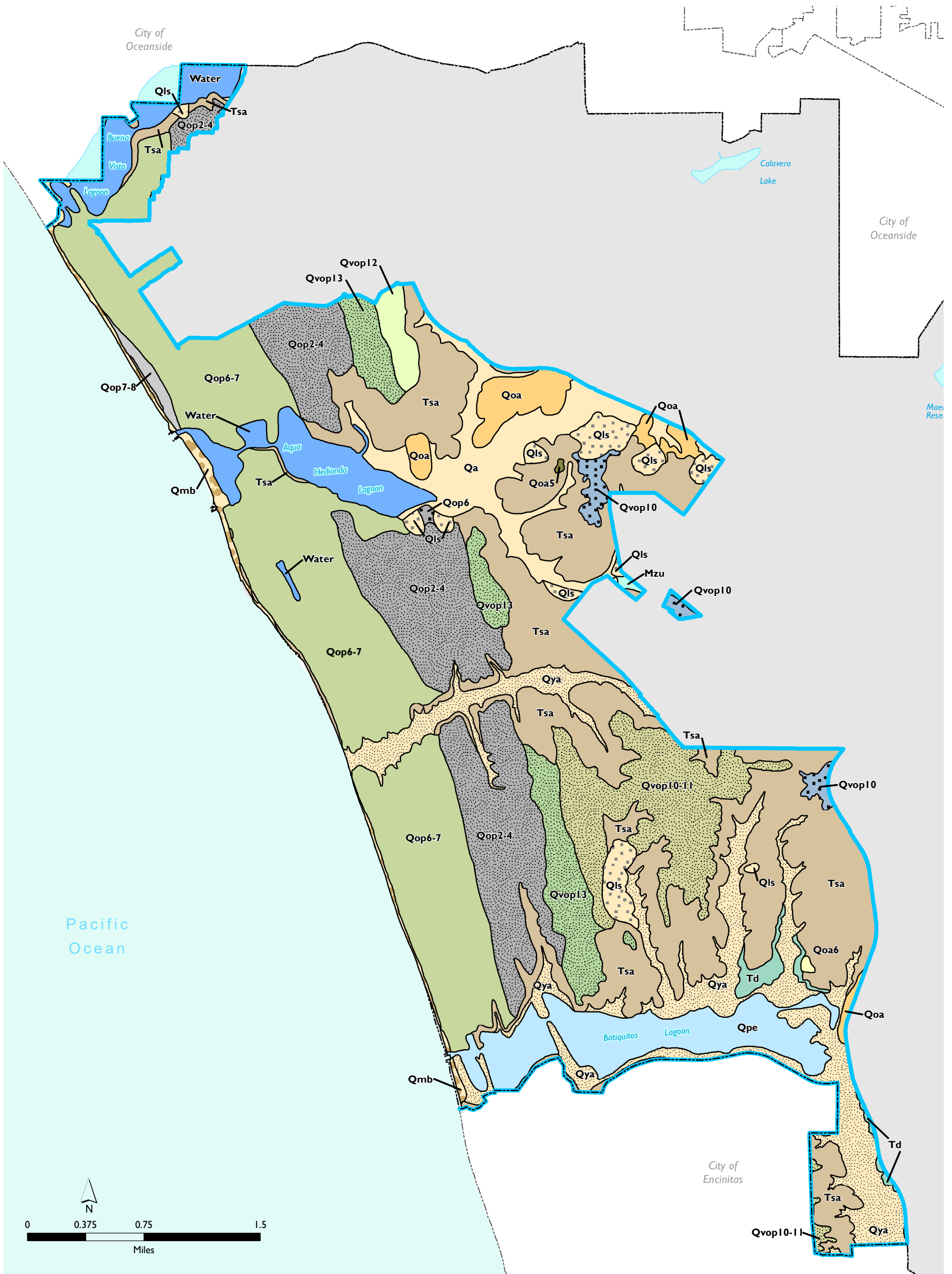
Carlsbad's Coastal Zone contains abundant alluvial and floodplain deposits from the early Pleistocene and Holocene (about 2 million years ago to present). The Coastal Zone also contains many paralic deposits from the Pleistocene (approximately 2 million to 10,000 years ago). These paralic deposits contain intertwined marine or continental sediments. Based on grain size and depositional history, most of these units have low to moderate fossil potential.

The Santiago Formation (49-45 million years ago) and the Delmar Formation (49-47 million years ago) are primarily middle Eocene (49-38 million years ago) sandstones and siltstones. The Santiago Formation contains lenses of fossiliferous claystone and siltstone. The accompanying Delmar Formation is a sandy claystone interbedded with sandstone. This formation is not well known for producing fossils, but it has the potential to yield specimens. Before the Eocene, the Carlsbad area was a shallow sea (approximately 74 million years ago). This sea deposited the sands and silts found in the major formations from this time.

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



CITY OF CARLSBAD

LOCAL COASTAL PROGRAM



Source: Michael Baker International, 2018; SANGIS, 2017; City of Carlsbad, 2017

LEGEND

- | | | |
|---|--|---|
|  Coastal Zone |  Qoa: old alluvial flood-plain deposits, undivided (late to middle Pleistocene) |  Qvop12: very old paralic deposits, unit 12 (middle to early Pleistocene) |
|  City Limit |  Qop6-7 (old paralic deposits, units 6-7 (late to middle Pleistocene) |  Qvop10-11: very old paralic deposits, units 10-11 (middle to early Pleistocene) |
| Geology In Coastal Zone Only (as modified from Kennedy and Tan, 2007) | | |
|  Qa: alluvial flood-plain deposits (late Holocene) |  Qoa6: old alluvial flood-plain deposits, unit 6 (late to middle Pleistocene) |  Qvop10 very old paralic deposits, unit 10 (middle to early Pleistocene) |
|  Qmb: marine beach deposits (late Holocene) |  Qoa5: old alluvial flood-plain deposits, unit 5 (late to middle Pleistocene) |  Td: Delmar Formation (middle Eocene) |
|  Qpe: Paralic estuarine deposits (late Holocene) |  Qop7-8: old paralic deposits, units 7-8 (late to middle Pleistocene) |  Tsa: Santiago Formation (middle Eocene) |
|  Qya: young alluvial flood-plain deposits (Holocene and late Pleistocene) |  Qop6: old paralic deposits, unit 6 (late to middle Pleistocene) |  Mzu: Metasedimentary and metavolcanic rocks, undivided (Mesozoic) |
|  Qls: landslide deposits (Holocene and Pleistocene) |  Qop2-4: old paralic deposits, units 2-4 (late to middle Pleistocene) |  Water Body |
| |  Qvop13: very old paralic deposits, unit 13 (middle to early Pleistocene) | |
- FIGURE 5-2

ts, units 2-4 (late to middle Pleistocene)

deposits, unit 13 (middle to early Pleistocene)

FIGURE 5-2

GEOLOGY IN THE COASTAL ZONE

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Cultural Resources

Cultural resources are broadly defined as anything made, modified, or moved by a human in the past. Cultural resources can also be described in terms of time period (e.g., prehistoric and historic), culture (e.g., Native American or Euro-American), physical state (archaeological, built environment, landscape level, and sacred/religious), and significance, defined as meeting certain criteria and age thresholds specified in state and federal regulations. Places that meet age thresholds and criteria for listing in the California Register of Historical Resources or the National Register of Historic Places are protected by the Coastal Act. In addition, a resource that is considered sacred, religious, spiritual, or an object of cultural value to Native American Tribes and meets California Register criteria, regardless of time period, is a “Tribal Cultural Resource” that is given special and separate consideration under state and federal law.

In terms of time period, prehistoric cultural resources are the remnants of activities carried out by the native population of the area (Native Americans) prior to the arrival of Europeans in California. Native American occupation is known to extend back at least 10,000 years, representing a Native American “history” that long predates the arrival of Europeans. Historic cultural resources are the structures or material remains of activities carried out by people after the arrival of Europeans in the 1700s.

Native American Cultures in Carlsbad

The City of Carlsbad is in a culturally rich region, and has long been home to, or within traditional use areas of, Native American cultures. The cultural history of Carlsbad is complex, with two main Native American cultures, the Luiseño and the Kumeyaay (or Diegueños). The Luiseño occupied most of the area drained by the San Luis Rey and Santa Margarita Rivers, east toward Pala and south to Agua Hedionda Lagoon. The Kumeyaay occupied the southern part of Carlsbad, southeast into Imperial County and south of the United States into Baja California. From west to east, the Kumeyaay occupied the coast, coastal hills, mountains, and desert.

Native American History in Carlsbad

Most archaeologists agree that about 10,000 years ago, warming temperature resulted in changes to the way people lived. Hunting of smaller game and an increased reliance on plant gathering characterized local communities. Material artifacts from archaeological sites spanning the San Dieguito Complex, Encinitas Tradition, Milling Stone Period, and San Luis Rey phases include points (formerly called “arrowheads”), knives, scrapers, engraving tools, manos and metates, shell middens, stone and shell accessories, ceramics and pictographs. From 10,000 years before present (B.P.) to about 1,000 B.P., people primarily lived in small mobile groups. Between 1,000 and 150 B.P. in what is now northern San Diego County, people occupied camps on hills along the San Luis Rey and Santa Margarita Rivers that were re-used seasonally by the same groups. Native Americans used the rivers for travel corridors

between the coast and interior valleys (Temecula and San Jose Valleys). In the San Luis Rey phases, permanent settlement communities appeared in linear arrangements in areas with access to a water source and acorns. Re-occupied seasonal camps continued to be established, and a full range of subsistence, social, and ceremonial activities occurred at the permanent residential sites. Over time, the residential settlements began to consolidate into large villages near reliable water sources. The late San Luis Rey phase represented the antecedents of the Luiseño.

The Luiseño lived in sedentary and autonomous village groups, typically in valleys along streams or on the coast, with specific surrounding territory for hunting, gathering, and fishing. Social organization was based on patrilineal and patrilocal lineages. Houses were circular with conical roofs and were made of a framework of logs covered by tules, sedge, or bark and a layer of earth. The floors of the houses were about two feet below the ground surface. Houses had a central fireplace, but most cooking was done outside. Other structures in the villages included sweathouses, ramadas, granaries, and ovens; caves and rock shelters were also used for various activities. When the Spanish arrived in southern California in 1769, it is estimated that there were 50 Luiseño villages with a population of about 200 each, suggesting a total population of about 10,000. Some Luiseño Tribe members were converted and taken to Mission San Juan Capistrano. Hundreds of Luiseño were converted and brought to Mission San Luis Rey, although the friars allowed many to remain in their villages.

The Kumeyaay (also known as Tipai and Ipai) were Yuman speakers (part of the Hokan language family) who occupied San Diego County. The Kumeyaay were loosely organized into patrilineal groups that used certain areas for hunting and gathering, but apparently did not control a bounded and defended territory like the Luiseño. In addition, members of several different groups usually lived in the same residential base, unlike the Luiseño where a single lineage controlled a village and its territory. Kumeyaay lived in residential bases during the winter and subsisted on stored resources. No permanent houses were built, and temporary brush shelters were not reused the next year. The winter residential bases provided the location for social and ceremonial activities in addition to subsistence. The Kumeyaay were geographically and linguistically divided into western and eastern groups. The western and eastern Kumeyaay spoke two different dialects, but the two groups met in the mountains in the fall where they gathered black oak acorns, traded, and held ceremonies. It is estimated that the Kumeyaay population was about 9,000 at the time of European contact in 1769. Beginning in 1775, the semi-nomadic life of the Kumeyaay began to change primarily because of the influence of the Spanish missions, when they were forced to adopt a sedentary lifestyle.

Consultation with Native American Tribes

Senate Bill (SB) 18

SB 18 became effective in March 2005 and requires city and county governments to consult with California Native American Tribes early in the planning process with the intent of protecting traditional tribal cultural places. The purpose of involving tribes early in planning efforts is to allow consideration of tribal cultural places in the context of broad local land use policy before project-level land use decisions are made by a local government. As such, SB 18 applies to the adoption or substantial amendment of general or specific plans, and the designation of open space areas that may contain cultural resources. The process by which consultation must occur in these cases was published by the Governor's Office of Planning and Research through its Tribal Consultation Guidelines: Supplement to General Plan Guidelines (November 14, 2005).

Assembly Bill (AB) 52

AB 52 became effective in July 2015. Recognizing that California Native American Tribes are experts about their tribal cultural resources and heritage, AB 52 amended the California Environmental Quality Act (CEQA) to require that lead agencies initiate consultation with tribes at the commencement of the CEQA process to identify "tribal cultural resources," as defined by CEQA. Furthermore, because a substantial adverse change to a tribal cultural resource is considered a significant impact on the environment under CEQA, consultation is required to develop appropriate avoidance, impact minimization, and mitigation measures.

A lead agency must provide notice to any California Native American Tribe that has requested notice of projects proposed by the lead agency. For any tribe that responds to the notice within 30 days of receipt with a request for consultation, the lead agency must consult with the tribe. Topics that may be addressed during consultation include the presence or absence of tribal cultural resources, the potential for the project to cause a substantial adverse change to tribal cultural resources, type of environmental document that should be prepared, and possible mitigation measures and project alternatives.

City Council Policy No. 83

City Council Policy No. 83 became effective on March 1, 2016. The purpose of the policy is to recognize the city's "responsibility to protect with improved certainty the important historical and cultural values of current tribal cultural resources within the city limits and to establish an improved framework for the city's consultation with Native American tribes that are traditionally and culturally affiliated with the City of Carlsbad, including the San Luis Rey Band of Mission Indians."

City Council Policy No. 83 was developed in consultation with the San Luis Rey Band of Mission Indians and, to the extent allowed under the authority of the city, urges city and private projects to be designed to avoid or substantially reduce impacts to tribal cultural resources, as defined in CEQA.

Euro-American History in Carlsbad

In 1769, Spanish explorers of the Portolá Expedition first arrived from Mexico and camped near Agua Hedionda Lagoon. Franciscan friars established missions to convert, educate, and control the native population. Mission San Diego was established to convert the Kumeyaay. Mission San Luis Rey was established in 1798 on the lower San Luis Rey River to convert the Luiseño. With Mexican independence from Spain in 1821, land ownership and land use patterns evolved, igniting the Rancho period in California's history where large tracts of land were granted to settlers. Much of Carlsbad was part of Rancho Agua Hedionda, a 13,000-acre ranch. The holdings extended from the Pacific Ocean east toward Vista, and from the north side of Agua Hedionda Lagoon south to Leucadia in present-day Encinitas.

After Mexico lost the Mexican-American War in 1848, the U.S. Government took control of California. The rapid population increase brought about by the Gold Rush of 1849 allowed California to become a state in 1850. After the Civil War, the development of railroads had an enormous effect on the development of California and the western United States. The selected route of the railroad determined the future of many coastal town sites, including Carlsbad. The town began as a station (known as Frazier's Station in 1884) on the new California Southern Railroad. The railroad stood as the town's center in Carlsbad Village, and the town grew several blocks in all directions.

John Frazier arrived in the area in 1883 and dug wells to provide water for steam locomotives. Frazier and several businessmen formed the Carlsbad Land and Mineral Water Company in 1886, which laid out a town site and initiated speculative development. The newly formed town was christened Carlsbad because the mineral water found by Frazier contained the same mineral properties as the famous Spa No. 7 in Karlsbad, Bohemia. The city experienced a long period of declining growth between 1890 and 1914 due to drought and national economic problems.

Population and economic growth resumed in the late 1910s, spurred by agriculture. In 1914, the South Coast Land Company bought up all the remaining lands of the Carlsbad Land and Mineral Water Company, as well as other adjoining properties. The new company drilled wells to provide water for farming. New settlers arrived and bought farmland, growing winter vegetables, grains, and poultry. During the 1920s, Carlsbad became a major avocado and flower bulb production area. During this time, millions of Mexicans fled north to seek refuge during the Mexican Revolution. Those who settled in Carlsbad created the foundation for the town's first neighborhood, which today is called the Barrio.

Like the rest of the country, Carlsbad felt the effects of the Great Depression in the 1930s, during which numerous businesses failed and many residents left the area. After WWII, however, suburban development began to spread throughout southern California. After a vote about whether to join Oceanside or incorporate, Carlsbad incorporated as a city in 1952. Following a series of annexations beginning in the 1960s, Carlsbad has grown gradually in area and population.

Some buildings and sites remain from the late 19th and early 20th century history of Carlsbad. Within the Coastal Zone, there are two historic resources listed on the National Register of Historic Places and/or the California Register of Historical Resources. Refer to Table 5-3 for these sites.

Table 5-3, <i>Carlsbad Historic Resources in the Coastal Zone</i>			
Name/Description	Address	NRHP¹	CRHR²
Carlsbad Santa Fe Depot	400 Carlsbad Village Dr.	X	
Frazier's Well/Alt Karlsbad	2802 Carlsbad Blvd.		X

1. National Register of Historic Places
2. California Register of Historic Resources

5.4 Scenic Resources

As stated in Section 5.1, the objective of Coastal Act Section 30251 is to protect scenic resources. Section 30251 requires that development be sited and designed to protect views to and along the ocean and other scenic coastal areas; that new development minimize the alteration of natural landforms; and that development is sited and designed to be visually compatible with the character of surrounding areas.

Carlsbad's Scenic Coastal Resources

Carlsbad's unique physical setting provides residents and visitors with spectacular coastal views, including those of the open waters of the ocean and lagoons, sandy beaches, coastal bluffs, and the natural habitat and hillsides surrounding the lagoons (coastal viewsheds). Most of Carlsbad's ocean coastline and lagoon areas are visible from public streets, trails, and parks (public scenic viewing areas). Carlsbad's important coastal viewsheds and public scenic viewing areas are described in Table 5-4, and are depicted in Figure 5-3.

The policies of this Local Coastal Program specify that new development, on the sites identified on Figure 5-3, should not interrupt views of a coastal viewshed from public scenic viewing areas. Where this is not feasible, new development must minimize view impacts through siting and design measures.

Quality of Scenic Coastal Resources

An important part of protecting public views of a coastal viewshed is protecting the scenic quality of coastal resources within the viewshed. In addition to the ocean and lagoons, other scenic coastal resources include sandy beaches, coastal bluffs, and the wetlands and natural hillsides surrounding the lagoons. These features contribute to Carlsbad's unique visual character.

The policies of this Local Coastal Program place parameters on development to ensure protection of the public views and quality of scenic resources by establishing restrictions on the location of buildings, landscaping, signs, and lighting, as well as requiring development to minimize impacts to natural hillsides.

While not listed as Historic Resources, there are many cultural resources that add to the charm and character of the Village and Barrio area, some of those include: Twin Inns, the structures in McGee Park, the Pizza Port building, the Army Navy Academy, and the bungalows throughout the area, just to name a few.

Table 5-4, Public Scenic Viewing Areas

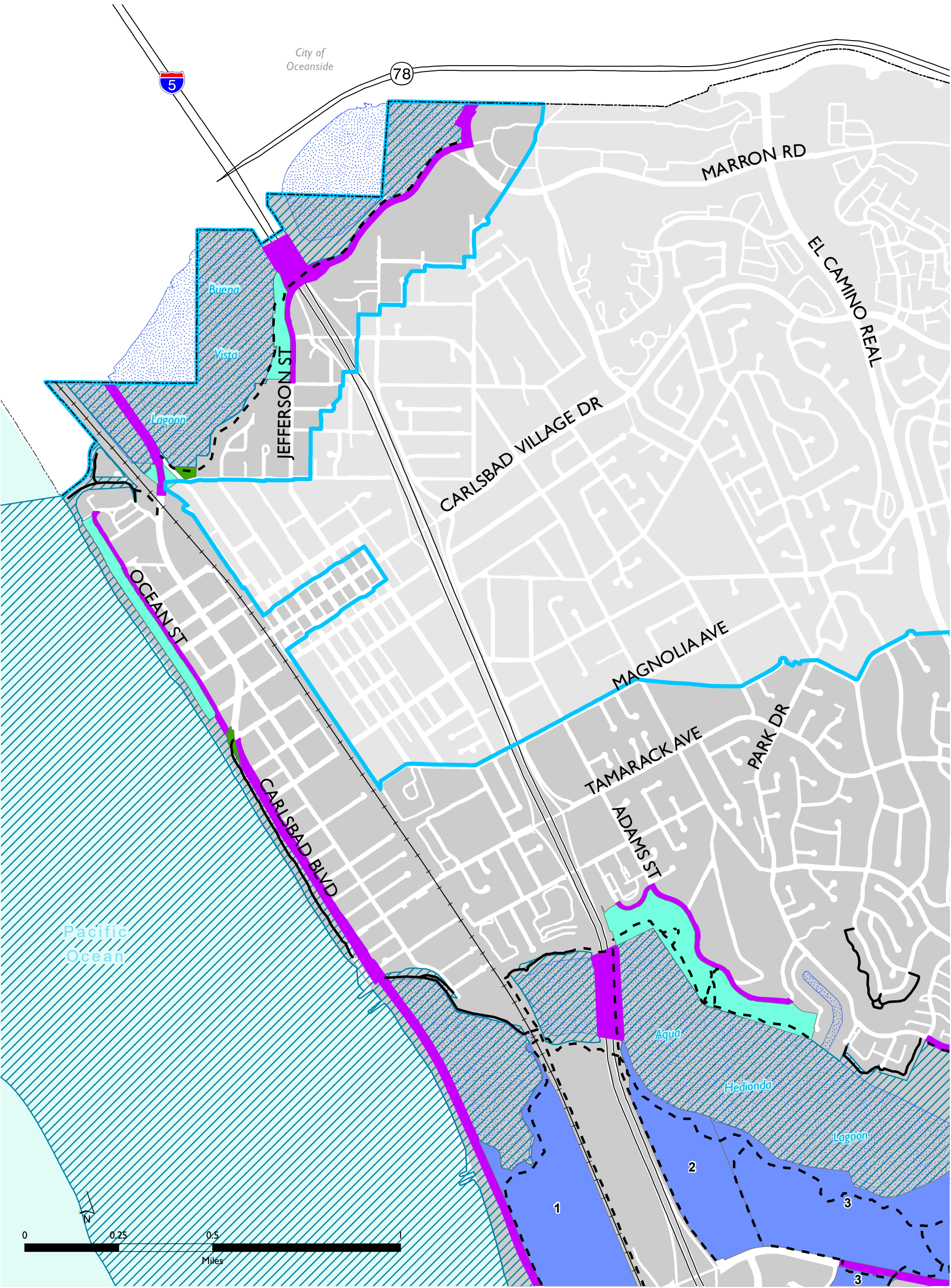
Public Streets		
Description	Location	Provides Views To
Jefferson Street	From: Northern city boundary (at Hwy. 78) To: Buena Vista Way	Buena Vista Lagoon
Ocean Street	From: Public beach access entrance (at Rue Des Chateaux) To: Southern street terminus (at public beach parking lot)	Pacific Ocean and beaches
Carlsbad Boulevard	From: Northern city boundary To: Northern railroad right-of-way	Buena Vista Lagoon
	From: Pine Avenue To: Northern property boundary of 5001 Tierra Del Oro Street (approx. 635 feet north of Cannon Road)	Pacific Ocean and beaches
	From: Northern property boundary of 5305 Carlsbad Blvd. (approx. 100 feet south of Shore Drive southern terminus) To: Southern city boundary	Pacific Ocean and beaches
Park Drive	From: Kelly Drive To: Neblina Drive	Agua Hedionda Lagoon
Adams Street	From: Most easterly point where the street abuts the most easterly parcel fronting Agua Hedionda Lagoon To: Harrison Street	Agua Hedionda Lagoon
Harrison Street	From: Adams Street To: Most westerly point where the street abuts the most westerly parcel fronting Agua Hedionda Lagoon	Agua Hedionda Lagoon
Cannon Road	From: El Camino Real To: Car Country Drive	Agua Hedionda Lagoon Pacific Ocean
Tierra Del Oro	Adjacent to oceanfront parcels	Pacific Ocean and beaches
Shore Drive	Adjacent to oceanfront parcels	Pacific Ocean and beaches
Armada Drive	From: Southern property boundary of Carlsbad Ranch Specific Plan Planning Area 4a To: Northern property boundary of Carlsbad Ranch Specific Plan Planning Area 20	The Flower Fields Pacific Ocean
Palomar Airport Road	From: Railroad To: Carlsbad Boulevard (southbound lane)	Pacific Ocean and beaches
Arenal Road	From: El Camino Real To: Columbine Drive	Batiquitos Lagoon
Batiquitos Drive	From: Spoonbill Lane (northern terminus) To: Golden Star Lane	Batiquitos Lagoon
El Camino Real	From: Arenal Drive To: La Costa Avenue	Batiquitos Lagoon
La Costa Avenue	From: El Camino Real To: City boundary on west side of Interstate 5	Batiquitos Lagoon

Table 5-4, Public Scenic Viewing Areas

Public Trails		
Description	Location	Provides Views To
Existing and Future Public Trails	Between Carlsbad Boulevard and the ocean shoreline	Pacific Ocean and beaches
	Along the southern shoreline of Buena Vista Lagoon	Buena Vista Lagoon
	Behind the residential lots along Sunnyhill Drive and Horizon Drive	Agua Hedionda Lagoon
	Along the northern and southern shorelines of Agua Hedionda Lagoon	Agua Hedionda Lagoon
	Between Cannon Road and Agua Hedionda Lagoon	Agua Hedionda Lagoon
	Between Cannon Road and Armada Drive	Pacific Ocean Agua Hedionda Lagoon
	Along the northern shoreline of Batiquitos Lagoon	Batiquitos Lagoon
Public Parks/Gathering Sites		
Description	Location	Provides Views To
Maxton Brown Park	500 Laguna Drive	Buena Vista Lagoon
Triangle Park	West side of Carlsbad Boulevard at Pine Avenue	Pacific Ocean and beaches
Cannon Road Park	4950 Carlsbad Boulevard	Pacific Ocean and beaches
Agua Hedionda Lagoon Discovery Center	1580 Cannon Road	Agua Hedionda Lagoon
Carlsbad State Campground	West side of Carlsbad Boulevard from approximately 350 feet north of Island Way to Avenida Encinas	Pacific Ocean and beaches
Batiquitos Lagoon Nature Center	North side of Batiquitos Lagoon approximately 300 feet south of the southern terminus of Gabbiano Lane	Batiquitos Lagoon

CITY OF CARLSBAD

LOCAL COASTAL PROGRAM



Source: Michael Baker International, 2016; SANGIS, 2016; City of Carlsbad, 2019

12/7/2021 10:11:46 AM \\49652\GIS\MXD\Carlsbad_MXD\LCP_2019\Chapter 5\Figure 5-3A Coastal Views and Viewing Areas 11x17.mxd

LEGEND

- | | |
|--------------|-------------------------------------|
| Coastal Zone | Coastal Viewshed |
| City Limit | Parcel Subject to Policy LCP-5-P.31 |
| Lagoon | Parcel Subject to Policy LCP-5-P.32 |
| Railroad | |

Scenic Viewing Areas

- | |
|----------------------------|
| Existing Public Trail |
| Future Public Trail |
| Public Park/Gathering Site |
| Public Street/Freeway |

FIGURE 5-3A

COASTAL VIEWSHEDS AND VIEWING AREAS

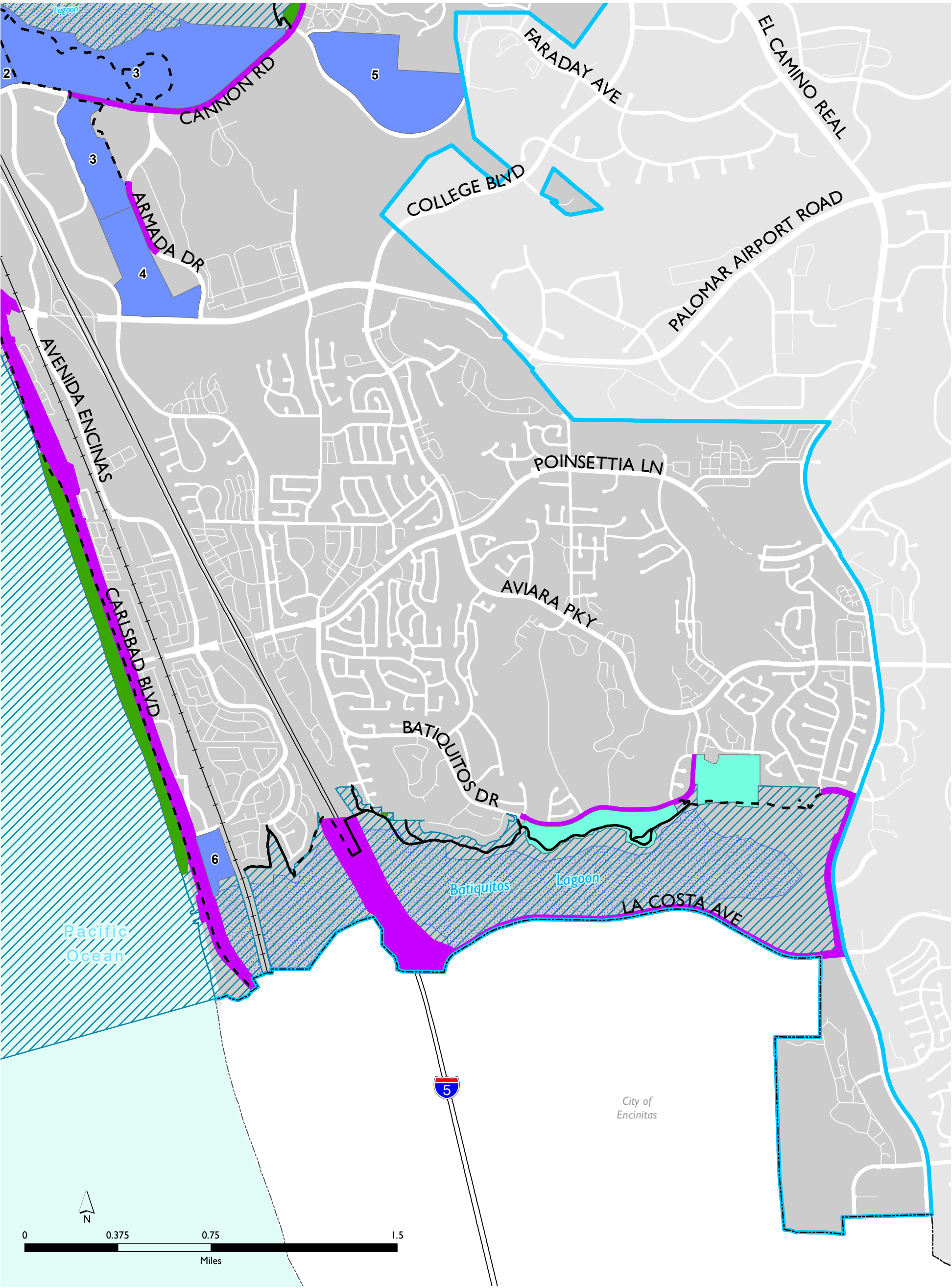
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FIGURE 5-3B

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CITY OF CARLSBAD

LOCAL COASTAL PROGRAM



Source: Michael Baker International, 2016; SANGIS, 2016; City of Carlsbad, 2019

12/7/2021 JN M:\Data\49652\GIS\MXD\Carlsbad_MXD\LCP_2019\Chapter 5\Figure 5-3C Coastal Views and Viewing Areas 11x17.mxd

LEGEND

- | | |
|--------------|-------------------------------------|
| Coastal Zone | Coastal Viewshed |
| City Limit | Parcel Subject to Policy LCP-5-P.31 |
| Lagoon | Parcel Subject to Policy LCP-5-P.32 |
| Railroad | |

Scenic Viewing Areas

- | |
|----------------------------|
| Existing Public Trail |
| Future Public Trail |
| Public Park/Gathering Site |
| Public Street/Freeway |

FIGURE 5-3C

COASTAL VIEWSHEDS AND VIEWING AREAS

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5.5 Agricultural, Cultural and Scenic Resources Policies

The following policies provide direction to ensure that development in the Coastal Zone is consistent with Coastal Act requirements related to protection of agricultural, cultural, and scenic resources. Some of the following policies are directly related to the Coastal Act sections described in Section 5.1 of this chapter; reference to those Coastal Act sections is noted at the end of the applicable policies.

Agricultural Resources

- LCP-5-P.1 Allow agricultural lands in Carlsbad to convert to non-agricultural uses only when consistent with the policies of the Coastal Act and this Local Coastal Program [related to Coastal Act Section 30241 and 30242].
- LCP-5-P.2 Recognize the important value of agriculture and support the continuation of existing agriculture by minimizing conflicts with urban uses; such as by requiring new adjacent development to utilize buffers, vegetation, and other site design features that minimize impacts on the agricultural use; and by requiring farm operators to utilize methods to prevent dust and pesticide impacts on adjacent uses [related to Coastal Act Section 30241].
- LCP-5-P.3 Support and encourage the continuation of agriculture within the Cannon Road Open Space, Farming and Public Use Corridor, and other areas by utilizing methods and resources to reduce the financial burdens on agricultural land, not only to prevent premature development but also to encourage its continued use for agricultural purposes. For example, consider construction of public facility improvements, such as drainage improvements, which are designed to support the continuation of agriculture.
- LCP-5-P.4 Ensure that the existing Flower Fields remain a farming and flower production use by utilizing all available methods and programs, including grants and other sources of financial assistance.
- LCP-5-P.5 Support efforts of the farming and floriculture industries to establish and operate a farm cooperative and/or floral trade center.
- LCP-5-P.6 Support efforts to reduce agricultural users' reliance on imported water, such as by reclaiming wastewater and run-off water for reuse.
- LCP-5-P.7 Support efforts to provide farmworker housing.

- LCP-5-P.8 Support efforts to educate agriculturalists and home gardeners about agriculture and gardening practices, including proper use of pesticides. The use of natural/organic herbicides and pesticides is preferred in lieu of chemical pesticides.
- LCP-5-P.9 Allow only the following uses on the agricultural lands shown on Figure 5-1:
- A. Uses permitted on Areas 1 and 5, as shown on Figure 5-1, shall only be those uses specified by the Coastal Agriculture Overlay Zone, until such time that agriculture is permitted to convert to non-agricultural uses per the policies of this Local Coastal Program.
 - B. Uses permitted on Areas 2 and 3, as shown on Figure 5-1, shall only be the agricultural uses permitted by the Cannon Road – Agriculture/Open Space (CR-A/OS) Zone, until such time that agriculture is permitted to convert to non-agricultural uses per the policies of this Local Coastal Program.
 - C. Uses permitted on Area 4 (Flower Fields), as shown on Figure 5-1, shall be limited to flower production, pursuant to the Carlsbad Ranch Specific Plan. The Flower Fields shall not be allowed to convert to non-agricultural uses.
- LCP-5-P.10 Allow conversion of agricultural land to non-agricultural uses consistent with all applicable requirements of the Coastal Act and the city's Local Coastal Program, including the following:
- A. Area 1 on Figure 5-1:
 - 1. May convert to uses consistent with the applicable land use designation and zone, subject to criteria and payment of a mitigation fee pursuant to Coastal Act Section 30171.5.
 - 2. Prior to development on Area 1, a permanent open space easement in favor of the City of Carlsbad shall be recorded over Area 2 on Figure 5-1. The easement shall not prohibit or limit the uses described in Policy LCP-5-P.10.B.5.
 - 3. Development on Area 1 shall include a public trail, as identified in Chapter 4, with public coastal viewing areas, as well as dedication of a portion of the site for a public recreational use if the city finds that current or future recreational needs require the development of such uses along the south shore of Agua Hedionda Lagoon.

4. If a proposed land use does not include area for expansion of Carlsbad Energy Center, a written report must be submitted to the city that demonstrates, to the satisfaction of the city, that the site is not necessary for future expansion of the energy center per Coastal Act Section 30413(b) and that future expansion needs can be accommodated at the present energy center site.

B. Area 2 on Figure 5-1:

1. Shall continue to be utilized for agricultural purposes while agriculture remains economically viable for the land owner;
2. May convert when the land owner determines that agriculture is no longer economically viable;
3. May convert only to open space and compatible public uses that are permitted by the Cannon Road – Agriculture/Open Space (CR-A/OS) zone, and shall include a public trail, as identified in Chapter 4, with public coastal viewing areas; and
4. May convert subject to criteria and payment of a mitigation fee pursuant to Coastal Act Section 30171.5.
5. Nothing in this plan prohibits or limits the continuation of the following utility uses, which are permitted as a matter of right in the Cannon Road – Agriculture/Open Space (CR-A/OS) zone: energy transmission and distribution facilities, including, but not limited to, rights-of-way and pressure control or booster stations, substations, gas metering/regulating stations or operating centers for gasoline, electricity, natural gas, synthetic natural gas, oil or other forms of energy sources, with the necessary accessory equipment incidental thereto, together with utility buildings/facilities that are built, operated, or maintained by a public utility to the extent they are regulated by the California Public Utilities Commission.

C. Area 3 on Figure 5-1:

1. Shall continue to be utilized for agricultural purposes while agriculture remains economically viable for the land owner;

2. May convert when agriculture is no longer economically viable for the land owner;
3. May convert only to open space and compatible public uses that are permitted by the Cannon Road – Agriculture/Open Space (CR-A/OS) zone; and
4. May convert subject to the Carlsbad Agricultural Conversion Mitigation Program.

D. Area 4 on Figure 5-1 shall not be allowed to convert to non-agricultural uses, pursuant to the Carlsbad Ranch Specific Plan.

E. Area 5 on Figure 5-1 may convert to uses consistent with the applicable land use designation and zone, and subject to the Carlsbad Agricultural Conversion Mitigation Program.

F. Agricultural lands within Areas 3 or 5 on Figure 5-1, which are converted to a public recreation or open space use and are under the control of a public entity, shall be exempt from the mitigation requirements of the Carlsbad Agricultural Conversion Mitigation Program.

LCP-5-P.11 Implement the Carlsbad Agricultural Conversion Mitigation Program, as required by Local Coastal Program implementing ordinances. Agricultural lands subject to the program, as shown on Figure 5-1, may convert to non-agricultural uses by complying with one of three mitigation options, as described below:

- A. Preservation of prime agricultural land. One acre of prime agricultural land within the statewide coastal zone shall be preserved for each net acre of converted non-prime agricultural land in Carlsbad's coastal zone. The preserved land shall be in an area selected by the State Coastal Conservancy and approved by the city council. Preservation shall require the permanent transfer or dedication of interest in the prime agricultural land to a grantee that is a local or state agency, or a tax-exempt organization qualifying under Section 501(c)(3) of the U.S. Internal Revenue Code. Grantees shall be organizations and agencies whose principal purposes are consistent with the preservation of agriculture.
- B. Payment of a mitigation fee. The city council shall determine the amount of the fee at the time it considers a coastal development permit for development of the property. The fee shall not be less than \$5,000 nor more than \$10,000 per net

converted acre of agriculture land and shall be paid prior to the issuance of building permits for the project. All mitigation fees shall be deposited in a City of Carlsbad Local Coastal Program agricultural conversion mitigation fees fund. The funds may be used for the following purposes:

1. Restoration of the coastal and lagoon environment including, but not limited to, acquisition, management, and/or restoration involving wildlife habitat or open space preservation;
2. Purchase and improvement of agricultural lands for continued agricultural production, or for the provision of research activities or ancillary uses necessary for the continued production of agriculture and/or aquaculture in the city's coastal zone, including, but not limited to, farm worker housing;
3. Restoration of beaches for public use including, but not limited to, local and regional sand replenishment programs, vertical and lateral beach access improvements, trails, and other beach-related improvements that enhance accessibility, and/or public use of beaches; and
4. Improvements to existing or proposed lagoon nature centers.

Paleontological and Cultural Resources

- LCP-5-P.12 Where appropriate, designate as open space those areas that preserve paleontological and cultural resources.
- LCP-5-P.13 Evaluate, pursuant to the California Environmental Quality Act, the potential impacts to paleontological and cultural resources that may result from proposed development.
- LCP-5-P.14 Implement appropriate mitigation measures when development would adversely impact paleontological and cultural resources, as identified by the state historic preservation officer [related to Coastal Act Section 30244].
- LCP-5-P.15 Require consultation with the appropriate organizations and individuals (e.g., the Native American Heritage Commission [NAHC], Native American Tribes, and Information Centers of the California Historical Resources Information Systems [CHRIS]) to minimize potential impacts to cultural resources that may occur because of proposed development. Consultation with Native American Tribes shall be conducted in conformance with state law and city requirements.

- LCP-5-P.16 Require the following during construction of development projects in previously undisturbed areas and in areas with known paleontological or archaeological resources:
- A. A qualified professional shall monitor grading, ground-disturbing, and other major earth-moving activities;
 - B. In areas with cultural resources of interest to Native American Tribes, a tribal monitor, in addition to the qualified professional, shall monitor grading, ground-disturbing, and other major earth-moving activities.
 - C. Prior to occupancy of any buildings, a cultural resource monitoring report identifying all materials recovered shall be submitted to the City Planner.
- LCP-5-P.17 Ensure that the determination of the significance of cultural or tribal cultural resources, and the development and implementation of any appropriate treatment measures and procedures, is conducted by a qualified archaeologist and, in the case of tribal cultural resources, in consultation with culturally- and geographically-affiliated Native American Tribes. All Native American human remains and associated grave goods shall be returned to their most likely descendent and repatriated. The final disposition of tribal cultural resources not directly associated with Native American graves shall be negotiated during consultation with interested Tribes in accordance with the California Environmental Quality Act, Public Resources Code Section 21084.3, and any other applicable laws and regulations.
- LCP-5-P.18 Require that development activities halt if subsurface deposits are found and believed to be cultural or tribal cultural resources, or human in origin. No development activities shall occur within 100 feet of the find. A determination of the find's significance shall be made pursuant to Policy LCP-5-P.17. The no work radius may be modified as appropriate by a qualified archaeologist and, in the case of tribal cultural resources, in consultation with a Native American monitor. The no work radius shall remain in effect subject to the following:
- A. If the archaeologist, in consultation with a Native American monitor in the case of tribal cultural resources, determines that the find does not represent a cultural resource, then work may resume.
 - B. If the archaeologist, in consultation with a Native American monitor in the case of tribal cultural resources, determines that the find does not represent a cultural

resource from any time period or cultural affiliation, then work may resume when it has been demonstrated to the satisfaction of the city that: 1) the site is not eligible for the National Register of Historic Places or the California Register of Historical Resources, and 2) that measures for treatment of the find have been completed to the city's satisfaction.

- C. If the archaeologist, in consultation with a Native American monitor in the case of tribal cultural resources, determines that the find includes human remains or potentially human remains of Native American ancestry, measures shall be taken to protect the discovery from disturbance, ensure respectful and dignified treatment in accordance with the cultural and spiritual traditions of the traditionally and culturally affiliated Native American Tribe, and implement all applicable procedures per state law. Work may resume when the city and any responsible agency, through consultation with interested California Native American Tribes, determine that the treatment measures have been completed to the agencies' satisfaction.

- LCP-5-P.19 Identify, pursuant to the National Historic Preservation Act and California Environmental Quality Act, historic resources in the coastal zone and consider if those resources should be designated in national, state, and/or local registers, if determined appropriate and with agreement of the property owners.
- LCP-5-P.20 Encourage the use of regional, state, and federal programs that promote cultural preservation to upgrade and redevelop properties with historic or cultural value. Consider becoming a participant in the Mills Act tax incentive program.
- LCP-5-P.21 Encourage the rehabilitation of qualified historic structures through application of the California Historical Building Code.

Scenic and Visual Resource Policies

General Policies applicable within the Coastal Zone (all parcels as applicable)

- LCP-5-P.22 Ensure that new development and redevelopment is scaled and sited to respect the natural terrain and is designed in a manner that minimizes the alteration of natural land forms and ensures compatibility with the character of the surrounding area. Development on slopes, when permitted, shall be designed to minimize grading and comply with the hillside development requirements of the zoning ordinance [related to Coastal Act Section 30251].

- LCP-5-P.23 Require new development and redevelopment, which is located on property that slopes down adjacent to a lagoon shoreline, to be designed to step-down in height with the slope, to minimize casting shadows on public shoreline areas.
- LCP-5-P.24 Ensure that new development and redevelopment preserves, where possible, existing, mature, healthy vegetation that provides significant scenic value, such as oak trees.
- LCP-5-P.25 Require that all signs comply with the city's sign ordinance and comply with the following criteria. In addition, signs shall be designed and located to minimize impacts to coastal viewsheds from public scenic viewing areas:
- A. Monument signs should be limited to one per driveway entrance and six feet in height above average grade.
 - B. Wall signs should be sized in relation to the size of the building.
 - C. One pole sign limited to 35 feet in height above average grade may be permitted for shopping centers designated "Regional Commercial" on the Local Coastal Program Land Use Map.
 - D. Off-site commercial signs and billboards are prohibited.
- LCP-5-P.26 All new utility systems shall be placed underground as feasible and commonly practiced.

Policies applicable to land identified on Figure 5-3 as a coastal viewshed or scenic viewing area, and land located between a scenic viewing area and a coastal viewshed

- LCP-5-P.27 Ensure that new development and redevelopment is located and designed to avoid, and where avoidance is not possible, to minimize visual impacts and interruption of public views of a coastal viewshed from public scenic viewing areas [related to Coastal Act Section 30251].
- A. Development site selection and design alternatives are preferred methods to minimize impacts on public views of a coastal viewshed, rather than landscape screening.
 - B. Land divisions and lot line adjustments shall be designed to minimize impacts to public views of the viewshed and maximize open space, such as by clustering building sites.

- C. Fences, walls, and landscaping shall not block public views of a coastal viewshed from public scenic viewing areas. Fences and walls shall be visually permeable if located where there is the potential to block public views. Landscaping shall be maintained at a height that will not obscure or block public views of a view shed.

LCP-5-P.28 Ensure that new development on publicly owned land between the ocean and Carlsbad Boulevard does not obstruct public views of the ocean. Development of public structures for public safety or that provide limited public access and recreation opportunities may be permitted, provided they are designed and sited to minimize impacts to public views of the ocean.

LCP-5-P.29 Require that retaining walls visible to the public not exceed six feet in height and incorporate veneers, texturing, and/or colors that blend with the surrounding earth materials or landscape. Stepped or terraced retaining walls with at least a 3-foot-wide area for planting in between, may be permitted. Where feasible, long continuous walls shall be broken into sections or shall include undulations to provide visual relief.

LCP-5-P.30 Ensure that exterior lighting (except street lights, traffic lights, navigational lights, and other similar safety lighting) is minimized, restricted to low intensity fixtures, shielded, and concealed from view to the maximum feasible extent to avoid or minimize public views of the light source from public scenic viewing areas.

LCP-5-P.31 Ensure that the natural visual quality of coastal viewsheds is maintained and any visually degraded natural areas are restored.

Policies applicable to land identified on Figure 5-3 as parcels subject to Policy LCP-5-P.31

LCP-5-P.32 Require that new development and redevelopment is sited and designed to preserve public blue water ocean/lagoon views by:

- A. On parcels located adjacent to the north shore of Agua Hedionda Lagoon and that have an elevation difference of 35 feet or more between the mean high tide line and an adjacent public street:

- 1. New structures shall not extend higher than the centerline elevation of the street adjacent to the project site, unless infeasible due to physical site constraints or conflicts with other resource protection policies of this Local Coastal Program, as determined by the city decision maker for the proposed project.

2. New structures may be limited to one story in height, if necessary, to ensure blue water views are maintained over the entire site.
 3. The height of fences and walls shall not extend higher than the centerline elevation of the adjacent street, except for fences and walls that are visually permeable and comply with the city's fence height regulations.
 4. Use native vegetation types with a maximum growth height and located such that landscaping will not extend above the centerline elevation of the adjacent street.
- B. On parcels not subject to A.1 of this policy and when it is infeasible to comply with A.1 of this policy due to physical site constraints or conflicts with other resource protection policies of this Local Coastal Program:
1. New development shall provide a minimum of one view corridor on the project site that meets the following criteria:
 - a. The view corridor shall be located along at least one side of the property that provides public blue water ocean/lagoon views.
 - b. The width of the view corridor shall be no less than the minimum required building setback; however, additional width may be required to ensure public blue water ocean/lagoon views.
 - c. A site analysis shall be conducted to confirm the location of the view corridor provides blue water ocean/lagoon views from the public street.
 - d. No portions of any above-ground structure shall extend into the view corridor, including, but not limited to, building eaves, chimneys, and stairways.
 - e. Any fencing across the view corridor shall be visually permeable and any landscaping in the corridor shall only be low-growing species that will not obscure or block blue water views from the street.
 - f. The view corridor shall be secured through a notice of restriction or an easement and shall be maintained to ensure public views are not blocked.

Policies applicable to land identified on Figure 5-3 as parcels subject to Policy LCP-5-P-32:

LCP-5-P.33 Implement the following site-specific policies, in addition to the scenic resource protection policies above:

A. Areas 1, 2, and 3 on Figure 5-3:

1. Development on the properties shall provide public access to views of Agua Hedionda Lagoon and the Pacific Ocean (where possible); such as by providing dedicated public gathering/viewing areas that offer views of the lagoon, in addition to the adjacent existing or future public scenic viewing areas shown on Figure 5-3.

B. Area 4 on Figure 5-3:

1. The Flower Fields are a scenic resource that shall be protected. No improvements or development on the site shall be permitted if doing so would negatively impact the scenic quality of the Flower Fields.

C. Area 5 on Figure 5-3:

1. Development on the property shall provide public access to views of Agua Hedionda Lagoon and the Pacific Ocean; such as by providing dedicated public gathering/viewing areas.

D. Area 6 on Figure 5-3:

1. Development on the property shall provide public access to views of Batiquitos Lagoon; such as by providing a dedicated public gathering/viewing area that offers views of the lagoon and Pacific Ocean, in addition to the nearby existing or future public scenic viewing areas shown on Figure 5-3.

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Environmentally Sensitive Habitat Areas and Water Quality

Carlsbad is endowed with a rich array of natural resources, including the Pacific Ocean, three lagoons (Buena Vista, Agua Hedionda, and Batiquitos), and other waterways and natural habitat areas. These resources are vital components of the city's setting and provide habitat for wildlife and recreation opportunities. Protecting these natural resources is a high priority for residents and is consistent with the goals of the California Coastal Act. This chapter describes the natural coastal resources found in Carlsbad's Coastal Zone, which include environmentally sensitive habitat area (ESHA) and marine and coastal water quality. The chapter concludes with policies that guide the city in the protection of such resources.



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6.1 Introduction

The California Coastal Act includes extensive policies concerning the protection, use, and experience of the natural coastal environment. The Coastal Act provides for the protection of both land and marine habitats. It mandates that environmentally sensitive habitat area (ESHA) and marine resources are to be protected against significant disruption of habitat value and maintained, enhanced, and restored, as feasible. Coastal Act policies related to natural resource protection include the following:

Section 30107.5 *Environmentally sensitive area*

"Environmentally sensitive area" means 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.

Section 30121 *Wetland*

"Wetland" means 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.

Section 30230 *Marine resources; maintenance*

Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Section 30231 *Biological productivity; water quality*

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface waterflow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Section 30233 *Diking, filling or dredging; continued movement of sediment and nutrients*

- (a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:
- (1) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.
 - (2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.
 - (3) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.
 - (4) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.

- (5) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.
- (6) Restoration purposes.
- (7) Nature study, aquaculture, or similar resource dependent activities.

b) Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for these purposes to appropriate beaches or into suitable longshore current systems.

c) In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary. Any alteration of coastal wetlands identified by the Department of Fish and Game, including, but not limited to, the 19 coastal wetlands identified in its report entitled, "Acquisition Priorities for the Coastal Wetlands of California", shall be limited to very minor incidental public facilities, restorative measures, nature study, commercial fishing facilities in Bodega Bay, and development in already developed parts of south San Diego Bay, if otherwise in accordance with this division.

For the purposes of this section, "commercial fishing facilities in Bodega Bay" means that not less than 80 percent of all boating facilities proposed to be developed or improved, where the improvement would create additional berths in Bodega Bay, shall be designed and used for commercial fishing activities.

d) Erosion control and flood control facilities constructed on watercourses can impede the movement of sediment and nutrients that would otherwise be carried by storm runoff into coastal waters. To facilitate the continued delivery of these sediments to the littoral zone, whenever feasible, the material removed from these facilities may be placed at appropriate points on the shoreline in accordance with other applicable provisions of this division, where feasible mitigation measures have been provided to minimize adverse environmental effects. Aspects that shall be considered before issuing a coastal development permit for these purposes are the method of placement, time of year of placement, and sensitivity of the placement area.

Section 30240 *Environmentally sensitive habitat areas; adjacent developments*

- (a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.
- (b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

Section 30250(a) *Location; existing developed area*

- (a) New residential, commercial, or industrial development, except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources. In addition, land divisions, other than leases for agricultural uses, outside existing 37 developed areas shall be permitted only where 50 percent of the usable parcels in the area have been developed and the created parcels would be no smaller than the average size of surrounding parcels.

6.2 Environmentally Sensitive Habitat Area (ESHA)

Coastal Act Section 30240(a) requires that “environmentally sensitive habitat areas be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.” “Environmentally sensitive habitat area” is defined by Coastal Act Section 30107.5, as shown in Section 6.1.

Habitats and Natural Vegetation in Carlsbad

Habitat types within Carlsbad include grassland, coastal sage scrub, chaparral, woodland, riparian, marsh and other wetlands, and open water. A summary description of the natural habitat found within the Coastal Zone is provided below. More information about the habitat types in Carlsbad is provided in the Carlsbad Habitat Management Plan, which is a component of the city’s Local Coastal Program.

Upland Habitat

Coastal Sage Scrub

Three types of coastal sage scrub exist within Carlsbad’s Coastal Zone: Diegan coastal sage scrub, maritime succulent scrub, and coastal sage scrub-chaparral scrub. Coastal sage scrub is home to the federally threatened coastal California gnatcatcher, as well as the orange-throated whiptail (a California Species of Special Concern) and the federally listed plant species San Diego ambrosia. Coastal sage scrub is considered sensitive habitat under California regulations, but Diegan coastal sage scrub in particular is identified in the California Natural Diversity Database as a priority for monitoring and restoration. In Carlsbad, the largest remaining areas of Diegan coastal sage scrub are outside the Coastal Zone.

Chaparral

There are two categories of chaparral habitat in Carlsbad: undifferentiated (including southern mixed and chamise chaparral) and southern maritime chaparral. Both vegetation communities occur in a patchy distribution throughout the city and are located on wetter north- and west-facing slopes, alternating with coastal sage scrub, grasslands, and oak woodlands. Southern maritime chaparral is the most limited type of chaparral in the city and is considered a sensitive habitat. Sensitive plant and animal species that may be found in chaparral habitat are the wart-stemmed ceanothus (designated as sensitive by the California Native Plant Society), the federally and state-listed endangered Orcutt’s spineflower, the California endangered short-leaved dudleya, and the California Watch List species Southern California rufous-crowned sparrow.

Grassland

There are native and non-native grasslands within Carlsbad's Coastal Zone. Native grasslands are considered a sensitive habitat under California regulations and are identified in the California Natural Diversity Database as priority areas for monitoring and restoration. Native grassland vegetation is extremely limited in Carlsbad. Non-native grassland is not considered a sensitive habitat; however, it may be a significant foraging habitat for raptors and the fully protected California white-tailed kite. Non-native grassland may also support sensitive animal and plant species such as the federally endangered Stephens' kangaroo rat and the federally and state listed San Diego thorn-mint and may serve as a habitat linkage for a number of wildlife species such as mule deer and scrub species such as California gnatcatcher.

Woodland

Two types of woodland occur within Carlsbad's Coastal Zone: oak woodland and eucalyptus woodland. In coastal southern California, oak woodland is dominated by coast live oak with scattered individuals of other tree species. Eucalyptus woodland is dominated by various species of planted eucalyptus. Sensitive species that may occur in oak woodlands include the Cooper's hawk (a California Watch List species), regionally sensitive Harbison's dun skipper, and Nuttall's scrub oak and Engelmann oak (designated as sensitive by the California Native Plant Society). Although eucalyptus woodland is a non-native community that does not support sensitive plant or wildlife species, it is often used for nesting by raptors and other birds or roosting by bats.

Wetland and Riparian Habitat

Wetlands

Wetland habitats within Carlsbad's Coastal Zone consist of southern coastal salt marsh, freshwater marsh, and cismontane alkali marsh, in addition to other wetland and aquatic habitat types, such as estuaries, freshwater/open water, and vernal pools.

Marsh habitats are considered sensitive and are regulated under federal and state regulations and policies. Sensitive species that may occur in salt marsh include the state-listed California black rail and Belding's savannah sparrow, as well as the federally listed Ridgway's rail. Plant species found in freshwater marsh include the state-listed spreading navarretia.

Estuarine habitat consists of a semi-enclosed body of water that has a free connection with the open ocean. Freshwater/open water habitat consists of lakes, ponds, and reservoirs and can be surrounded by freshwater marsh, salt marsh, or riparian habitat areas. Vernal pools are highly restricted wetlands that contain high numbers of endangered, sensitive, and endemic plant and animal species. Sensitive

species found in vernal pool habitats include state and federally listed endangered California Orcutt grass and San Diego button-celery, as well as the federally listed San Diego fairy shrimp.

Riparian Habitat

Riparian habitats are found along drainages and streams, where soils tend to be moist during all or part of the year. Riparian habitat located in Carlsbad's Coastal Zone consists of riparian scrub, riparian woodland, and riparian forest. Riparian habitats are all considered sensitive under federal and state regulations. Sensitive species that may occur in riparian habitats include the federally and state-listed endangered least Bell's vireo and willowy monardella. Sycamore-alder woodland supports nesting for a number of raptor species, including white-tailed kite and Cooper's hawk.

Sensitive Plant and Animal Species

A total of 56 sensitive plant and animal species have been recorded as occurring or potentially occurring within Carlsbad. Of these, 24 species are covered by the Carlsbad Habitat Management Plan, which means the U.S. Fish and Wildlife Service and the California Department of Fish and Wildlife consider that the species are adequately protected within the Carlsbad Habitat Management Plan preserve system. An additional 19 species could be considered for coverage by the Habitat Management Plan if additional funding becomes available for management in Carlsbad, or if other cities in north San Diego County have similar habitat management plans approved. Refer to the Carlsbad Habitat Management Plan for more information about sensitive species in Carlsbad.

Tree Habitat for Protected Bird Species

Most birds nest in trees. While not all trees in Carlsbad are considered ESHA, they may provide important breeding and nesting habitat for a sensitive/protected bird species. The policies of this chapter protect breeding, roosting, and nesting habitat for birds protected by the Migratory Bird Treaty Act and bird species listed by the federal or California Endangered Species Acts, California bird species of special concern, as well as owls and raptors, which have a valuable role in the overall coastal ecosystem.

Habitat Conservation and Management Plans

Multiple Habitat Conservation Program (MHCP)

Carlsbad and the Cities of Encinitas, Escondido, Oceanside, San Marcos, Solana Beach, and Vista participated in the preparation of the MHCP, which was adopted and certified by the San Diego Association of Governments (SANDAG) in 2003. The MHCP is a comprehensive plan that addresses the needs of multiple plant and animal species in northwestern San Diego County, enabling cities to implement their portions of the MHCP through citywide subarea plans.

Habitat Management Plan for Natural Communities in the City of Carlsbad

The City of Carlsbad prepared a subarea plan as a part of the MHCP, called the Habitat Management Plan for Natural Communities in the City of Carlsbad (Habitat Management Plan). The Habitat Management Plan was approved by the Coastal Commission in June 2003 and is a component of the city's Local Coastal Program. The Habitat Management Plan identifies how the city, in cooperation with the U.S. Fish and Wildlife Service and the California Department of Fish and Wildlife, will preserve the diversity of habitat and protect environmentally sensitive resources within Carlsbad, while allowing for additional development consistent with the city's Local Coastal Program and General Plan.

Table 6-1, *Habitat Management Plan Preserves Over 100 Acres in the Coastal Zone*

Preserve Name	Total Acres	Acres in Coastal Zone
Agua Hedionda Ecological Reserve	197	197
Aviara Master Association	197	197
Batiquitos Lagoon Ecological Reserve	564	564
Buena Vista Lagoon Ecological Reserve	140	140
Cabrillo Power	253	253
Crossings Golf Course	206	153
La Costa Glen	108	108

Source: City of Carlsbad, June 2019

The Habitat Management Plan serves as a habitat conservation plan, as described in Section 10(a)(1)B of the Endangered Species Act, and natural community conservation plan, as authorized in the Natural Community Conservation Planning Act (Fish and Game Code Section 2800 et. seq.). Formal approval and adoption of the Habitat Management Plan occurred through issuance of a permit by the U.S. Fish and Wildlife Service and the California Department of Fish and Wildlife, as well as execution of an implementation agreement between the City of Carlsbad and the wildlife agencies.

A primary objective of the Habitat Management Plan is to conserve a full range of vegetation community types, with an emphasis on sensitive habitat types. The types of habitat protected by the plan include grassland; coastal sage scrub; chaparral; southern maritime chaparral; oak woodland; eucalyptus woodland; riparian scrub, woodland, and forest; marsh, estuarine, freshwater, and other wetlands; and disturbed lands.

The Habitat Management Plan preserve system consists of the following, which are identified on Figure 6-1.

- Existing hardline preserve areas – these areas include both publicly and privately-owned land that has been committed to habitat conservation as a result of existing open space regulations, past development approvals, or other actions.
- Proposed hardline preserve areas – these areas include proposed (future) public and private projects for which proposed hardline design has been included in the Habitat Management Plan as future “proposed” hardline preserve areas. Take of habitat, as defined in the city’s Habitat Management Plan, is authorized for the remaining portions of the projects. The general location of the proposed hardline areas is shown on Figure 6-1, while detailed boundaries and more information about the individual projects can be found in the Habitat Management Plan.
- Standards areas – in addition to hardline areas, the Habitat Management Plan includes conservation standards for specific areas where no hardline area is proposed. The standards are applicable to future development proposals and require conservation of sensitive species, sensitive habitat areas within core areas, and landscape linkages and movement corridors between core areas and with adjoining jurisdictions. To allow reasonable economic use of these properties, the standards allow at least 25 percent of the property to be developed, in the least environmentally damaging location, and the remaining site area is to be conserved. More information about the standards areas can be found in the Habitat Management Plan.

When the Habitat Management Plan was approved in 2003, the plan identified 2,019 acres of “existing hardline” areas and 396 acres of “proposed hardline” areas. The plan also identified 252 acres of land classified as “standards areas.” The exact number of acres conserved for “standards areas” is not determined until the time a development proposal is approved within a standards area.

Since 2003, 264 acres of “proposed hardline” area have been formally conserved (132 acres of “proposed hardline” areas remain) and 113 acres of “standards areas” have been conserved (69 acres of “standards” areas remain). As of June 2019, with the addition of conserved proposed hardline and standards areas, there are 2,396 acres of “existing hardline” areas (an increase of 377 acres since 2003).

Most of the sensitive habitat areas within the Coastal Zone are included in existing hardline preserves, including the diverse habitat areas surrounding the three lagoons. There are over 90 preserves in the city’s Coastal Zone that range in size from one acre to 568 acres. Table 6-1 shows preserves in the Coastal Zone that are over 100 acres in size.

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CITY OF CARLSBAD

LOCAL COASTAL PROGRAM



Source: Michael Baker International, 2016; SANGIS, 2016; City of Carlsbad, 2019

12/7/2021 JN M:\Mdata\149652\GIS\HMP\Carlsbad_MXD\LCP_2019\Chapter 6\Figure 6-1 HMP Preserves 11x17.mxd

LEGEND

Coastal Zone	HMP Preserve System
City Limit	Existing Hardline
Railroad	Proposed Hardline
	Outside-Conserved
	Standards Area

FIGURE 6-1
2019 HABITAT MANAGEMENT PLAN HARDLINE PRESERVES AND STANDARDS AREAS

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The Habitat Management Plan and the Coastal Act

The city's Habitat Management Plan comprehensively protects ESHA by identifying and implementing an interlinked natural communities preserve system. The Habitat Management Plan establishes a long-range approach to habitat management and preserve creation and is intended to function at the citywide level, instead of focusing on impacts to individual properties. Implementation of this large-scale approach to habitat conservation allows some development to impact environmentally sensitive habitat in the least sensitive areas in order to preserve the largest and most valuable areas of contiguous habitat and their associated populations of sensitive species.

Coastal Act Section 30240(a) requires that "environmentally sensitive habitat areas be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas." When the Coastal Commission approved the city's Habitat Management Plan in June 2003, it identified that by allowing impacts to some environmentally sensitive areas the Habitat Management Plan conflicts with Coastal Act Section 30240, which protects against impacts to sensitive habitat. However, the Habitat Management Plan promotes the objectives of Coastal Act Section 30250, which requires new development to be concentrated in areas able to support it without significantly impacting coastal resources.

In the case of the city's Habitat Management Plan, Coastal Act Sections 30240 and 30250 conflict. To resolve the conflict, Coastal Act Section 30007.5 allows the Coastal Commission to determine the "manner which on balance is the most protective of significant coastal resources." In approving the Habitat Management Plan, the Coastal Commission determined that although the plan allows impacts to some sensitive resources, it is on balance the most protective option for ESHA because it protects large, contiguous blocks of sensitive habitat with the highest natural resource value, and directs development away from these areas.¹

The comprehensive nature of the Habitat Management Plan's habitat preservation strategy sets it apart from other approaches that are not comprehensive and lack regional resource protection standards; these non-comprehensive approaches require more stringent limitations on sensitive habitat impacts for individual sites. By requiring clustering and concentration of development away from the most valuable sensitive habitat areas, the Habitat Management Plan provides a larger, more contiguous preserve area than if impacts from development were to be evaluated on a lot-by-lot basis.

¹ California Coastal Commission Staff Report City of Carlsbad Major Amendment No. 1-03B (Habitat Management Plan), dated May 22, 2003, <https://documents.coastal.ca.gov/reports/2003/6/Th8d-6-2003.pdf>.

The Habitat Management Plan and Figure 6-1 do not identify all habitat areas that meet the definition of ESHA per the Coastal Act. Per the policies of this chapter, a biological study and habitat protection may be required for development proposed on any site that may contain sensitive habitat.

Impacts of Beach Grooming on Beach Ecosystem

“Beach wrack” is an important part of the marine ecosystem. “Beach wrack” refers to the mounds of seaweed and other loose organic material that is brought ashore and accumulates by the natural processes of tides and waves. While these mounds may appear to beach visitors as unsightly debris, wrack is an important nutrient source for the beach ecosystem, in that it provides micro-habitat for a variety of organisms, supports the prey of many marine and terrestrial invertebrates and shorebirds, and contributes to the establishment of coastal strand and incipient dune habitat. Regular grooming of sandy beaches can destroy the wrack and degrade the near shore habitat. Research has shown that groomed beaches have lower invertebrate species richness, abundance and biomass and supports fewer birds in absolute numbers and species diversity.

Beach grooming can negatively impact sensitive shorebird species, such as the western snowy plover and the California least tern, that forage and nest on the open beach. The western snowy plover establishes nests just above the wrack line in the upper beach and coastal strand zone. These nests are very exposed and vulnerable to disturbance and predation. The California least tern breeds on exposed tidal flats, beaches and bays of the Pacific Ocean and is vulnerable to predators, natural disasters and human disturbance. Beach grooming not only removes potential plover and tern nest material, but can also flatten the subtle topographic depressions that these birds use to nest in.

Beach grooming can also negatively impact California grunion, which are a species of fish with a very unique mating ritual. Grunion come ashore in the spring and summer to reproduce during particularly high night-time tides. Female grunion dig their tails into the sand and lay their eggs. For the next ten days or so grunion eggs remain buried in the sand until the next high tide when the eggs hatch and young grunion are washed out to sea. If beach grooming occurs while grunion eggs are buried, all the eggs may be destroyed.

6.3 Marine and Coastal Water Quality

Local Surface Waters

The San Diego region is divided into 11 hydrologic units, which flow from elevated regions in the east toward coastal lagoons, estuaries, bays, and the Pacific Ocean in the west. As shown in Figure 6-2, the Carlsbad hydrologic unit is approximately 210 square miles in area, extending from the headwaters above Lake Wohlford in the east to the Pacific Ocean in the west and from Vista and Oceanside in the north to Solana Beach, Escondido, and the community of Rancho Santa Fe to the south. The cities of Carlsbad, San Marcos, and Encinitas are entirely within this hydrologic unit. There are numerous important surface hydrologic features within the Carlsbad hydrologic unit, including four unique coastal lagoons, three major creeks, and two large water storage reservoirs.

In Carlsbad, surface flow of water is often channeled through streams and ephemeral drainages. A stream is a topographical feature with a clear bed and bank that periodically conveys water. Ephemeral drainages and ephemeral streams are topographic features that convey water, but only during and shortly after rainfall events in a typical year. Most of the surface flow comes from precipitation runoff and storm events. Precipitation occurs predominantly during the winter and spring months, and as a result, streamflow is highest during this period. Surface flows during the summer and fall months are typically low and consist of urban runoff, agricultural runoff, and surfacing groundwater.

Surface Water Quality

Impacts to the Carlsbad hydrologic unit include surface water quality degradation, sewage spills, sedimentation, habitat degradation and loss, invasive species, and eutrophication (i.e., excessive nutrients in a body of water, usually resulting from runoff from land, which causes a dense growth of plant life and death of animal life from lack of oxygen). Pollutant conditions in the Carlsbad hydrologic unit include bacterial indicators, eutrophic conditions, nutrients, sediments, sulfates, nitrates, and phosphates. The sources of these pollutants are varied and include urban runoff, agricultural runoff, sewage spills, livestock/domestic animals, and other natural sources. Key water quality issues in the city's principal surface water bodies are described below. The water quality issues described below are addressed through regional programs that focus on improving existing water quality conditions.

Buena Vista Lagoon

Buena Vista Lagoon is a 220-acre freshwater lagoon managed as an ecological reserve by the California Department of Fish and Wildlife. The lagoon is identified on the California 2014-2016 Clean Water Act (CWA) Section 303(d) List of Impaired Waters for nutrients, indicator bacteria, sediment toxicity, and sedimentation/siltation. Waters on the Section 303(d) list are those that do not meet water quality standards and parameters for pollutants. Buena Vista Creek, which feeds into the lagoon, is also listed

as impaired for sediment toxicity, benthic community effects, bifenthrin, and selenium. The City of Vista has installed a series of check dams and a detention basin to assist in the removal of sediments traveling through Buena Vista Creek.

The lagoon is protected from tidal influence by a beach berm and a weir located at the lagoon mouth. The existing weir maintains a minimum water level within the lagoon at an elevation of 5.6 feet National Geodetic Vertical Datum (NGVD). Sedimentation from the watershed upstream of the lagoon has accumulated within the lagoon basins, leading to decreasing water depths and increasing nutrient levels. Sedimentation and water quality issues have raised questions about Buena Vista Lagoon's long-term ecological health. Over time, the increased sediment and nutrient loading from urban development, sewage spills, and restricted circulation from highway and railroad bridges and the weir have degraded the lagoon. These conditions have diminished the lagoon's value to fish and wildlife, as well as human use.

In July 2012, the San Diego Association of Governments (SANDAG) began an environmental review process for the Buena Vista Lagoon Enhancement Project, which included evaluation of three enhancement alternatives (freshwater, saltwater, and a saltwater/freshwater hybrid regime) and a no project alternative. On May 22, 2020, SANDAG adopted a resolution to accept the saltwater alternative, which will allow the Buena Vista Lagoon to connect directly with ocean waters to flush out sediments.

Agua Hedionda Lagoon

Agua Hedionda Lagoon encompasses three interconnected lagoons, divided by Interstate 5 and a railroad bridge. The Agua Hedionda Ecological Reserve was acquired in 2000 by the California Department of Fish and Wildlife and consists of 186 acres of wetland at the eastern end of the lagoon. Agua Hedionda Lagoon is listed as impaired on the California 2014-2016 CWA Section 303(d) List of Impaired Waters for toxicity. Sources are listed as unknown. Agua Hedionda Creek, which feeds into the lagoon, is listed as impaired on the California 2014-2016 CWA Section 303(d) List of Impaired Waters for benthic community effects, indicator bacteria, malathion, manganese, bifenthrin, chlorpyrifos, cypermethrin, phosphorus, selenium, total dissolved solids, total nitrogen, and toxicity.

A significant threat to the lagoon's water quality was discovered in June 2000 when *Caulerpa taxifolia* algae was found growing in the lagoon. The algae are extremely fast growing (more than an inch a day), and if allowed to become permanently established, can destroy and replace coastal marine life such as kelp forests, which are home to a wide variety of fish, marine mammals, and seabirds. Action was taken to remove the threatening algae and in July 2006 *Caulerpa taxifolia* was declared eradicated from the lagoon.

Algerian Sea Lavender was also discovered in the lagoon's salt marshes and restoration efforts to remove it began in 2017. Algerian Sea Lavender pushes out native vegetation that is important to nesting birds and the survival of juvenile fish species. As of the date of this Local Coastal Program, the Agua Hedionda Lagoon Foundation and the California Department of Fish and Wildlife were continuing restoration efforts.

Agua Hedionda Lagoon also contains plants, like eelgrass, that help improve water quality. Eelgrass produces food and oxygen for marine life and improves water quality by filtering polluted runoff and absorbing excess nutrients.

Batiquitos Lagoon

Batiquitos Lagoon was originally open to the ocean, but the construction of transportation corridors and other development resulted in sediment closing off the lagoon over time. In the mid-1990s, the Batiquitos Lagoon Enhancement Project restored the lagoon to regular tidal influence, as it exists today (2017). The California Department of Fish and Wildlife is responsible for ongoing maintenance and monitoring of the lagoon, as required by Section 10 of the 1987 "Memorandum of Agreement for the Enhancement of Batiquitos Lagoon," which is an agreement between the City of Carlsbad, U.S. Fish and Wildlife Service, California Department of Fish and Game (as it was known in 1987), California State Lands Commission, and the City of Los Angeles that sets forth the roles and responsibilities for the restoration of Batiquitos Lagoon.

Batiquitos Lagoon is listed as impaired on the California 2014-2016 CWA Section 303(d) List of Impaired Waters for toxicity. Sources are listed as unknown. Additionally, two of the creeks that feed into Batiquitos Lagoon are listed as impaired on the California 2014-2016 CWA Section 303(d) List of Impaired Waters—Encinitas Creek is impaired for benthic community effects, phosphorus, selenium, and toxicity, and San Marcos Creek is impaired for DDE (dichlorodiphenyldichloroethylene), phosphorus, sediment toxicity, benthic community effects, indicator bacteria (enterococcus and fecal coliform), and selenium.

Like Agua Hedionda Lagoon, Batiquitos Lagoon also contains eelgrass, which helps improve water quality, as described above.

Water Pollution

As additional development occurs in Carlsbad and other communities within the Carlsbad hydrologic unit, the placement of roads, parking lots, buildings, and other infrastructure may increase impervious surfaces. Impervious surfaces reduce the amount of water infiltration into the ground and increase direct runoff into the city's creeks, lagoons, and the ocean; also, increased pollution can be generated

from the daily activities of new residents and businesses. The increased direct runoff and daily activities could result in further water quality degradation and flooding concerns. In addition, if not controlled, development activities have the potential to cause soil erosion and sedimentation, which may increase rates of surface runoff, decrease water quality, and cause related environmental damage.

Certain types of development, referred to as “priority development projects” (PDPs), pose a greater risk of adverse impacts to water quality and hydrology due to the amount of impervious surface area, size of the project, type of land use, proximity to coastal waters, lagoons, or storm drain systems that lead to coastal waters. PDPs are defined in the city’s National Pollutant Discharge Elimination System (NPDES) municipal separate storm sewer system (MS4) permit, as shown in Table 6-2 (as of 2018).

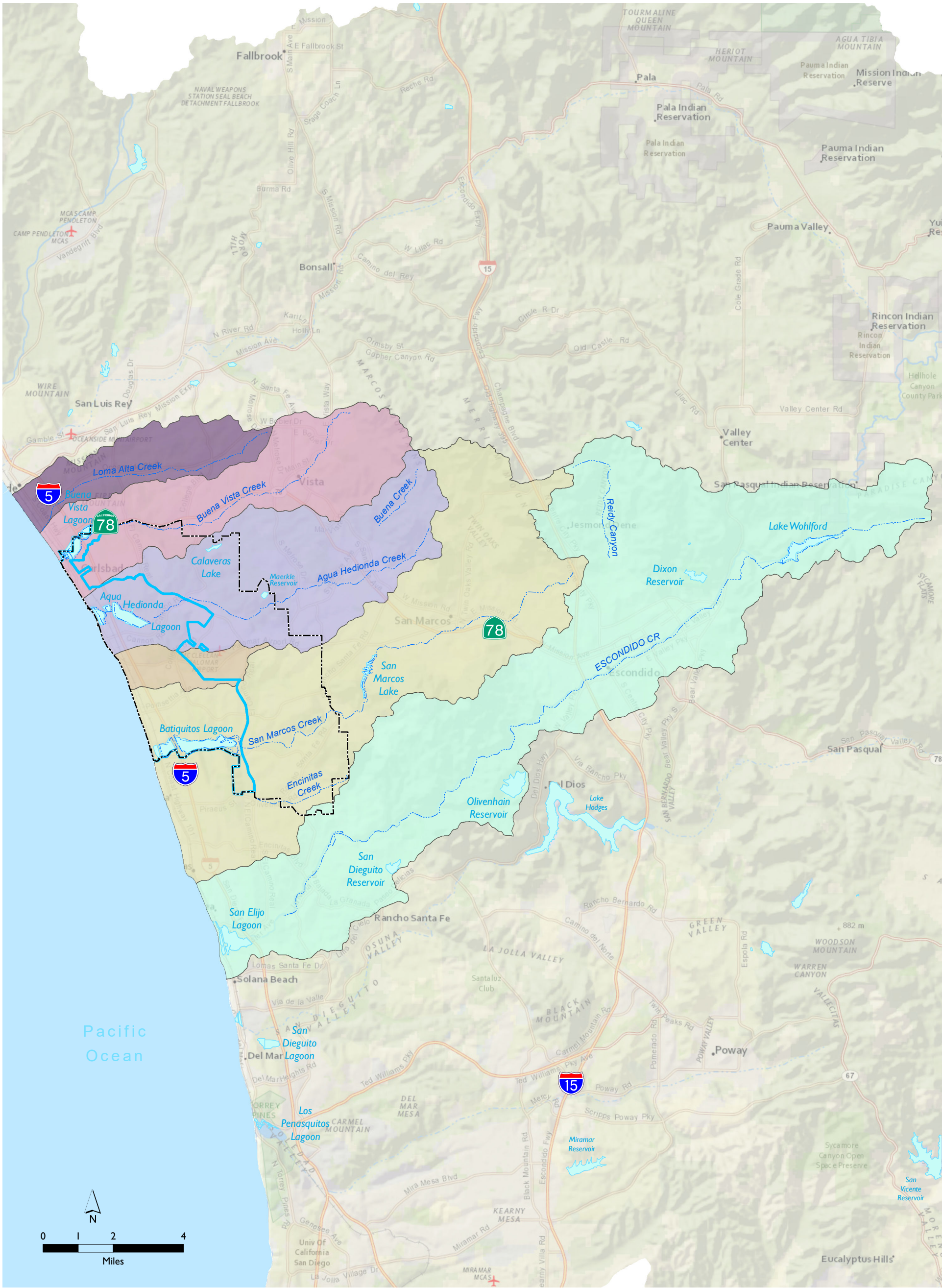
Table 6-2, Priority Development Projects (PDPs)	
Ref. #	Project Type
1	New development that creates 10,000 square feet or more of impervious surfaces collectively over the entire project site.
2	Redevelopment creating and/or replacing 5,000 square feet or more of impervious surface collectively over the entire project site on an existing site of 10,000 square feet or more of impervious surface
3	New development or redevelopment that creates and/or replaces 5,000 square feet or more of impervious surface collectively over the entire project site and supports one or more of the following: <ul style="list-style-type: none"> a. Restaurants b. Auto repair shops c. Retail gasoline outlets that are 5,000 square feet or more in size and generate an average daily traffic of 100 or more vehicles d. Development on any natural slope that is 25 percent or greater e. Parking lots f. Any impervious paved surface used for vehicle transportation (streets, roads, highways, freeways, and driveways)
4	New development or redevelopment that creates and/or replaces 5,000 square feet or more of impervious street, road, highway, freeway or driveway surface collectively over the entire project site.
5	New development or redevelopment that creates and/or replaces 2,500 square feet or more of impervious surface collectively over the entire site, and discharges directly to an “environmentally sensitive area” (ESA), as defined by the city’s BMP Design Manual Appendices. “Discharging directly to” includes flow that is conveyed overland a distance of 200 feet or less from the project to the ESA, or conveyed in a pipe or open channel any distance as an isolated flow from the project to the ESA (i.e., not commingled with flows from adjacent lands).
6	New development or redevelopment that results in the disturbance of one or more acres of land and is expected to generate water pollutants post construction.

The City of Carlsbad employs various measures, including best management practices (BMPs), to prevent pollutants and hazardous materials from entering municipal stormwater conveyance systems (for all development, including PDPs). As storm drains are not connected to sanitary sewer infrastructure, water conveyed to these drains is not treated prior to discharging into creeks, lagoons, and the ocean. Therefore, pollutants must be reduced and/or removed before entering urban conveyance systems. The city’s Storm Water Protection Program covers all phases of development

through planning, construction, and existing development and educates and monitors developers, businesses, municipal facilities, residents, school children, and the general public to help prevent pollutants and other hazardous materials from entering storm drains.

CITY OF CARLSBAD

LOCAL COASTAL PROGRAM



Source: Michael Baker International, 2016; SANGIS, 2016; City of Carlsbad, 2016

12/7/2021 JN M:\Data\1149652\GIS\MXD\Carlsbad_MXD\LCP_2019\Chapter 6\Figure 6-2 Carlsbad Hydrologic Unit 11x17.mxd

LEGEND

- Coastal Zone
- City Limit
- Creeks
- Major Sub-Basins/Watersheds**
 - Loma Alta Creek
 - Buena Vista Creek
 - Aqua Hedionda Creek & Buena Creeks

- Encinas Creek
- San Marcos Creek
- Escondido Creek

FIGURE 6-2
CARLSBAD HYDROLOGIC UNIT

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6.4 ESHA and Water Quality Policies

The following policies provide additional direction to ensure that development in the Coastal Zone is consistent with Coastal Act requirements related to protection of natural coastal resources. Some of the following policies are directly related to the Coastal Act sections described in Section 6.1 of this chapter; reference to those Coastal Act sections is noted at the end of the applicable policies. The use of the term “environmentally sensitive habitat area (ESHA)” in the policies of this chapter shall mean an “environmentally sensitive area” of habitat, as defined in Coastal Act Section 30107.5.

Environmentally Sensitive Habitat Area (ESHA)

- LCP-6-P.1 Maintain and implement the Coastal Commission certified “Habitat Management Plan for Natural Communities in the City of Carlsbad” (Habitat Management Plan) as a component of the Local Coastal Program. Any changes to the Habitat Management Plan that affect land within the coastal zone (including, but not limited to, changes to hardline preserve boundaries or mitigation requirements) shall be certified by the Coastal Commission as Local Coastal Program amendments prior to becoming effective.

- LCP-6-P.2 Protect ESHA against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas. Development in areas adjacent to an ESHA shall be sited, designed, and maintained to prevent significant degradation of the ESHA. Impacts to ESHA may be allowed only pursuant to the policies of this chapter and the provisions of the Habitat Management Plan [related to Coastal Act Section 30240].

- LCP-6-P.3 Ensure protection of sensitive habitat by implementing the requirements of the Habitat Management Plan including, but not limited to, the conservation standards specified in section D.7 and the adjacency standards in section F.3 of the plan. The requirements of the Habitat Management Plan shall be applicable to [related to Coastal Act Sections 30233 and 30240]:
 - A. Existing hardline, proposed hardline, and standards areas identified by the Habitat Management Plan, and
 - B. ESHA located outside the “existing hardline,” “proposed hardline,” and “standards areas” identified by the Habitat Management Plan.

- LCP-6-P.4 Continue participation in regional planning efforts to protect ESHA.

- LCP-6-P.5 Maintain functional wildlife corridors and habitat linkage to contribute to regional biodiversity and the viability of rare, unique, or sensitive biological resources throughout the city.
- LCP-6-P.6 Require that, at the time of any discretionary approval, any land identified as open space for its habitat value have an appropriate easement and land use and zoning designation placed on it for resource protection.
- LCP-6-P.7 Require a site-specific biological report, conducted by a qualified biologist, for any development project (i.e., grading, clearing, grubbing, construction, etc.) that requires a discretionary or ministerial permit, in the following circumstances:
- A. The project could directly or indirectly impact ESHA; or
 - B. The project could directly or indirectly impact lands identified in the Habitat Management Plan as existing hardline, proposed hardline, or standards area; or
 - C. There is no clear evidence that ESHA does not exist on the project site.
 - D. The biological report shall identify the location and quantities of all habitat on the project property and any off-site work area; the location of sensitive species; and the location of any off-site wetland, riparian habitat, oak woodland, nesting raptors, or narrow endemic species located within 100 feet of the property. The report shall also identify disturbed areas adjacent to or within sensitive habitat areas; the applicant shall provide information that identifies how the area became disturbed (i.e., natural causes or human actions; and if a coastal development was required and obtained to authorize the disturbance of the sensitive habitat).
- LCP-6-P.8 Ensure that Buena Vista, Agua Hedionda, and Batiquitos Lagoons and surrounding wetland habitat remain protected as hardline preserve areas pursuant to the Habitat Management Plan and the policies of this chapter.
- LCP-6-P.9 Ensure that consultation with and review by relevant state and federal agencies occurs prior to any bottom-disturbing activities (e.g., dredging) in Agua Hedionda Lagoon or Batiquitos Lagoon. The purpose of the consultation shall be to determine the required permitting process and measures to avoid, protect, and mitigate impacts to eelgrass beds throughout the lagoons.

- LCP-6-P.10 Support the California Department of Fish and Wildlife in its responsibility to maintain and operate Buena Vista Lagoon and Batiquitos Lagoon as ecological reserves. In regard to Batiquitos Lagoon, the Department of Fish and Wildlife is responsible for maintaining the lagoon pursuant to Section 10 of the 1987 “Memorandum of Agreement for the Enhancement of Batiquitos Lagoon.”
- LCP-6-P.11 Ensure that a maximum of two access crossings (Calle Barcelona and Levante Street) are maintained across the Green Valley riparian corridor (south of La Costa Avenue and west of El Camino Real). The crossings provide access to the development on the west side of the corridor. Maintenance of the crossings shall comply with the habitat protection requirements of the Habitat Management Plan and this Local Coastal Program.
- LCP-6-P.12 Require that tree trimming or removal, which is conducted as part of city tree maintenance or the construction of new development or redevelopment, comply with the following to protect the breeding, roosting, and nesting habitat of birds protected by the Migratory Bird Treaty Act and bird species listed by the Federal or California Endangered Species Act, and California bird species of special concern, as well as owls and raptors.
- A. Tree trimming or removal of any tree that, as determined by a qualified biologist, is used for breeding and nesting by a bird species listed above, shall be undertaken in compliance with all applicable codes or regulations of the California Department of Fish and Wildlife, the U.S. Fish and Wildlife Service, and the Migratory Bird Treaty Act, and shall be subject to the following:
1. Tree trimming or tree removal shall be avoided during the breeding and nesting season of the protected/sensitive bird species (January through September) unless the tree causes danger to public health and safety, as determined by the city in consultation with a qualified arborist. A health and safety danger shall be considered to exist if a qualified arborist determines that a tree or branch is dead, diseased, dying, or injured and said tree or branch is in imminent danger of collapse or breaking away.
 2. If trimming cannot be avoided during the breeding season, a pre-work nesting bird clearance survey shall be conducted by a qualified biologist no more than three days prior to the trimming/removal activity.

3. Trees or branches with an existing nest of a bird species listed above shall not be removed or disturbed until all young have successfully fledged from the nest, as determined by a qualified biologist, unless a health and safety danger exists.
 4. Removal of a tree, when permitted, shall be mitigated at a 1:1 ratio. The mitigation ratio may be reduced when multiple trees must be removed due to the health of the trees (e.g., infestation of a tree disease), as determined by a qualified biologist. A planting plan for each tree replacement/transplant shall be developed to specify the replacement/transplant location; tree type and size (minimum 15-gallon container size); planting specifications; and a cyclical five-year monitoring program with specific performance standards.
- B. If an active nest of a bird species listed above is found, construction activities within 300 feet (500 feet from any identified raptor nest) shall not exceed noise levels of 65 dB peak until the nest(s) is vacated and juveniles have fledged and there is no evidence of a second attempt at nesting. Surveys for the above bird species during their breeding season shall be conducted by a qualified professional prior to commencement of construction.

LCP-6-P.13 Ensure large scale beach maintenance activities avoid adverse impacts to the beach ecosystem, including beach wrack and near shore habitat during the spring/summer nesting season (April-August). Organized beach grooming should be avoided to the extent feasible, but would be allowed to decrease impacts of flying insect populations and large beach displacement areas on beachgoers. Alternative beach maintenance activities, such as manual beach cleaning, should be restricted when sensitive species are present on the beach (e.g., grunion, western snowy plover and least tern); when sensitive species are present, limit beach maintenance to areas located more than 10 feet landward of the beach wrack habitat line or mean high tide line, whichever is farthest landward.

Marine and Coastal Water Quality

LCP-6-P.14 Maintain, enhance, protect, and, where feasible, restore the quality and biological productivity of coastal waters consistent with Coastal Act Sections 30230 and 30231. Coastal waters include the ocean, rivers, streams, wetlands, estuaries, lakes, and groundwater.

- LCP-6-P.15 Ensure that any diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes is conducted in accordance with Coastal Act Section 30233.
- LCP-6-P.16 Ensure that all development occurs in accordance with the requirements of the city's Grading and Erosion Control Ordinance, Stormwater Management and Discharge Control Ordinance, Drainage Master Plan, Engineering Standards Volume 4 SWPPP Manual and Volume 5 BMP Design Manual, Jurisdictional Runoff Management Program (JRMP), and the additional requirements contained herein.
- LCP-6-P.17 Ensure that development is sited and designed to a) minimize the transport of pollutants in runoff into coastal waters, and b) minimize post-development changes in the site's runoff flow regime (i.e., volume, flow rate, timing, and duration) to preserve the pre-development hydrologic balance and prevent adverse changes in the hydrology of coastal waters (i.e., hydromodification).
- LCP-6-P.18 Address runoff management early in site design planning and alternatives analysis, integrating existing site characteristics that affect runoff (such as topography, drainage patterns, vegetation, soil conditions, natural hydrologic features, and infiltration conditions) in the design of strategies that minimize post-development changes in the runoff flow regime, control pollutant sources, and, where necessary, remove pollutants.
- LCP-6-P.19 Require the use of pollutant source control BMPs, which can be operational actions or structural or nonstructural features, in all development to minimize the transport of pollutants in runoff from the development.
- LCP-6-P.20 Give precedence to a low impact development (LID) approach to stormwater management in all development. LID integrates preventive site design strategies with small-scale, distributed BMPs to replicate the site's pre-development hydrologic balance through infiltration, evapotranspiration, harvesting, detention, or retention of stormwater close to the source. All development shall incorporate the following site design practices, where applicable and technically feasible:
- A. Restore hydrologic features such as stream corridors, drainage swales, topographical depressions, groundwater recharge areas, floodplains, and wetlands.
 - B. Preserve or enhance non-invasive vegetation to achieve water quality benefits such as transpiration, interception of rainfall, pollutant uptake, shading of waterways to maintain water temperature, and erosion control.

- C. Maintain or enhance on-site infiltration of runoff, where appropriate and feasible, to reduce runoff and recharge groundwater.
- D. Minimize the installation of impervious surfaces, especially directly-connected impervious areas, and, where feasible, increase the area of pervious surfaces in redevelopment to reduce runoff.

- LCP-6-P.21 Require that in areas adjacent to an ESHA development shall be sited and designed to protect the ESHA from any significant disruption of habitat values resulting from the discharge of stormwater or dry weather runoff flows.
- LCP-6-P.22 Avoid construction of new stormwater outfalls and direct stormwater to existing facilities with appropriate treatment and filtration, where feasible. Where new outfalls cannot be avoided, plan, site, and design outfalls to minimize adverse impacts to coastal resources from outfall discharges, including consolidation of existing and new outfalls where appropriate.
- LCP-6-P.23 Implement appropriate protocols, including conditions of approval for all coastal development permits, to manage BMPs (ongoing operation, maintenance, inspection, and training) in all development, to protect coastal water resources for the life of the development.
- LCP-6-P.24 Minimize water quality impacts during construction by minimizing the project footprint, minimizing and phasing grading activities, implementing soil stabilization and pollution prevention measures, preventing unnecessary soil compaction, or through other BMPS that minimize runoff and pollutant discharge.
- LCP-6-P.25 Require approval of a “weather triggered” action plan that identifies how a construction site will be protected to prevent water quality impacts during storm events. The plan shall identify BMPs that will be installed a minimum of 48 hours prior to a predicted storm event (i.e., a 40-percent or greater chance of rain within a 5-day National Weather Service forecast).
- LCP-6-P.26 Require the following, in addition to the policies above, for priority development projects (PDPs), as described in Table 6-2 and defined by the city’s municipal separate storm sewer system (MS4) permit.

- A. Early in the development planning and design stage, a qualified licensed professional shall prepare a pollutant runoff and hydrologic site analysis and document the expected effectiveness of proposed BMPs.
- B. Size LID, runoff control, and treatment control BMPs to infiltrate, retain, or treat, at a minimum, the runoff produced by the 85th percentile 24-hour storm event for volume-based BMPs, or two times the 85th percentile 1-hour storm event for flow-based BMPs.
- C. Use a LID approach that gives priority to preventive site design strategies to minimize post-development changes in the site's stormwater flow regime, supplemented by structural BMPs to retain on-site (by means of infiltration, evapotranspiration, or harvesting for later use), at a minimum, the runoff produced by the 85th percentile 24-hour design storm, to the extent appropriate and feasible.
- D. Conduct an alternatives analysis to demonstrate that there are no appropriate and feasible alternative project designs that would substantially improve runoff retention, if a proposed development will not retain on-site the runoff produced by the 85th percentile 24-hour design storm using a LID approach.
- E. Use a treatment control BMP (or a suite of BMPs) to remove pollutants of concern from any portion of the runoff produced by the 85th percentile 24-hour design storm that will not be retained on-site, or if additional pollutant removal is necessary to protect coastal waters.
- F. If a proposed development will add a net total of more than 10,000 square feet of impervious surface area, and any portion of the runoff produced by the 85th percentile 24-hour design storm will not be retained on-site, use a structural runoff control BMP to minimize adverse post-development changes in the runoff flow regime.

LCP-6-P.27 Consult the city's MS4 permit to verify the most current definition of PDPs. The PDP definitions in Table 6-2 shall apply in the coastal zone, unless the MS4 permit definitions include additional project types or more restrictive impervious area limitations, in which case those additional project types and more restrictive impervious area limitations shall apply in the coastal zone.

LCP-6-P.28 Determine that no Local Coastal Program amendment is required for the following minor revisions to the city's Engineering Standards Volume 4 SWPPP Manual and Volume 5 BMP Design Manual:

- A. Addition of new BMPs found to be more protective of water quality than current BMPs
- B. Removal of BMPs found to be ineffective (this does not include removal of BMPs on the basis that they are infeasible)
- C. Addition of new development categories as PDPs
- D. Addition of new coastal waters considered to be "environmentally sensitive areas"
- E. Reductions in the area of impervious surfaces used to designate a specific category of PDP

The minor changes listed above may be made, provided the city finds that the changes will better protect coastal water quality. The city shall notify the Executive Director of the Coastal Commission in writing of any of the above-listed changes.

LCP-6-P.29 Limit access on the eastern end of the Agua Hedionda Lagoon (east of Bayshore Drive) to passive vessels only (e.g., paddleboards and kayaks); no power boats or other motorized watercraft shall be permitted.

LCP-6-P.30 Encourage and support efforts to educate the community about the potential water quality impacts resulting from development.

LCP-6-P.31 Support the Buena Vista Lagoon Enhancement Project and enter into a project agreement with San Diego Association of Governments (SANDAG), the City of Oceanside, the California Department of Fish and Wildlife, and other affected property owners.

7

Coastal Hazards

Managing development to respond to coastal hazards is a key objective of the California Coastal Act. Consistent with the Coastal Act, this chapter identifies the hazards listed below and provides policies that guide new development to reduce risks to life and property and to avoid substantial changes to natural land forms. This chapter addresses the following coastal hazards:

- Sea level rise hazard areas
- Flood hazard areas (other than sea level rise flood hazards), including dam inundation and tsunami run-up areas
- Geologic hazards, such as soil erosion, liquefaction, and seismic hazard areas
- Fire hazard areas



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7.1 Introduction

The primary Coastal Act policies related to coastal hazards include the following:

Section 30235, *Construction altering natural shoreline*

Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal dependent uses or to protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fishkills should be phased out or upgraded where feasible.

Section 30236, *Water supply and flood control*

Channelizations, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and be limited to (1) necessary water supply projects, (2) flood control projects where no other method for protecting existing structures in the flood plain is feasible and where such protection is necessary for public safety or to protect existing development, or (3) developments where the primary function is the improvement of fish and wildlife habitat.

Section 30253, *Minimization of adverse impacts*

New development shall do all of the following:

- (a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.
- (b) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.
- (c) Be consistent with requirements imposed by an air pollution control district or the State Air Resources Board as to each particular development.
- (d) Minimize energy consumption and vehicle miles traveled.
- (e) Where appropriate, protect special communities and neighborhoods that, because of their unique characteristics, are popular visitor destination points for recreational uses.

7.2 Sea Level Rise

California Coastal Commission Sea Level Rise Policy Guidance (November 7, 2018) states:

“Climate change is upon us, affecting almost every facet of California’s natural and built environment. Increasing global temperatures are causing significant effects at global, regional, and local scales. In the past century, average global temperature has increased by about 0.8°C (1.4°F), and average global sea level has increased by 7 to 8 in (17 to 21 cm) (IPCC 2013). Sea level at the San Francisco tide gauge has risen 8 in (20 cm) over the past century, and recent reports developed by the California Ocean Protection Council (OPC) (in conjunction with the OPC Science Advisory Team) project that by the year 2100, sea levels may rise by approximately 2.4 to 6.9 feet, with the potential for rapid ice loss to result in an extreme scenario of 10.2 feet of sea level rise (Griggs et al., 2017; OPC 2018). While the California coast regularly experiences erosion, flooding, and significant storm events, sea level rise will exacerbate these natural forces, leading to significant social, environmental, and economic impacts. The third National Climate Assessment notes that there is strong evidence showing that the cost of doing nothing to prepare for the impacts of sea level rise exceeds the costs associated with adapting to them by about 4 to 10 times (Moser et al. 2014). Therefore, it is critically important that California plan and prepare for the impacts of sea level rise to ensure a resilient California coast for present and future generations.”

There is broad agreement in the scientific community that the earth is predicted to warm and that sea levels will rise because of the thermal expansion of water and increased contributions from melting glaciers.¹ Though there is consensus among the scientific community on these concepts, the timing and severity of sea level rise is relatively uncertain and is dependent on region-specific conditions. The uncertainty in the sea level rise projections is a result of future global emissions of carbon dioxide (a function of future social behavior) and the non-linear response of the ocean to warmer temperatures and contributions from land-based ice sources. Thus, planning for sea level rise must consider high and low estimates of sea level rise. Planning for a range of potential future conditions provides the City of Carlsbad with the tools to make current and future planning decisions that allow the city’s resources to adapt to changing conditions.

The “City of Carlsbad Sea Level Rise Vulnerability Assessment,” Appendix B of this Local Coastal Program, provides a Carlsbad-specific sea level rise analysis that evaluates the degree to which important community assets (e.g., beaches, public access ways, parcels, critical infrastructure,

¹ Coastal and Ocean Working Group of the California Climate Action Team (CO-CAT) 2013; California Coastal Commission 2015

transportation) are vulnerable to the adverse effects of projected sea level rise. The assessment identifies the assets that are likely to be impacted in years 2050 and 2100, and the causes and components of each asset's vulnerability.

Best Available Science

The information below describes the science used to prepare the “City of Carlsbad Sea Level Rise Vulnerability Assessment,” as well as science available as of 2017. The policies of this chapter require new development projects to be evaluated based on the best available sea level rise science and state guidance at the time of the proposal – the science referenced in this section may not be the best available science when future development is proposed. The “City of Carlsbad Sea Level Rise Vulnerability Assessment” is to be updated periodically to utilize the best available science and state guidance.

City of Carlsbad Vulnerability Assessment – CoSMoS 3.0 (2015)

For the “City of Carlsbad Sea Level Rise Vulnerability Assessment,” the U.S. Geological Survey Coastal Storm Modeling System (CoSMoS) version 3.0 (released for use in November 2015) was used to identify areas and assets vulnerable to sea level rise. CoSMoS 3.0 makes detailed predictions of coastal flooding and erosion based on existing and future sea level scenarios in southern California.

For the year 2050, CoSMoS 3.0 utilized a sea level rise scenario of 1.6 feet; for the year 2100, a sea level rise scenario of 6.6 feet was utilized. These sea level rise scenarios (1.6 feet and 6.6 feet) roughly align with the National Research Council's 2012 sea level rise projections (2 feet in the year 2050 and 5.5 feet in the year 2100).

Rising Seas in California: An Updated Sea Level Rise Science (2017)

The CoSMoS 3.0 sea level rise projections are also within the range of sea level rise probability identified in the Ocean Protection Council's 2017 report titled “Rising Seas in California: An Update on Sea-Level Science.” Table 7.1 shows the report's range of probable sea level rise projections, as well as a set of extreme sea level rise projections (no associated probability) that represent the highest sea level rise amount physically plausible according to the best available science at the time of the report. Table 7.1 also shows the report's recommendations regarding the applicability of the sea level rise projections.

Table 7-1, Ocean Protection Council 2017 Sea Level Rise Projections and Recommended Applicability

Sea Level Rise Projection		Recommended Applicability
Low end of probability range	1.2 feet in 2050 3.6 feet in 2100	Inform development projects with high adaptive capacity and low consequences if impacted by sea level rise, such as trails.
High end of probability range	2.0 feet in 2050 7.1 feet in 2100	Inform development projects with low adaptive capacity and high consequences if impacted by sea level rise, including residential and commercial development.
Extreme projection	2.8 feet in 2050 10.2 feet in 2100	Inform development projects with low adaptive capacity and extremely high consequences if impacted by sea level rise, such as critical infrastructure.

Sea Level Rise Planning Horizons for Development

In areas subject to future sea level rise hazards, as identified by the “City of Carlsbad Sea Level Rise Vulnerability Assessment,” an evaluation of future sea level rise impacts is required. The appropriate time horizon to use to evaluate the potential impacts of sea level rise on development depends on the anticipated duration/life of the development (i.e., the time when the development is expected to be removed, replaced, or redeveloped). For example, if a new structure has an anticipated duration of 75 years, then a sea level rise hazards analysis should evaluate the impacts to the site and development based on projected sea level rise over a minimum of 75 years. The duration of any development is generally defined by the following timeframes, unless a site- or project-specific analysis determines otherwise.²

Table 7-2, Anticipated Duration of Development

Development Type	Anticipated Duration
Ancillary development or amenity structures (e.g., trails, bike racks, playgrounds, parking lots, shoreline restrooms)	5 years
Manufactured or mobile homes	30 years
Buildings (e.g., residential, commercial, office, industrial, etc.)	75 years
Critical infrastructure	100 years

Adapting to Sea Level Rise

Adaptation to sea level rise involves taking appropriate actions to prevent or minimize the adverse effects of sea level rise. This Local Coastal Program includes a range of policies that guide city decision making and actions to improve community resilience to the impacts of sea level rise.

Adaptation strategies generally fall into four main categories: do nothing, protect, accommodate, and retreat. These strategies are generally described in Table 7-3. When considering which strategy (or

² California Coastal Commission Draft Residential Adaptation Policy Guidance, Interpretive Guidelines for Addressing Sea Level Rise in Local Coastal Program, March 2018

combination of strategies) is most appropriate to address a particular hazard, it is important to consider the associated secondary and cumulative effects (e.g., loss of beach resulting from the use of seawalls) and trade-offs (i.e., who/what will benefit and who/what will be adversely impacted?). The “City of Carlsbad Sea Level Rise Vulnerability Assessment” provides more information about the general strategies and secondary impacts.

The policies of this chapter provide guidance to assist the city in adapting to the sea level rise hazards identified in the “City of Carlsbad Sea Level Rise Vulnerability Assessment.”

Table 7-3, General Sea Level Rise Adaptation Strategies

General Adaptation Strategy	Description
Do Nothing	One option is to “do nothing” or follow a policy of “non-intervention.” Doing nothing results in the need to react when sea level rise impacts occur. The reactive approach involves emergency response, attempts to maintain the status-quo, and respond to impacts caused by episodic storm events and other sea level rise impacts. This approach will likely fail to anticipate and prevent or mitigate long-term consequences of sea level rise and may result in significant financial costs, as well as adverse impacts to coastal resources, development, and the city’s economy.
Protect	Protection strategies employ some sort of engineered structure or other measure to protect or floodproof development (or other coastal resources) in its current location without changes to the development or resources themselves. Protection strategies can be further divided into “hard” and “soft” defensive measures. Examples of a hard approach would be to construct a seawall or revetment, while a soft approach may be to nourish beaches with sand or build sand dunes. Although the California Coastal Act allows for potential protection strategies for existing development, it also directs that new development be sited and designed to avoid hazards and not require future protection that may alter a natural shoreline.
Accommodate	Accommodation strategies employ methods that modify existing or design new developments or infrastructure in a manner that decreases hazard risks and, therefore, increases the resiliency of the development/infrastructure to the impacts of sea level rise. These accommodation strategies include actions such as elevating structures, retrofitting or using materials to increase the strength of development/infrastructure such as: the ability to handle additional wave impacts; building structures that can easily be moved and relocated; using additional setback distances to account for acceleration of erosion; and clustering development in less vulnerable areas.
Retreat	Retreat strategies relocate or remove existing development out of hazard areas and limit the construction of new development in vulnerable areas.

Important Considerations about Sea Level Rise

Siting Development to Avoid Sea Level Rise Hazards

New development within sea level rise hazard areas is vulnerable to erosion and flood hazards and may result in impacts to coastal resources, such as loss of sandy beaches, impacts to bluff stability, and impacts to natural shoreline migration. The policies of this chapter require development to be located and designed to minimize risks from hazards, ensure structural stability, and ensure the protection of coastal resources, as required by the Coastal Act.

Shoreline Protective Devices (Armoring)

Coastal Act Section 30253 requires new development to minimize risks from hazards, to avoid creating or contributing significantly to erosion and geologic instability, and to not in any way require construction of armoring that substantially alters natural landforms along bluffs and cliffs. Other Coastal Act provisions also limit the circumstances in which shoreline armoring may be permitted. For example, Section 30251 requires that new development minimize the alteration of natural land forms and be visually compatible with the character of surrounding areas.

Coastal Act Section 30235 allows armoring that alters natural shoreline processes when it is needed to protect coastal dependent uses, existing structures, or public beaches in danger from erosion. However, shoreline armoring is only to be permitted if it is necessary (i.e., if the existing structure is in fact in danger) and if the proposed shoreline protection is the least environmentally damaging alternative to abate the danger. Also, when shoreline armoring is permitted, it must be designed to eliminate or mitigate adverse impacts on beach area and local shoreline sand supply (e.g., losing sand and beach area through the device's physical encroachment on a beach, fixing of the back beach, preventing new beach formation in areas where the bluff/shoreline would have otherwise naturally eroded, and losing sand-generating bluff/shoreline materials that would have entered the sand supply system absent the shoreline protective device).

Although coastal armoring generally has significant adverse impacts on coastal resources, there are situations, as described in the policies of this chapter, where armoring may be allowed and may represent a reasonable short- to mid-term adaptation strategy. This may be especially true in urbanized areas where existing residential development and/or critical infrastructure exist, where development is already protected by armoring, where the impacts of armoring on natural shoreline processes will be minimal due to the geology of the area, and where the armoring is the least environmentally damaging alternative for adaptation. However, to the extent that this Local Coastal Program allows for shoreline armoring, new development must avoid impacts to public trust resources and mitigate for all impacts to coastal resources and public coastal access affected by armoring.

Emergency Coastal Development Permits

California Code of Regulations Section 13009 defines an emergency as “a sudden unexpected occurrence demanding immediate action to prevent or mitigate loss or damage to life, health, property, or essential public service.” The Coastal Act provides for issuance of emergency coastal development permits to allow temporary development to occur in response to an emergency. Along the shoreline, emergency permit applications for shoreline protective devices are likely to increase as risks of storm damage are exacerbated by sea level rise. It is important to note that the emergency permit is only a

temporary authorization of development – the emergency permit provisions are not intended to allow for construction of permanent shoreline protection.

Migration of Public Trust Lands

The State of California acquired sovereign ownership of all tidelands and submerged lands and beds of navigable waterways upon its admission to the United States in 1850. The state holds and manages these lands for the benefit of all people of the state for statewide purposes consistent with the common law public trust doctrine (public trust). The public trust ensures that title to sovereign land is held by the state in trust for the people of the state.

In coastal areas, public trust lands include both tidelands and submerged lands, from the shore out three nautical miles into the Pacific Ocean. Tidelands lie between mean high tide and mean low tide.

As the sea level rises over time, the mean high tide line/public trust land moves inland. An important consideration when planning for sea level rise is recognizing that the public trust boundary will migrate inland in some locations as sea levels rise. As this occurs, shorefront development might come to be located on public trust property during its lifespan. Development that encroaches on public trust land may cause new coastal resource and public trust impacts. The policies of this chapter ensure that development does not interfere with the protection and use of public trust land as it migrates inland.

Moving Development Away from Hazards (Retreat)

As described above, Coastal Act policies require new development to minimize risks from hazards and ensure structural stability without the need for shoreline protection that alters natural landforms. Other Coastal Act policies require protection of sensitive habitat, public access, and other coastal resources. Thus, as sea levels rise and hazardous areas and public trust lands migrate inland, Coastal Act policies will require new development to be located further inland in situations where other adaptation measures are infeasible, essentially resulting in the retreat of development inland.

The policies of this chapter address the circumstances when development must be removed to avoid hazardous conditions and impacts to public trust lands and coastal resources. Also, the policies require the city to develop a sea level rise adaptation plan(s) to identify how development can adapt to the impacts of sea level rise, including the circumstances (triggers) that may require retreat.

7.3 Flood Hazards

The information about sea level rise hazards in Section 7.2 identifies hazards, including flood hazards, that are projected to occur in the years 2050 and 2100. Existing flood hazards are also described in this section.

Flood Prone Areas

Flood prone areas are lands susceptible to being inundated by water from any source (e.g., the ocean, lagoons, creeks, surface water runoff, etc.). Flooding occurs when normally dry lands are partially or completely inundated by water on a temporary basis. Flooding may occur when there is:

- Overflow of floodwaters;
- Unusual and rapid accumulation or runoff of surface waters from any source; and/or
- Collapse or subsidence of land along the shore of a body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event.

Flood prone areas are identified in terms of the statistical annual chance of flood. The Federal Emergency Management Agency (FEMA) prepares Flood Insurance Rate Maps (FIRMs) that identify special flood hazard areas with a 1-percent-annual-chance flood (i.e., a flood event with a 1-percent chance of being equaled or exceeded in any given year). The 1-percent-annual-chance flood is also referred to as the base flood or 100-year flood. Areas outside the special flood hazard areas, with a moderate or minimal flood hazard, are also shown on the FIRMs; moderate flood hazard areas are between the limits of the base flood and the 0.2-percent-annual-chance (or 500-year) flood, and minimal flood hazard areas are at a higher elevation than the 0.2-percent-annual-chance flood. As shown in Figure 7-1, the potential special flood hazard areas identified on the FIRM maps in Carlsbad include the entire coastline and the following major drainage basins:

- Buena Vista Creek and Buena Vista Lagoon
- Agua Hedionda Creek, its northern tributary, and the Agua Hedionda Lagoon
- San Marcos Creek and its northern tributary
- Batiquitos Lagoon
- Encinitas Creek

Preserving or restoring natural floodplains helps with flood loss reduction benefits and improves water quality and habitat. Pursuant to this Local Coastal Program, development is restricted in a 1-percent-annual-chance flood area.

Dam Inundation

Dam inundation can be caused by the release of impounded water from structural failure or overtopping of a dam. The San Diego County Multi-Jurisdiction Hazard Mitigation (HAZMIT) Plan identifies dam failure risk levels based on dam inundation map data. Four dams and a reservoir are located within or adjacent to Carlsbad: the Calavera, Maerkle, San Marcos, and Bressi dams, and the Stanley A. Mahr reservoir, all of which are outside the Coastal Zone. However, failure or overtopping of the dams/reservoirs could result in inundation downstream within the Coastal Zone, as shown in Figure 7-2. All four dams and the reservoir have emergency action plans in place. These facilities are periodically inspected by the California Department of Water Resources, Division of Safety of Dams.

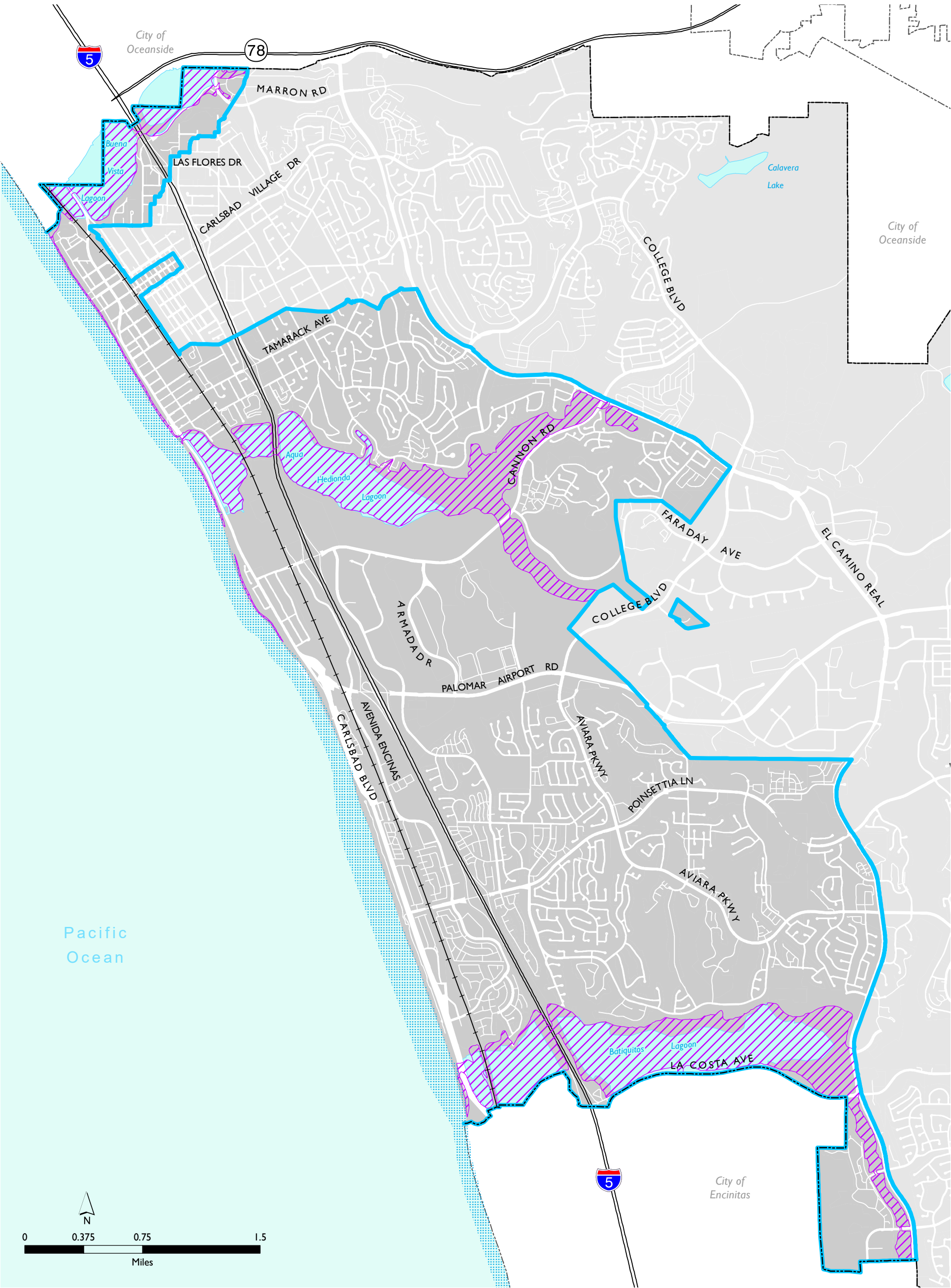
Tsunami Run-Up

Tsunamis are long wavelength ocean waves generated by sudden movements of the ocean bottom during events such as earthquakes, volcanic eruptions, or landslides. San Diego County maps zones of high risk for tsunami run-up. As shown in Figures 7-3A, 7-3B and 7-3C, Maximum Tsunami Run-Up, the areas identified in Carlsbad as at risk for tsunami run-up are in the immediate vicinity of the Pacific Ocean coastline and the Buena Vista, Agua Hedionda, and Batiquitos Lagoons.

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CITY OF CARLSBAD

LOCAL COASTAL PROGRAM



Source: Michael Baker International, 2016; SANGIS, 2016; City of Carlsbad, 2016

12/7/2021 J:\M\Mapa\1149652\GIS\MXD\Carlsbad_MXD\LCP_2019\Chapter 7\Figure 7-1 Flood Hazard Zone 11x17.mxd

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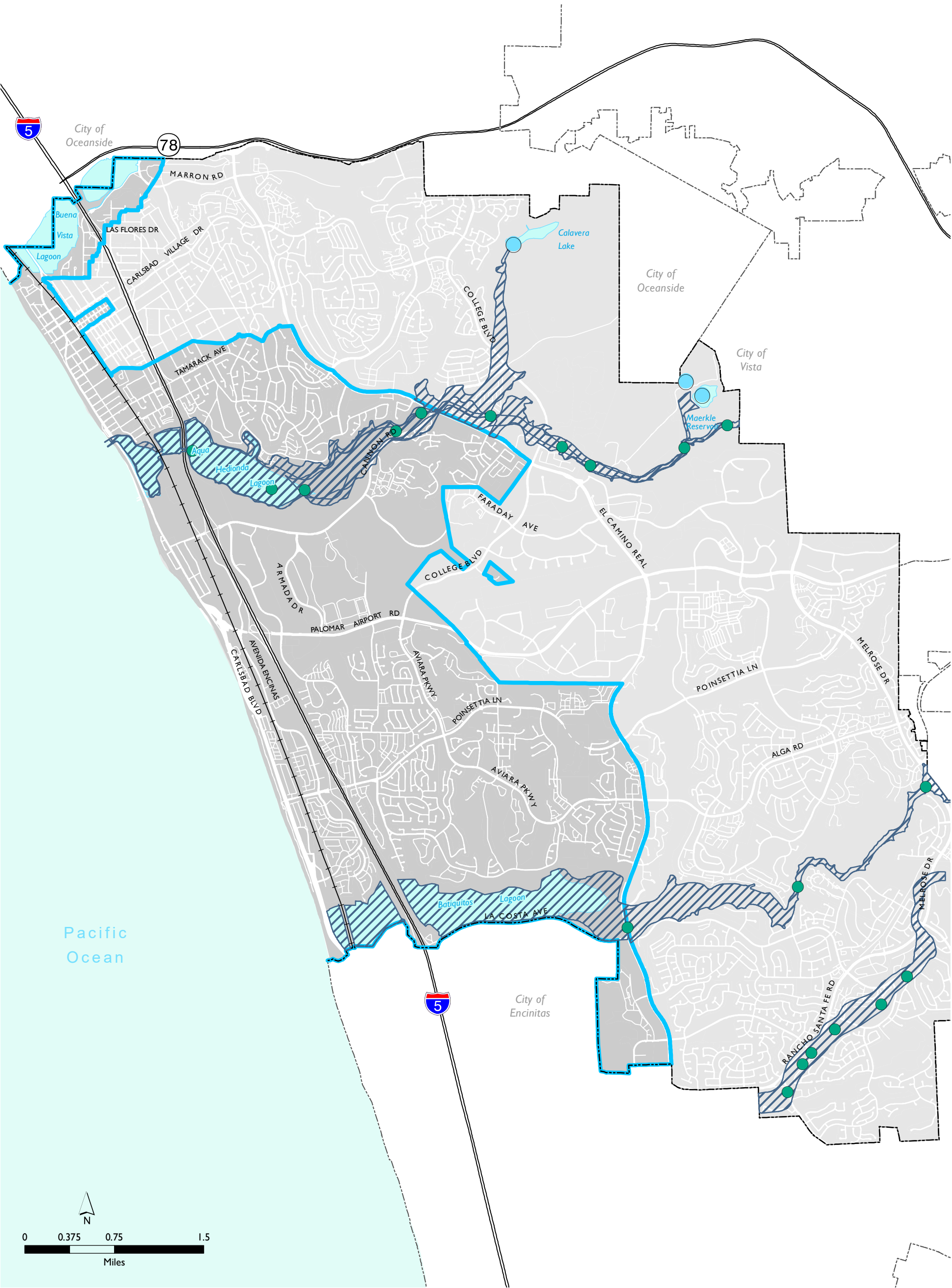
- Coastal Zone
- City Limit
- Railroad
- FEMA Special Flood Hazard Area (1-percent annual chance flood area - 100-year floodplain)
- FEMA VE Zone (1-percent annual chance flood area with wave action)

FIGURE 7-1
FLOOD HAZARD ZONE

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CITY OF CARLSBAD

LOCAL COASTAL PROGRAM



Source: Michael Baker International, 2016; SANGIS, 2016; FEMA, 2016; City of Carlsbad, 2016

12/3/2021 J:\M:\Data\149632\GIS\MXD\Carlsbad_MXD\LCP_2019\Chapter 7\Figure 7-2 Dam Inundation Areas 11x17.mxd

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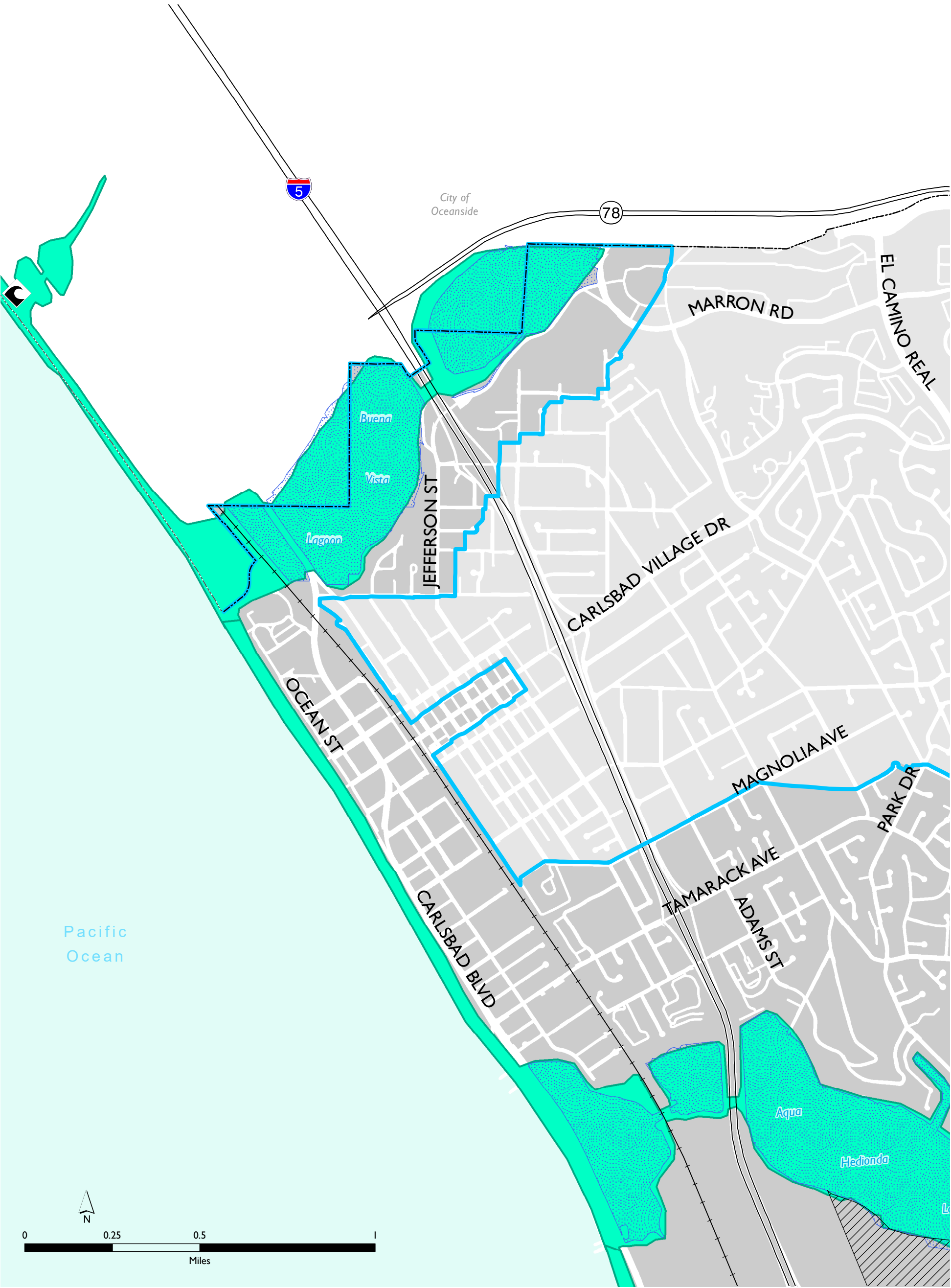
- | | |
|--------------|-----------------------|
| Coastal Zone | Dam Inundation Areas |
| City Limit | Dams & Reservoirs |
| Railroad | Dam Inundation Points |

FIGURE 7-2
DAM INUNDATION AREAS

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CITY OF CARLSBAD

LOCAL COASTAL PROGRAM



Source: Michael Baker International, 2016; SANGIS, 2016; City of Carlsbad, 2019

12/7/2021 JN M:\Data\1149652\GIS\MXD\Carlsbad_MXD\LCP_2019\Chapter 7\Figure 7-3A Maximum Tsunami Run-Up 11x17.mxd

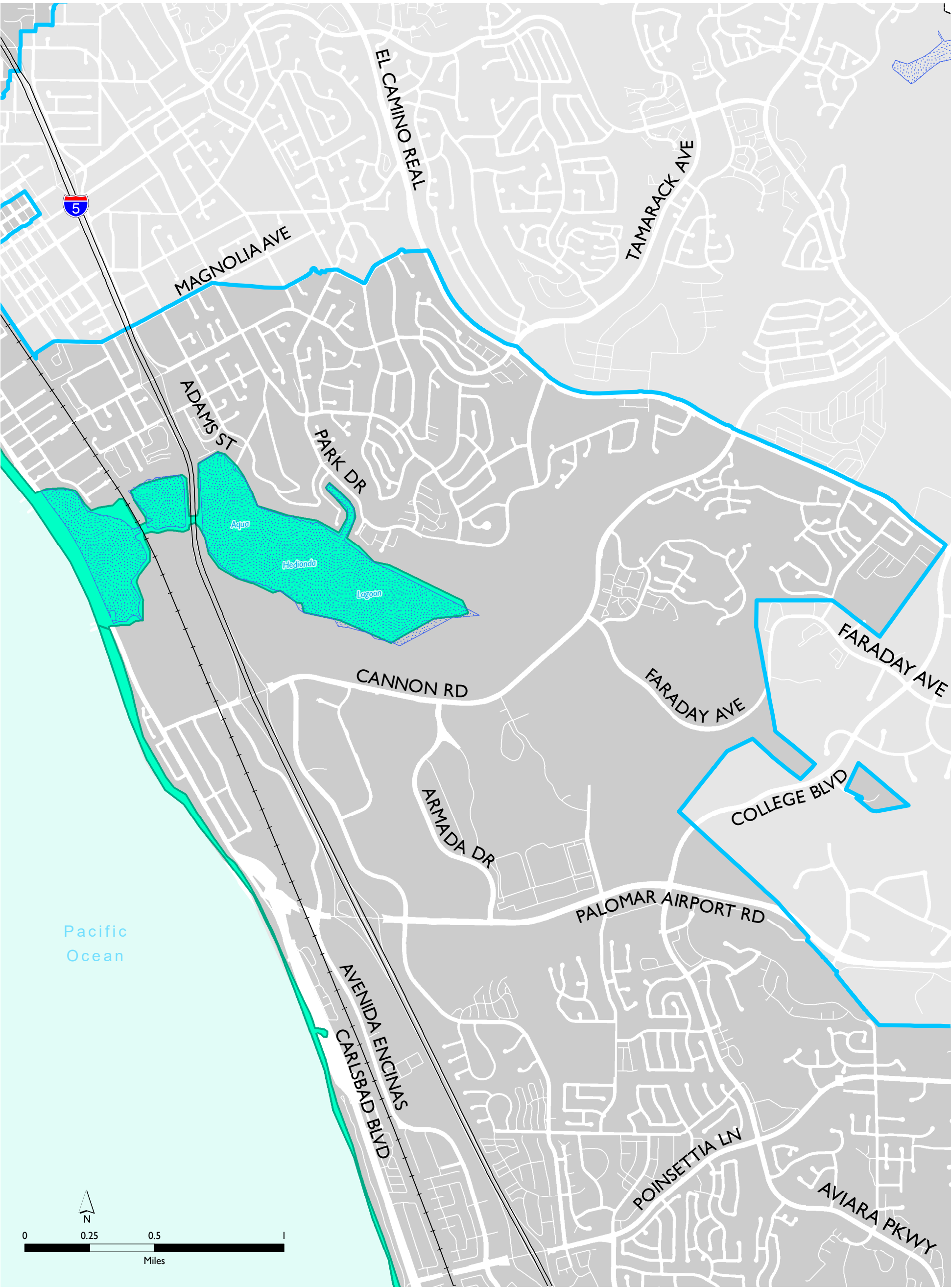
- LEGEND**
- Coastal Zone
 - City Limit
 - Lagoon
 - Railroad
 - Maximum Tsunami Projected Runup
 - Historic Tsunami Effect Felt

FIGURE 7-3A
MAXIMUM TSUNAMI PROJECTED RUN-UP

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CITY OF CARLSBAD

LOCAL COASTAL PROGRAM



Source: Michael Baker International, 2016; SANGIS, 2016; City of Carlsbad, 2019

12/7/2021 JN M:\P\data\149652\GIS\MXD\Carlsbad_MXD\LCP_2019\Chapter 7\Figure 7-3B Maximum Tsunami Run-Up 11x17.mxd

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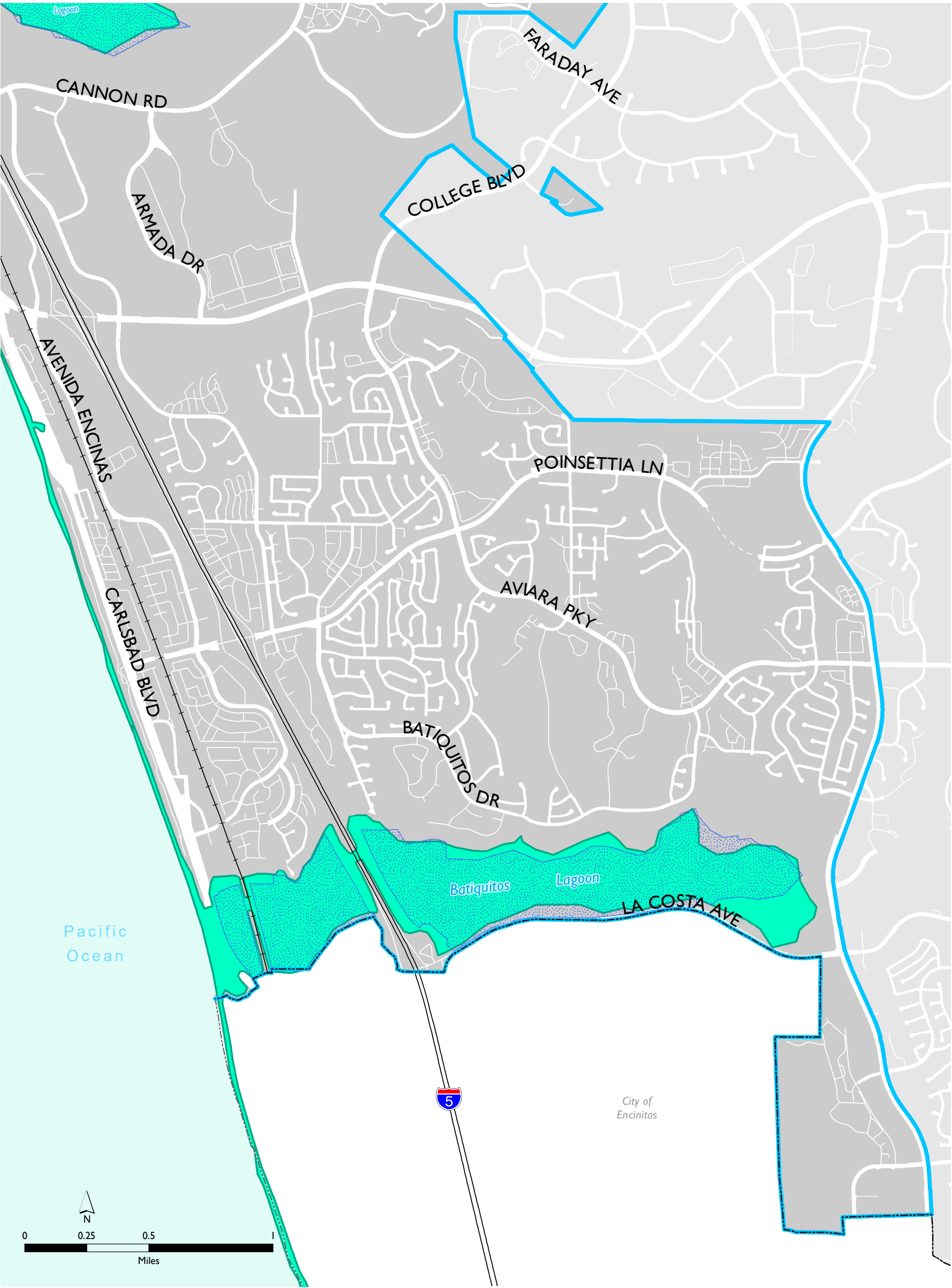
- Coastal Zone
- City Limit
- Lagoon
- Railroad
- Maximum Tsunami Projected Runup

FIGURE 7-3B
MAXIMUM TSUNAMI PROJECTED RUN-UP

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CITY OF CARLSBAD

LOCAL COASTAL PROGRAM



Source: Michael Baker International, 2016; SANGIS, 2016; City of Carlsbad, 2019

12/7/2021 JN M:\Mdata\149652\GIS\MXD\Carlsbad_MXD\LC_P_2019\Chapter 7\Figure 7-3C Maximum Tsunami Run-Up 11x17.mxd

LEGEND

- Coastal Zone
- City Limit
- Lagoon
- Railroad
- Maximum Tsunami Projected Runup

FIGURE 7-3C
MAXIMUM TSUNAMI PROJECTED RUN-UP

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7.4 Geologic Hazards

Carlsbad's geologic formations and deposits are described in Chapter 5, Section 5.3 of this Local Coastal Program. The following information describes potential geologic hazards, including erosion and seismic hazards.

Soil Erosion

Erosion occurs when materials on the earth's surface are loosened, dissolved, or worn away and relocated by natural processes (e.g., rainfall, flowing water, wind, ice, temperature change, gravity, as well as coastal erosion from storms, wave attack, and rising sea levels in combination with those annual forces) or by human-driven activities (e.g., agriculture, construction). Section 7.2 provides more information about erosion impacts related to sea level rise.

Erosion can threaten the city's water quality, economic viability, and supply of natural resources, including beaches and coastal bluffs. Potential consequences include loss of topsoil, loss of agricultural productivity, sedimentation in lakes, rivers, and lagoons, pollution of soil and water by contaminants and nutrients, destruction of habitats, and damage to property and infrastructure.

Coastal Erosion

Carlsbad's beaches serve as a buffer between the action of ocean waves and coastal development. However, like many beaches along the California coast, Carlsbad's beaches are threatened by erosion and sediment loss.

Coastal sediment occurs, accumulates, and moves via natural processes (ocean currents, precipitation, landslides, stream flow, etc.) to replenish the shoreline, which is also naturally subject to erosion. However, urban development and marine structures such as piers and breakwaters can disrupt these processes and alter the quantity, quality, and location of coastal sediment deposition over time. Often, additional interventions, such as armoring, dredging, beach renourishment, and other methods are employed to stabilize the shoreline, but such interventions can have adverse impacts on shoreline erosion down shore and on coastal ecosystems and may accelerate sand loss.

North Carlsbad beaches, Agua Hedionda Lagoon, South Carlsbad beaches, and Batiquitos Lagoon beach have all been listed as "beach erosion areas of concern" by SANDAG's Coastal Regional Sediment Management Plan for the San Diego Region (2009). The regional sediment management plan is a step toward regional cooperation of shoreline management and identifies management strategies, potential sediment sources, and potential receiving sites. The city has also actively maintained its beaches through its own beach nourishment programs, sourcing sediments from the lagoons (which impound sediments once destined for the coast) and local construction projects. In 2012, North and South

Carlsbad beaches were replenished with 218,000 and 140,000 cubic yards of new sand, respectively, as part of SANDAG's Regional Beach Sand Project. Even with nourishment, the beaches are still affected by erosion damage from flooding and storm events, which will be exacerbated by sea level rise (see Section 7.2). Similarly, sea level rise will exacerbate erosion of coastal bluffs.

The policies of this Local Coastal Program, which address adaptation to sea level rise, are applicable to the coastal erosion areas identified in SANDAG's Coastal Regional Sediment Management Plan for the San Diego Region (2009), as well as all other coastal areas that become vulnerable to erosion and other hazards as the sea level rises (see Section 7.2 above for more information about sea level rise hazards).

Hillsides and Slopes

The policies of this Local Coastal Program require protection of hillsides and slopes against erosion hazards. Preserving hillside vegetation protects slope stability, nearby development, and the surrounding environment from damage related to erosion.

Landslides involve the downslope displacement and movement of material and can be triggered by either static (i.e., gravity) or dynamic (i.e., earthquake or rainfall) forces. The geology, structure, and amount of groundwater in the slope affect slope failure potential, as do external processes (i.e., climate, topography, slope geometry, and human activity). Slope failure is more likely to occur on steeper slopes, of 15 percent or greater, but may also occur on slopes of 15 percent or less. The probability is greater on steeper slopes that exhibit old landslide features such as scarps, slanted vegetation, and transverse ridges. Landslide-susceptible areas are characterized by steep slopes and downslope creep of surface materials and are more common in zones of active earthquake faulting (see below for more information about seismicity in Carlsbad). In general, south-facing slopes in Carlsbad have gentle grades and are not prone to landslides, while north-facing slopes are generally steeper and more susceptible to landslides.

The policies of this Local Coastal Program prohibit or limit development on hillsides and slopes and ensure that the effects of human-related or development-driven erosion are reduced or avoided. Examples of other slope protection/erosion prevention measures include the city's Habitat Management Plan, which protects slopes, such as banks, due to their proximity to riparian habitat or because they contain listed habitat types. Also, the city's hillside development regulations limit or prohibit development on steep slopes.

Seismicity

No active faults run directly through Carlsbad. Additionally, the California Geological Survey does not include Carlsbad on its list of cities affected by Alquist-Priolo Earthquake Fault Zones. The nearest fault to the city is the Newport-Inglewood-Rose Canyon Fault, which runs offshore of the western edge

of the city and is considered active. Other faults in the region include the Coronado Bank, La Nacion, Elsinore, Agua Caliente, and San Jacinto.

Fault activity has the potential to result in ground shaking, which can be of varying intensity depending on the intensity of earthquake activity, proximity to that activity, and local soils and geology conditions. Although there are no active faults in Carlsbad, the city is within a seismically active region, and earthquakes have the potential to cause ground shaking of significant magnitude. Figure 7-4 shows the location and extent of the profiled earthquake faults in San Diego County based on a U.S. Geological Survey earthquake model that shows probabilistic peak ground acceleration. Although located near fault lines, Carlsbad is in a medium-low probabilistic peak ground acceleration zone.

Historical documents record that an earthquake centered either on the Rose Canyon Fault or the Coronado Bank Fault struck San Diego on May 27, 1862, damaging buildings in Old Town and causing ground rupture near the mouth of the San Diego River. This earthquake is believed to have had a magnitude of about 6.0 based on descriptions of the damage it caused. The strongest recorded earthquake in the San Diego area was a magnitude of 5.3 that struck on July 13, 1986, on the Coronado Bank Fault, 25 miles offshore of Solana Beach. Several moderate earthquakes have also been recorded in the Rose Canyon Fault Zone. On June 17, 1985, three earthquakes hit San Diego measuring 3.9, 4.0, and 3.9, respectively; and on October 28, 1986, a stronger earthquake with a magnitude of 4.7 occurred.³

Seismic Risks

Earthquake damage to existing and new structures can be caused by ground rupture, liquefaction, ground shaking, and possibly inundation from tsunamis (as discussed above). The level of damage at a location resulting from an earthquake will depend on the magnitude of the event, the epicenter distance, the response of geologic materials, and the design and construction quality of structures.

During an earthquake, shaking of granular loose soil saturated with water can lead to liquefaction, a condition in which sediments below the water table temporarily lose strength and behave as a viscous liquid rather than a solid. As a result, structures can lose foundation-bearing capacity. Historically, seismic shaking levels in the San Diego region, including Carlsbad, have not been sufficient to trigger liquefaction, and as such, the city generally has a low liquefaction risk. However, some areas of the city have a higher risk of liquefaction because of the presence of hydric soils or soils that are often saturated

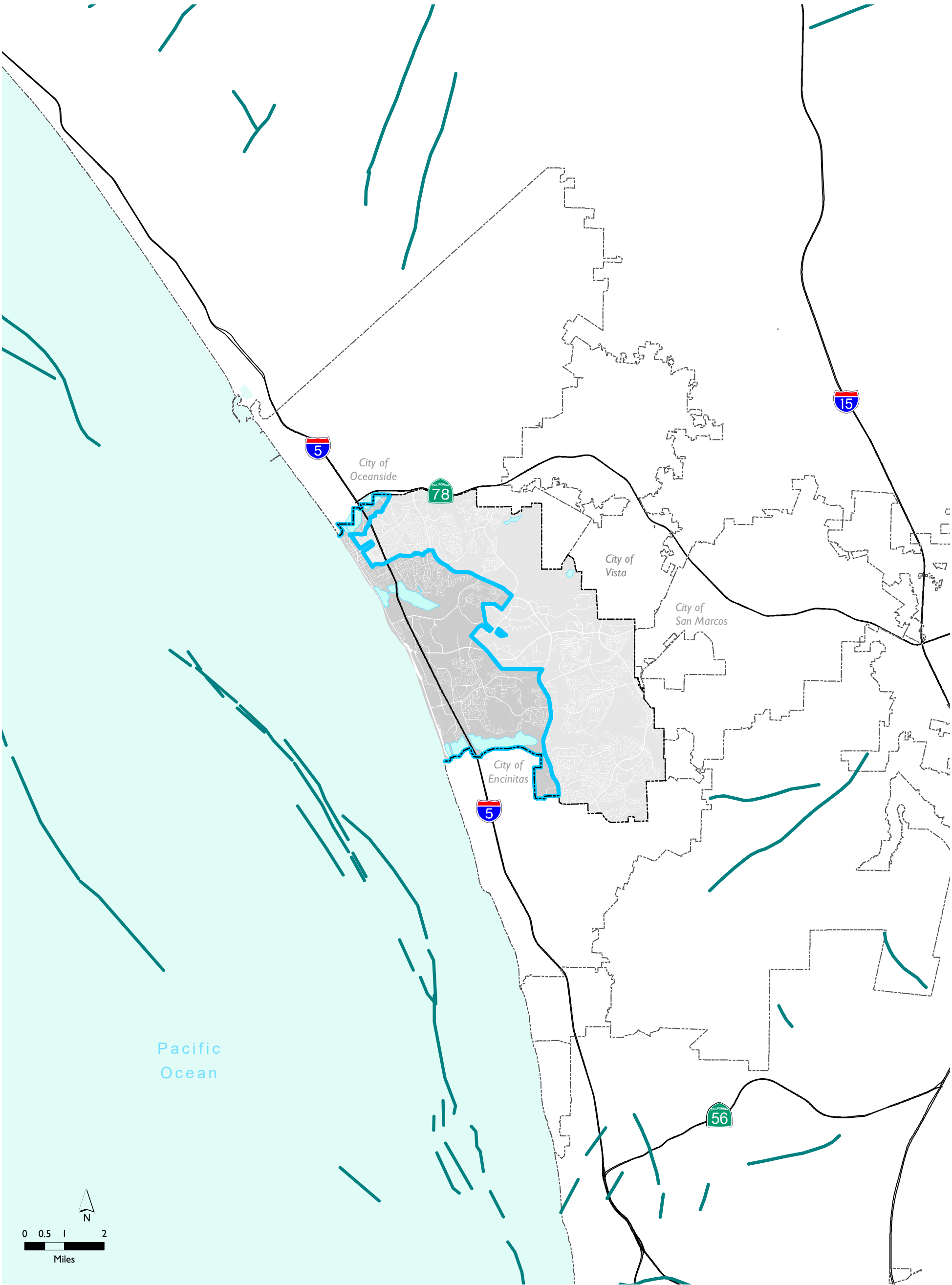
³ Deméré, Thomas A., PhD, San Diego Natural History Museum, "Faults and Earthquakes in San Diego County," accessed September 25, 2012, <http://www.sdnhm.org/archive/research/paleontology/sdfaults.html>.

or characteristic of wetlands. These areas are limited to the immediate vicinity of the Buena Vista, Agua Hedionda, and Batiquitos Lagoons, as shown in Figure 7-5.

Development in a liquefaction hazard zone requires adherence to the guidelines for evaluating and mitigating seismic hazards as required by California Public Resources Code Section 2695(a). Before a development permit can be granted for a site in a seismic hazard zone, a geotechnical investigation of the site must be conducted and appropriate mitigation measures incorporated into the project design. Mitigation of liquefaction hazards can include edge containment structures (e.g., berms, dikes, retaining walls), driving piles, removal or treatment of liquefiable soils, or modification of site geometry.

CITY OF CARLSBAD

LOCAL COASTAL PROGRAM



Source: Michael Baker International, 2016; SANGIS, 2016; City of Carlsbad, 2016

12/7/2021 JN M:\Data\I 49652\GIS\MXD\Carlsbad_MXD\LCP_2019\Chapter 7\Figure 7-4 Earthquake Faults 11x17.mxd

LEGEND

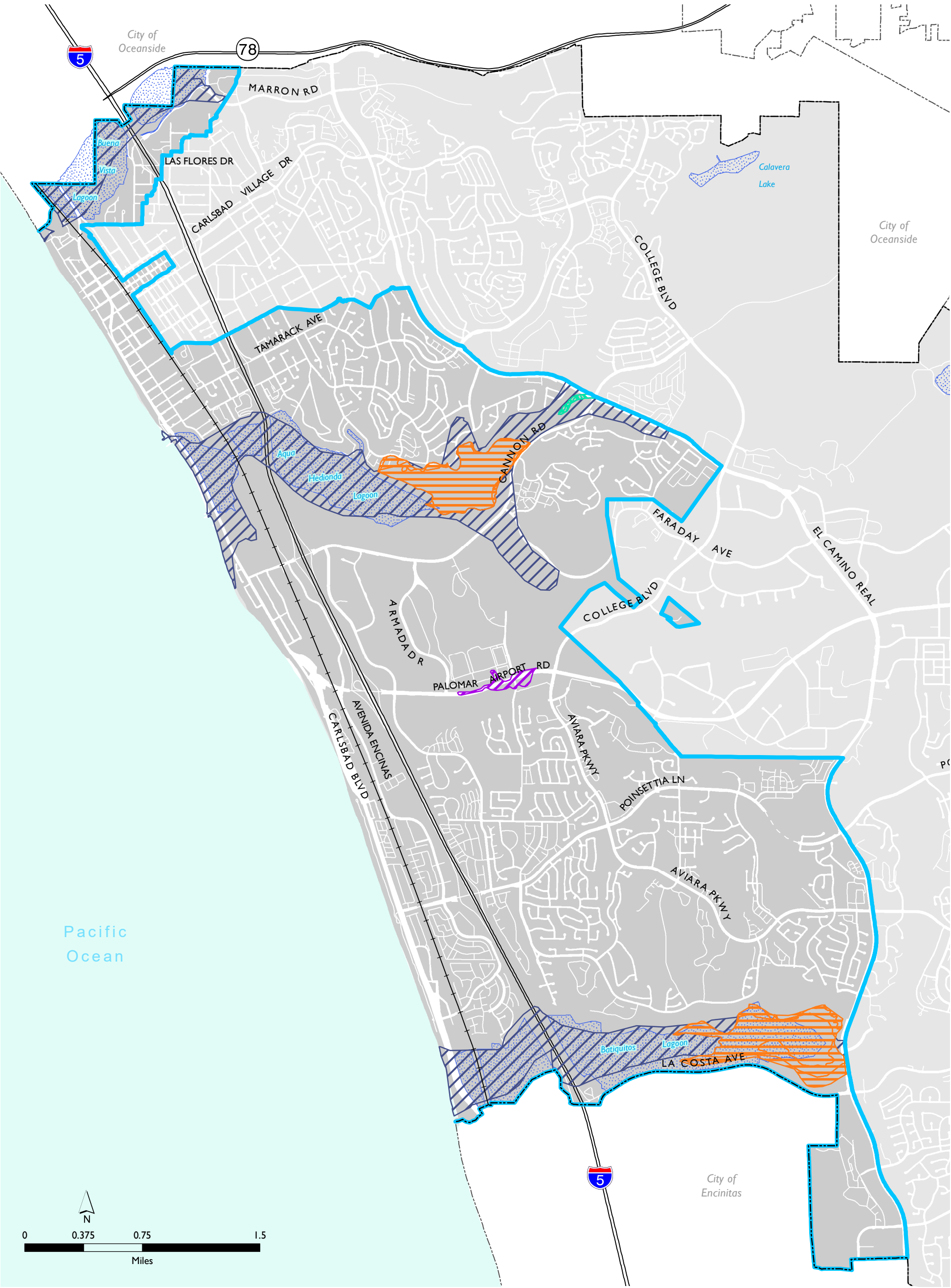
- Coastal Zone
- City Limit
- Earthquake Fault Lines

FIGURE 7-4
EARTHQUAKE FAULTS

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CITY OF CARLSBAD

LOCAL COASTAL PROGRAM



Source: Michael Baker International, 2016; SANGIS, 2016; City of Carlsbad, 2016

12/7/2021 J:\M:\data\149652\GIS\MXD\Carlsbad_MXD\LCP_2019\Chapter 7\Figure 7-5 Liquefaction Hazards 11x17.mxd

LEGEND

- Coastal Zone
- City Limit
- Lagoon
- Railroad

Potential Liquefaction

- Riverwash
- Tidal flats
- Tujunga sand, 0 to 5 percent slopes
- Other Hazard

FIGURE 7-5
LIQUEFACTION HAZARDS

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7.5 Fire Hazards

Wildland Fire Hazards

The California Department of Forestry and Fire Protection (Cal Fire) has mapped fire threat potential throughout California. Cal Fire ranks fire threat according to the availability of fuel and the likelihood of an area burning (based on topography, fire history, and climate).⁴ The rankings include little or no fire threat and moderate, high, and very high fire threat. Large amounts of open space and wildland make Carlsbad susceptible to brush fires year-round. The proximity of native vegetation and the climate of the region contribute to a moderate-to-high threat of wildfires in the city, as illustrated in Figure 7-6. Most of the Coastal Zone has only moderate fire threat; however, there is high and very high fire threat in the central and eastern portions of the city.⁵

Urban Fire Hazards

Urban fire risk in Carlsbad is greatest in older structures and neighborhoods built before modern building codes for fire safety and building systems were in place. Other factors affecting urban fire risk and relative likelihood of loss of life or property include building age, height, and use; storage of flammable material; building construction materials; availability of sprinkler systems; and proximity to a fire station and hydrants.

Vegetation Management and Environmentally Sensitive Habitat Areas

Fire safety and prevention sometimes require managing vegetation to create defensible space around structures. But such vegetation management (sometimes referred to as fuel modification or brush management) if in or adjacent to significant environmentally sensitive habitat area (ESHA) can adversely impact and significantly degrade the quality of the sensitive habitat. Chapter 6 of this Local Coastal Program identifies the location of ESHA in the Coastal Zone. The Carlsbad Habitat Management Plan provides regulations that protect ESHA consistent with the Coastal Act. When evaluating fire prevention measures that involve vegetation management, any impacts to ESHA must comply with the requirements of the Carlsbad Habitat Management Plan.

The policies of this chapter require a fire protection plan when a proposed project contains or is bounded by fire-hazardous native vegetation or when a proposed project is within an area bounded by a very high fire hazard severity zone. For properties with slopes that have or are adjacent to native

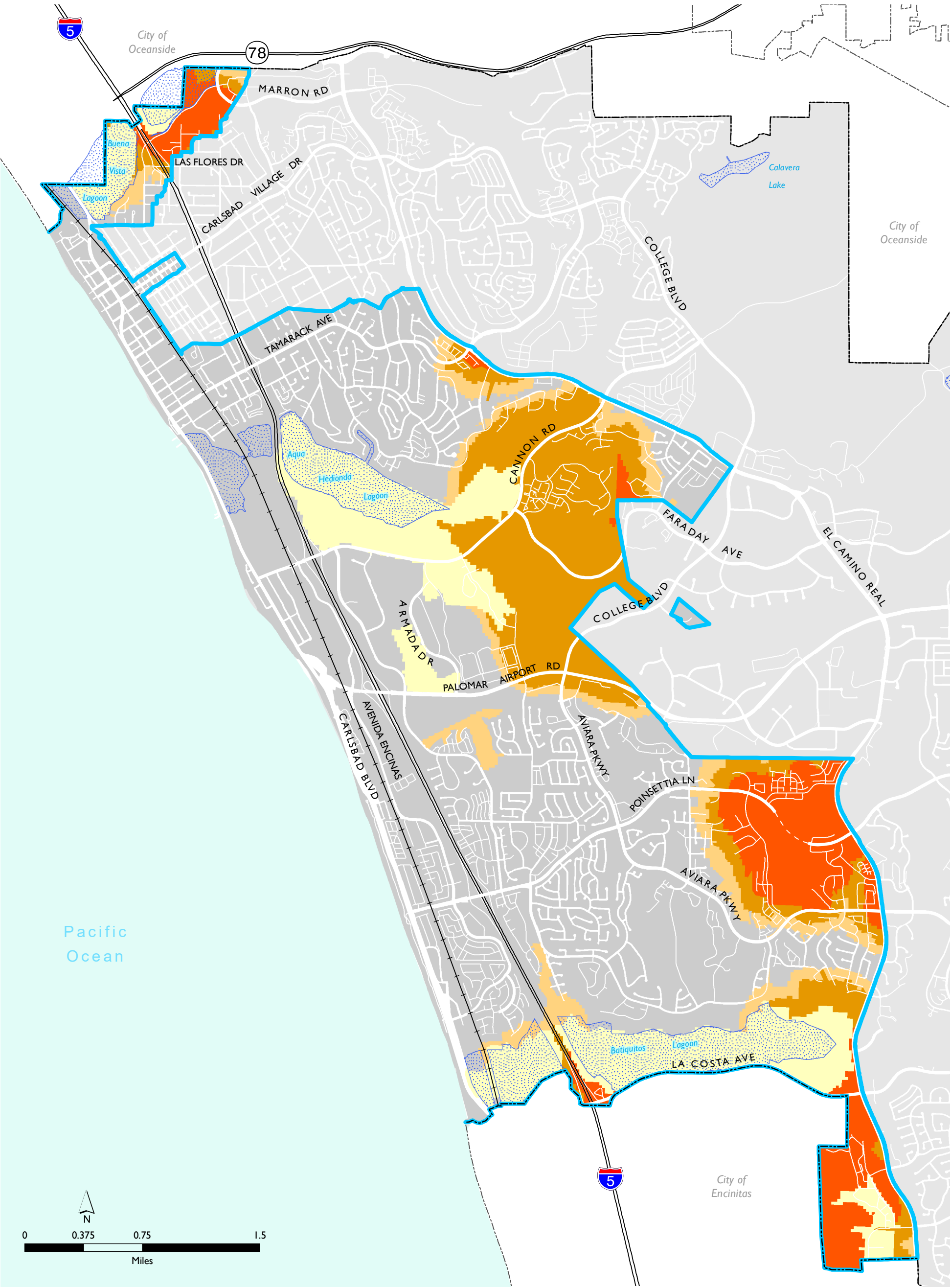
⁴ County of San Diego, 2010, San Diego County Multi-Jurisdiction Hazard Mitigation Plan, page 4-89.

⁵ County of San Diego, 2010, San Diego County Multi-Jurisdiction Hazard Mitigation Plan, pages 4-93 and 4-94.

vegetation, the fire protection plan must show that fuel modification areas are designed per the requirements shown in Figures 7-7A, 7-7B, and 7-7C.

CITY OF CARLSBAD

LOCAL COASTAL PLAN UPDATE



Source: Michael Baker International, 2016; SANGIS, 2016; City of Carlsbad, 2016

12/7/2021 J:\M:\9\data\149652\GIS\MXD\Carlsbad_MXD\LCP_2019\Chapter 7\Figure 7-6 Fire Hazards 11x17.mxd

FIGURE 7-6
FIRE HAZARDS

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Figure 7-7A, Fuel Modification for Condition A – Manufactured Slopes

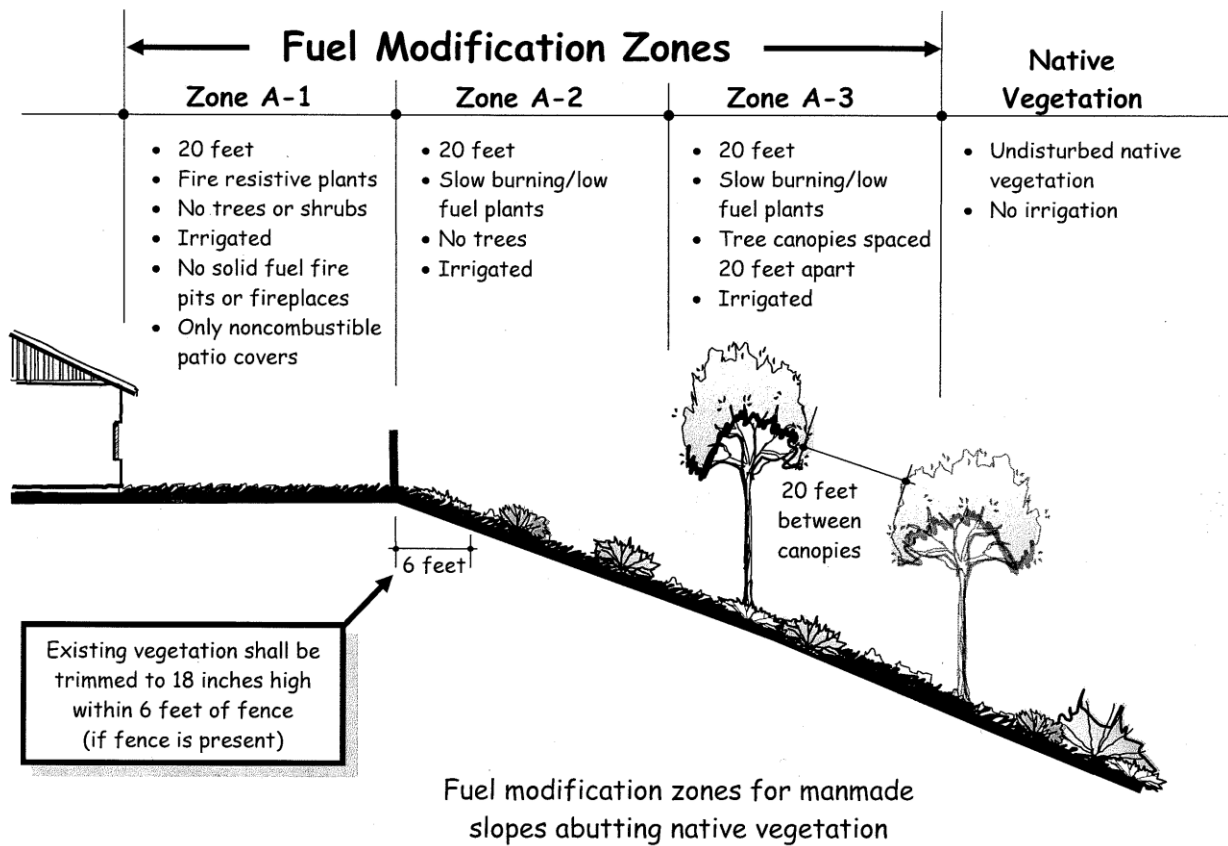
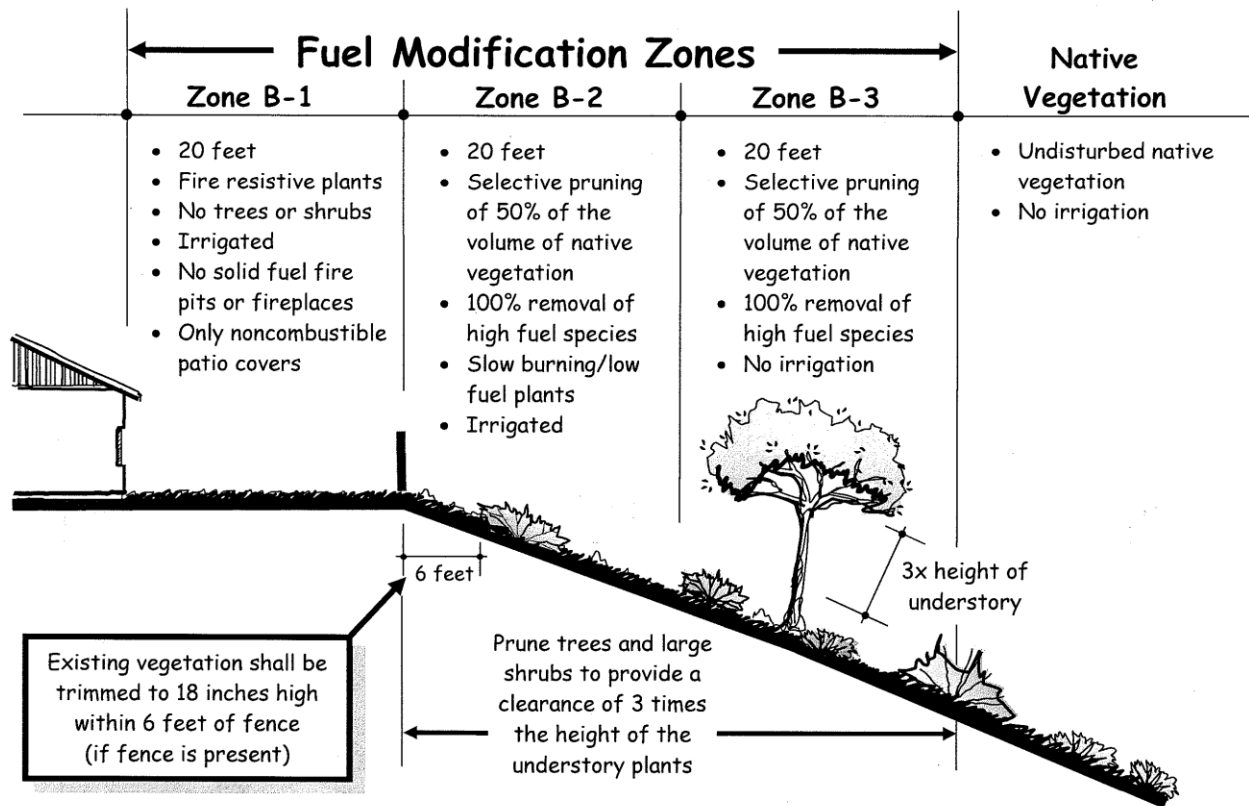
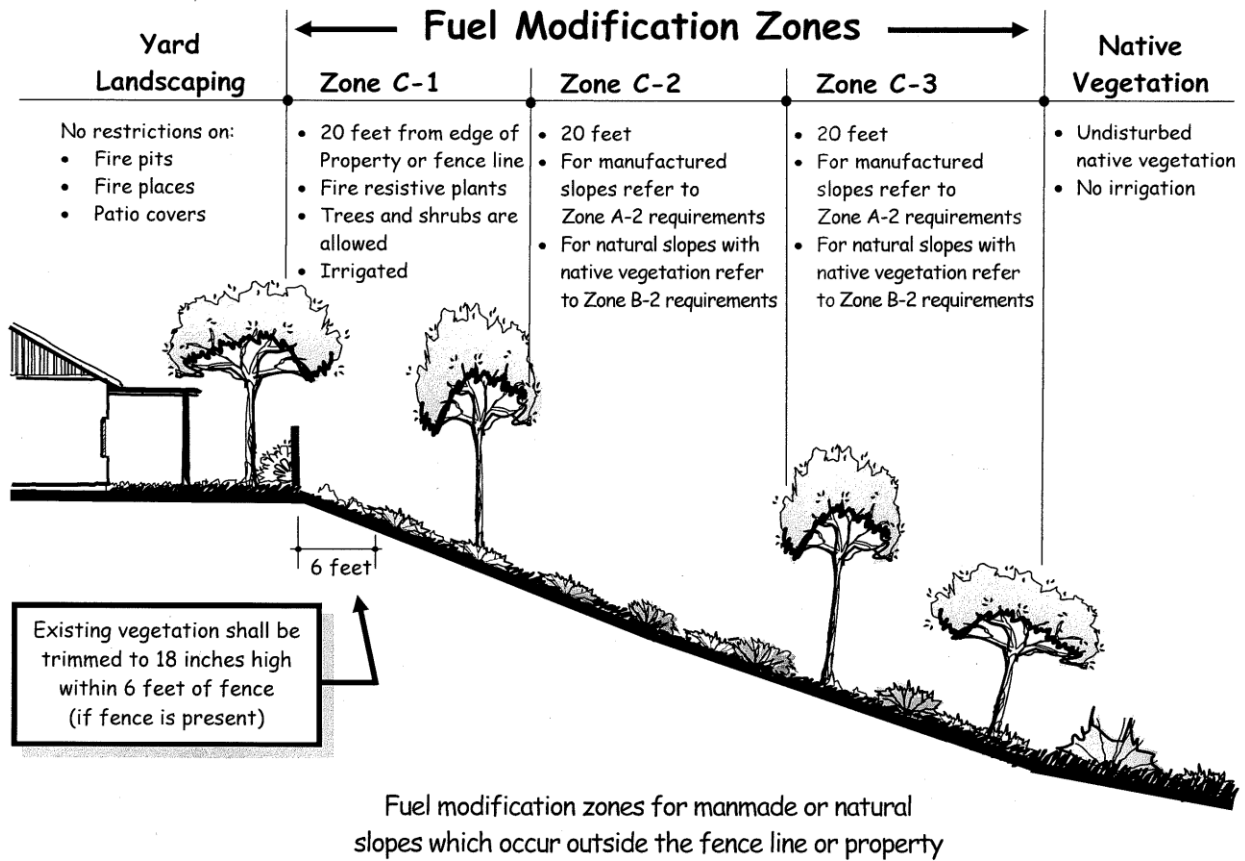


Figure 7-7B, Fuel Modification for Condition B – Native Vegetation on Natural Slopes



For areas where removal of native vegetation is restricted within the fuel modification zones

Figure 7-7C, Fuel Modification for Condition C – Manufactured or Native Slopes Outside a Fence or Property Line



7.6 Coastal Hazards Policies

The following policies provide direction to ensure that development in the Coastal Zone is consistent with Coastal Act requirements related to coastal hazards. Some of the following policies are directly related to the Coastal Act sections described in Section 7.1 of this chapter; reference to those Coastal Act sections is noted at the end of the applicable policies.

General

- LCP-7-P.1 Regulate development, including remodeling or structural rehabilitation, to minimize safety hazards on sites having a history or a newly identified threat of flooding, erosion, subsidence, or seismic dangers.
- LCP-7-P.2 Require all new development and redevelopment be sited and designed to avoid hazardous areas and minimize risks to life and property from coastal and other hazards.
- LCP-7-P.3 Enforce the California Subdivision Map Act by denying subdivision maps if a project site is not physically suitable for either the type or density of a proposed development because of geologic, seismic, or other hazards.
- LCP-7-P.4 Issue emergency coastal development permits in the event of an emergency (i.e., a sudden unexpected occurrence demanding immediate action to prevent or mitigate loss or damage to life, health, property or essential services). Emergency coastal development permits shall only be issued if:
- A. An emergency exists that requires action more quickly than permitted by the procedures for a regular coastal development permit;
 - B. The work can and will be completed within 30 days unless otherwise specified by the emergency permit;
 - C. The work is consistent with applicable Local Coastal Program policies;
 - D. The nature of the work is temporary and fully removable with minimal impact to the affected area;
 - E. The work is the minimum amount of temporary development necessary to abate the emergency in the least environmentally damaging short- and long-term manner;

Requests for emergency coastal development permits for any work to be conducted within the Coastal Commission’s permit jurisdiction (tidelands, submerged lands, and public trust lands) shall be referred to the Coastal Commission.

- LCP-7-P.5 Require that all emergency coastal development permits expire six months after the permit becomes effective, unless extended for good cause by the city, and if such extension is limited as much as possible in duration. Within 30 days of issuance of an emergency coastal development permit, the applicant shall apply for a regular coastal development permit. All emergency development is considered temporary and must be removed and the affected area restored within six months after the emergency permit becomes effective, unless the city authorizes an extension of time for good cause or the development is permitted by a regular coastal development permit.
- LCP-7-P.6 Coordinate with San Diego County and other appropriate agencies to ensure future updates to the Multi-jurisdictional Hazard Mitigation Plan align with the city’s Local Coastal Program.

Sea Level Rise Hazards

Note: As used in the following sea level rise hazard policies, the term “sea level rise hazard zone” refers to the sea level rise hazard zones identified in the “City of Carlsbad Sea Level Rise Vulnerability Assessment.”

Sea Level Rise Hazards Analysis

- LCP-7-P.7 Incorporate the “City of Carlsbad Sea Level Rise Vulnerability Assessment” as Appendix B of this Local Coastal Program Land Use Plan. The assessment, including sea level rise hazard maps, shall be updated approximately every 10 years; the update shall utilize the best available science and state guidance applicable at the time of the update.
- LCP-7-P.8 Require a site-specific sea level rise hazard report(s) for all development that requires a coastal development permit and is proposed on property that is 1) wholly or partially in a sea level rise hazard zone (as shown on the sea level rise hazard maps for year 2100 – see Appendix B), or 2) an oceanfront parcel outside the boundary of a sea level rise hazard zone. The report shall be prepared pursuant to the requirements specified in the zoning ordinance and shall:
- A. Be based on the best available sea level rise science and state guidance applicable at the time of the report.

- B. Demonstrate that the development will not create new, or increase the degree of, sea level rise hazards to the property, and to the extent feasible, will avoid or minimize impacts from sea level rise hazards (inundation, bluff erosion, flood) for the anticipated duration of the development per Policy LCP-7-P.9.
- C. For sites with existing shoreline protective devices, the analysis shall assume that the protective device does not exist, such that the site would erode in a manner similar to unarmored sites in the same vicinity with similar geologic attributes. (This subsection does not apply to existing shoreline protective devices that are part of a development that includes an existing lagoon marina/boat dock).
- D. Demonstrate that the development will not encroach on public trust lands or a wetland boundary or required buffer during the anticipated duration of the development per Policy LCP-7-P.9.

Siting New Development and Redevelopment

- LCP-7-P.9 Interpret the anticipated duration of development in the coastal zone, as shown in Table 7-2 of this chapter, as a guideline for sea level rise planning purposes, not as an entitlement to maintain development in hazardous areas. The duration of any development shall be limited by site conditions, which may result in a shorter duration of development than shown in Table 7-2.
- LCP-7-P.10 Site all new development and redevelopment that requires a coastal development permit to avoid sea level rise hazards, including groundwater changes and shoreline migration, during the anticipated duration of the proposed development.
- LCP-7-P.11 Ensure that all new development and redevelopment that requires a coastal development permit and is located in a sea level rise hazard zone is consistent with the following:
 - A. Locate and design development to ensure stability and structural integrity for the anticipated duration of the development, without creating or contributing significantly to erosion, geologic instability, or destruction of the site or surrounding area, or require construction of shoreline protective devices that, in combination with sea level rise hazards, will substantially alter natural landforms.
 - B. Provide adequate drainage and erosion control facilities that are consistent with the water quality protection policies of Chapter 6 and convey site drainage in a non-

erosive manner to minimize hazards resulting from increased runoff and erosion. Blufftop runoff shall not be channelized or directed to the beach or the ocean.

- C. Development shall not encroach on a wetland boundary or required a buffer and will remain on private land during the anticipated duration of the development. The location of new development (during its anticipated duration) shall remain consistent with all Local Coastal Program policies and the Coastal Act, as the mean high tide line/public trust boundary migrates inland.

LCP-7-P.12 Permit development and redevelopment that cannot be located and designed to avoid impacts from sea level rise hazards, only if the development meets all the following criteria:

- A. The proposed development is the least environmentally damaging feasible alternative and is sited and designed to protect coastal resources and minimize hazards to the extent feasible.
- B. Approval of the development includes a condition that requires removal or other adaptation measures when specific triggers are met, including, but not limited to, those described in Policy LCP-7-P.27, to ensure that the development does not: 1) impact coastal resources, 2) substantially impair public trust resources, 3) become structurally unstable, or 4) pose unacceptable risks to life or property. The condition shall be recorded as part of a notice of restriction per Policy LCP-7-P.17.
- C. The proposed development is consistent with the public access and recreation policies of the Coastal Act and this Local Coastal Program.

LCP-7-P.13 Allow a minimum economic use and/or development of a property, as necessary to avoid an unconstitutional taking of private property without just compensation, where full adherence with all Local Coastal Program policies, including sea level rise policies and other hazard avoidance measures, would preclude a reasonable economic use of the property. Continued use of an existing structure, including with any permissible repair and maintenance (which may be exempt from permitting requirements), may provide a reasonable economic use. If development is allowed pursuant to this policy, it must be consistent with all Local Coastal Program policies to the maximum extent feasible.

- LCP-7-P.14 Ensure that new development and redevelopment on blufftop lots along the ocean and lagoon shorelines is set back from the blufftop edge. The setback line shall be the greater of the following distances:
- A. The “string-line” distance, which is a line measured between structures on adjacent blufftop lots; the adjacent structures to measure from shall be the enclosed portion of the structure on the adjacent site that is: a) nearest to the ocean or lagoon, and b) nearest to the project site. No decks or other accessory structures shall be permitted closer to the ocean or lagoon than those on adjacent blufftop properties.
 - B. The geologic setback is the location on the blufftop inland of which stability can be reasonably assured for the anticipated duration of the development without need for shoreline protective devices. The geologic setback line shall account for the erosion, including erosion due to sea level rise, anticipated during the duration of the development.
- LCP-7-P.15 Prohibit structures, grading, and other landform alteration on bluff faces except for the following: restoration of natural resources, public access structures where no feasible alternative means of public access exists, and shoreline protective devices, if allowed by this Local Coastal Program and the Coastal Act. Such structures shall be designed and constructed to be visually compatible with the surrounding area to the maximum extent feasible and to minimize erosion of the bluff face.
- LCP-7-P.16 Prohibit improvements (including those that do not meet the threshold of redevelopment) to an existing structure that meets all of the following (note: improvements may be permitted subject to policies LCP-7-P.12 and LCP-7-P.13):
- A. The existing structure is located in a sea level rise hazard zone; and
 - B. The existing structure would not be permitted to be constructed today based on sea level rise hazard policies; and
 - C. The proposed improvements would increase the degree of sea level rise hazard to the property, such as by developing seaward or in a new location that conflicts with the policies of this chapter.
- LCP-7-P.17 Require recordation of a notice of restriction on property as a condition of approval of a coastal development permit for new development and redevelopment in a sea level rise hazard zone. As specified in the zoning ordinance, the notice of restriction shall

identify existing and potential future sea level rise hazards and the associated limitations on land use and property rights.

Shoreline Protective Devices (Armoring)

- LCP-7-P.18 Encourage the use of soft or natural shoreline protection methods, such as beach/sand nourishment, dune restoration, living shorelines, horizontal levees, and other soft or natural alternatives to hard shoreline protective devices. Prior to approval of a soft shoreline protection method, the city shall consider how the soft shoreline protection method may need to change over time as sea levels rise, and the impacts the shoreline protection may have on coastal resources.
- LCP-7-P.19 Identify and give priority to non-structural shoreline protection options, prior to permitting shoreline protective devices pursuant to Policy LCP-7-P.20. Non-structural shoreline protection options may include, but are not limited to, relocation of the threatened development, beach nourishment, non-structural drainage and native landscape improvements, sand bags, or other similar non-structural options that can address an erosion hazard and/or minimize risk of flooding and provide structural stability. Such non-structural options shall be used wherever feasible to protect coastal resources.
- LCP-7-P.20 Permit shoreline protective devices, pursuant to Coastal Act Section 30235, including revetments, breakwaters, groins, seawalls, bluff retaining walls, and other such construction that alters natural shoreline processes, only when all the following criteria are met:
- A. The protective device is required to serve coastal-dependent uses or protect public beaches in danger from erosion or protect existing principal structures. “Existing” in the context of this policy refers to structures that existed prior to Coastal Commission certification of this policy ([insert date after certification]).
 - B. The protective device is designed to eliminate or mitigate adverse impacts on local shoreline sand supply.
 - C. There is no less environmentally damaging alternative.
 - D. No waiver of rights to shoreline protective devices applies to the property.
 - E. The shoreline protective device is required, as a condition of approval, to be removed when the coastal-dependent use or structure, which the device is intended to protect, is no longer present or no longer requires armoring.

- LCP-7-P.21 Prohibit the use of shoreline protective devices to protect new development, including redevelopment. If new development, including redevelopment, is protected by an existing legally authorized shoreline protective device, the new development/redevelopment shall be sited and designed in a manner that does not require or rely on the use of a shoreline protective device to ensure geologic stability. Require, as a condition of approval of a coastal development permit, that new development, including redevelopment, record a notice of restriction waiving the right, per Coastal Act Section 30235, to construct shoreline protective devices in the future. The condition shall be recorded as part of a notice of restriction per Policy LCP-7-P.17. This policy does not apply to existing shoreline protective devices that are part of a development that includes a lagoon marina/boat dock.
- LCP-7-P.22 Require, when permitting new development or redevelopment, removal of existing shoreline protective devices that are under the control of the property owner, only if (note: this policy does not apply to existing shoreline protective devices that are part of a development that includes a lagoon marina/boat dock):
- A. It is feasible to remove the device and restore affected areas; and
 - B. The device is causing adverse impacts to coastal or public trust resources, or will cause impacts over the anticipated duration of the development/redevelopment due to sea level rise during that time; and
 - C. The device is no longer necessary to protect the remaining existing principal structure on the property or adjacent properties that are entitled to retain shoreline armoring.
- LCP-7-P.23 Require that new shoreline protective devices, when permitted pursuant to Policy LCP-7-P.20, are sited and designed to eliminate or mitigate adverse impacts on local shoreline sand supply, and to avoid impacts to other coastal resources and public access to the maximum extent feasible. If such impacts cannot be avoided, they shall be mitigated through options such as providing equivalent new public access or recreational facilities or undertaking restoration of nearby beach habitat. Mitigation of impacts to coastal resources and public coastal access shall ensure equitable public access to and benefits from coastal resources.
- LCP-7-P.24 Permit repair and maintenance of existing, legally permitted shoreline protective devices only if the activities do not result in an enlargement or extension of armoring. Repair and maintenance activities shall not result in a seaward encroachment of the

shoreline protective device or substantially impair public trust resources. Repair and maintenance projects shall include measures to address and mitigate all coastal resource impacts that the repair and maintenance activities may cause. Replacement of 50 percent or more of a shoreline protective device shall not be considered repair and maintenance, but instead constitutes a replacement structure subject to provisions applicable to new shoreline protective devices.

- LCP-7-P.25 Ensure that the emergency coastal development permit provisions (policies LCP-7-P.4 and LCP-7-P.5) do not allow for construction of permanent shoreline protective devices, such as seawalls, that are not temporary in nature and the removal of which would likely cause adverse impacts to the affected area.
- LCP-7-P.26 Coordinate with the California Coastal Commission to prepare and maintain a coastal armoring database that identifies the location and condition of all existing shoreline armoring, as well as the permit status of all existing armoring in the city.

Moving Development Away from Hazards

- LCP-7-P.27 Require removal or relocation of structures or portions of structures and restoration of the impacted property in the following circumstances (note: new and/or augmented shoreline protective devices shall not be permitted to protect the structure(s) unless otherwise permitted by this Local Coastal Program):
- A. Any government agency with relevant authority and jurisdiction has ordered that the structures are not to be occupied or are to be removed due to hazards that negatively affect public health and safety.
 - B. Essential services to the site can no longer feasibly be maintained (e.g., utilities, roads).
 - C. The structures are no longer located on private property due to the migration of the public trust boundary, and the development significantly impairs public trust resources.
 - D. The development requires new and/or augmented shoreline protective devices that conflict with the sea level rise policies in this chapter.
 - E. Removal is required pursuant to other sea level rise policies in this chapter.

It is the landowner's responsibility to remove the structure(s) and restore the site at the owner's expense in a way that best protects the public trust and coastal resources. In the event portions of the development fall to the bluffs, beach, or ocean before they are

removed/relocated, the landowner will remove all recoverable debris associated with the development and lawfully dispose of the material in an approved disposal site. Removal and restoration activities requires a coastal development permit or an emergency coastal development permit, if warranted.

Sea Level Rise Development Standards and Adaptation Plans

- LCP-7-P.28 Develop and implement sea level rise hazard – shoreline development standards, as part of the Zoning Ordinance, for areas that are vulnerable to sea level rise hazards. The development standards shall minimize risks to life and property associated with sea level rise and ensure protection of the migrating shoreline.
- LCP-7-P.29 Develop a sea level rise adaptation plan(s) that identifies how development, resources, and other vulnerable assets can adapt to the impacts of sea level rise. The adaptation plan should provide a framework to manage risks and take actions based on sea level rise monitoring and specific scenarios related to sea level rise impacts. Elements of an adaptation plan include, but are not limited to:
- A. Examination of priorities for adaptation, timelines, options, specific projects to be implemented, phasing, and action triggers.
 - B. Identification of methods and standards to address repetitive property damage.
 - C. Identification of methods and standards to maintain public lateral beach access.
 - D. Assessment of seasonal and long-term shoreline changes and the potential for flooding or damage from erosion, sea level rise, waves, storm surge, or seiches.
 - E. Evaluation of the feasibility of hazard avoidance, retreat, restoration of the sand supply, and beach nourishment in appropriate areas.
 - F. Consideration of the associated secondary impacts (e.g., loss of beach resulting from the use of seawalls) and trade-offs (i.e., who/what will benefit and who/what will be adversely impacted?) of adaptation strategies.
 - G. Recommendations for adapting existing development, public improvements, coastal access, recreational areas, and other coastal resources.
 - H. Evaluation of the feasibility of a program related to transfer of development rights
 - I. Evaluation of the feasibility to form a geologic hazard abatement district to help fund sea level rise adaptation

- LCP-7-P.30 Prioritize the development and implementation of adaptation plans for critical infrastructure, such as Carlsbad Boulevard, public trails, parks, beach access, parking, utilities, and other important public improvements and resources that are vulnerable to sea level rise hazards. The adaptation plan should consider landward relocation of critical infrastructure where feasible.
- LCP-7-P.31 Support and coordinate with the California Department of Parks and Recreation in sea level rise adaptation planning for the state campground in Carlsbad.

Other Sea Level Rise Adaptation Efforts

- LCP-7-P.32 Continue to build community awareness about sea level rise hazards and future vulnerabilities.
- LCP-7-P.33 Continue to participate in collaborative sea level rise adaptation efforts with other local, regional, state, and federal entities to promote restoration or enhancement of natural ecosystems such as coastal wetlands, lagoons, and sandy beaches. Support regional and local efforts to mitigate the impacts of sea level rise, such as implementation of beach nourishment projects and other adaptation methods.
- LCP-7-P.34 Support efforts to monitor sea level rise impacts to beaches, bluffs, natural resources, and shoreline and public trust migration. Collaborate with other local, regional, state, and federal entities to establish monitoring methods and track the effects of sea level rise.
- LCP-7-P.35 Encourage development projects that create dredge spoils to deposit such spoils on the beach if the material is suitable for sand replenishment, and the deposit of spoils is consistent with the other policies of the Local Coastal Program, including habitat protection policies.
- LCP-7-P.36 Prohibit the creation of new lots (including adjusted lots) in sea level rise hazard zones, unless it is demonstrated either that:
- A. The new lot(s) will be permanently protected for open space, public access, or other similar purposes consistent with the city's Local Coastal Program and Coastal Act, or
 - B. Resultant parcels contain a buildable area in which development would remain located on private property despite the migration of the public trust boundary, not require the future construction or augmentation of a shoreline protective device, be adequately served by public services (e.g., water, sewer, and safe, legal, all-

weather access as applicable), and otherwise be consistent with all Local Coastal Program policies and standards.

Lot line adjustments that do not meet the criteria above may be permitted if the adjustment will not exacerbate or create a current or future sea level rise hazardous condition and will not expose additional development to a sea level rise hazard.

Flood Hazards (not addressed above)

- LCP-7-P.37 Channelization, dams, or other substantial alterations of streams shall incorporate the best mitigation measures feasible and be limited to: a) necessary water supply improvements; b) flood control measures where no other method for protecting existing structures in a floodplain is feasible, and where such protection is necessary for public safety or to protect existing development; or c) measures designed with the primary purpose to improve fish and wildlife habitat [related to Coastal Act Section 30236].
- LCP-7-P.38 Implement flood control programs that reduce flood hazards, such as the city's Grading Ordinance, Drainage Master Plan, and the Floodplain Management Regulations.
- LCP-7-P.39 Comply with the Federal Emergency Management Agency (FEMA) requirements to identify and regulate flood hazard areas. Cooperate with FEMA on shoreline flooding hazards and other mapping efforts, including efforts to reflect sea level rise flooding projections.
- LCP-7-P.40 Prohibit development within a floodway, unless certification by a registered professional engineer demonstrates that encroachments will not result in any increase in flood levels during the occurrence of the base flood discharge. Uses permitted in a floodway shall be limited to agricultural, recreational, and other such low-intensity uses provided that no use shall be permitted that will create significant adverse impacts on environmental resources, and development complies with all applicable provisions of the Local Coastal Program.
- LCP-7-P.41 Prohibit the development of permanent structures in the 1-percent-annual-chance flood area unless no alternative development area exists on the development site and proper mitigation measures are implemented to minimize or eliminate risks to life and property from the flood hazard. Permitted development in the 1-percent-annual-chance flood area shall be subject to the following:

- A. Development shall be limited to structures capable of withstanding periodic flooding without requiring substantial alteration of streams (on- or off-site), including channelization and dams.
- B. Development shall not result in an obstruction to flood control and shall not adversely impact environmental resources.
- C. Development complies with all applicable provisions of the Local Coastal Program.

- LCP-7-P.42 Ensure that all floodways are designated as open space on the land use and zoning maps. One-percent-annual-chance flood areas shall be designated open space as part of the approval of a development project.
- LCP-7-P.43 Require that all proposed drainage facilities are properly sized to handle 1-percent-annual-chance flood conditions.
- LCP-7-P.44 Cooperate and coordinate with federal, state, and local jurisdictions and with other agencies that are involved in the mitigation of flood hazards from dam inundation, tsunamis, sea level rise, and major flood events.

Geologic Hazards

- LCP-7-P.45 Ensure that all development occurs in accordance with the water quality protection policies in Chapter 6 of this Local Coastal Program, which addresses erosion control and water runoff flow (i.e., volume, flow rate, timing, and duration).
- LCP-7-P.46 Require a site-specific geotechnical analysis and report of all sites proposed for development in areas where geologic conditions or soil types are susceptible to geologic hazards, such as coastal bluffs, steep slopes (25-percent inclination or greater), landslides, and liquefaction. Also require demonstration that the project site is suitable for the proposed development, the development will be safe from geologic hazards for the anticipated duration of the development (per Table 7.2), and the project conforms to all mitigation measures recommended in the geotechnical report prior to city approval of the proposed development.
- LCP-7-P.47 Require the following when development is permitted on property with a bluff that faces an ocean or lagoon shoreline:
- A. Where feasible, sub-drainage systems to remove groundwater from the bluff
 - B. Drought-resistant vegetation in landscaping
 - C. A waiver of public liability for hazards related to bluff stability

- LCP-7-P.48 Avoid impacts to natural steep slopes, significant natural landforms, and environmentally sensitive resources by clustering development away from those features.
- LCP-7-P.49 Limit development on natural steep slopes as follows:
- A. Slopes with a 25-percent or greater gradient that contain environmentally sensitive habitat shall be preserved in their natural state to reduce erosion and protect sensitive habitat, except as follows and subject to the habitat protection policies of Chapter 6 of this Local Coastal Program:
 - 1. If the application of this policy would preclude reasonable use of the property, in which case an encroachment not to exceed 10 percent of the 25 percent or greater slope area may be permitted.
 - 2. On lots with all or nearly all of the lot area in a 25-percent or greater gradient, encroachment may be permitted; however, no more than 20 percent of the entire parcel shall be disturbed from its natural state.
 - 3. No further subdivisions of land shall occur on lots with all of the lot area in a 25-percent or greater gradient, unless grading and development is limited to not more than 10 percent of the total site area.
 - 4. Use of slopes with a 25-percent or greater gradient is permitted to provide access to flatter areas if there is no less environmentally damaging alternative available.
 - B. Prohibit grading and development on natural slopes of greater than a 40 percent gradient, with or without sensitive habitat, if the slope area has all the following characteristics:
 - 1. Elevation differential of greater than 15 feet.
 - 2. Minimum area of 10,000 square feet.
 - 3. The slope is a prominent land form feature.
 - C. Slopes required to be preserved in their natural state per subsection A or that are determined to be undevelopable per subsection B of this policy shall be protected with an open space easement.
- LCP-7-P.50 Ensure development on natural steep slopes, when permitted, is designed to minimize grading and preserves the integrity of natural hillsides.

- LCP-7-P.51 Require qualified geotechnical engineering professionals to review grading plans and inspect areas of excavation during and after grading to evaluate slope stability and other geotechnical conditions that may affect site development and public safety. In areas of known or suspected landslides and/or adverse geologic conditions, the following determinations should be made: extent of landslide, depth-to-slide plane, soil types and strengths, presence of clay seams, and groundwater conditions.
- LCP-7-P.52 Prohibit the construction of buildings used for human occupancy on the surface trace of active faults.
- LCP-7-P.53 Require applicants to conduct detailed geologic and seismic investigations at sites where the construction of critical structures (high-occupancy structures and those that must remain in operation during emergencies) and structures over four stories are under consideration.
- LCP-7-P.54 Implement the California Building Standards Code to ensure structures are constructed to seismic safety standards.

Fire Hazards

- LCP-7-P.55 Require that new development be sited to avoid very high fire hazards as well as to avoid the need to extend fuel modification zones into environmentally sensitive habitat area (ESHA).
- LCP-7-P.56 Prohibit new subdivisions of land that would create a lot on which a subsequent development would result in fuel modification encroachment on adjacent ESHA.
- LCP-7-P.57 Require that fuel modification be designed and maintained consistent with the city's Habitat Management Plan, as well as Figures 7-7A, 7-7B, and 7-7C of this chapter.
- LCP-7-P.58 Require a fire suppression plan for all development adjacent to protected native vegetation or a very high fire hazard severity zone. The plan shall be subject to approval by the city's Fire Department and shall incorporate a combination of fire suppression measures, including building materials, sufficient structural setbacks from native vegetation, and selective thinning designed to ensure safety from fire hazard and protection of native habitat.

8

Glossary

This chapter defines terms used in this Local Coastal Program Land Use Plan that are technical or specialized, or that may not reflect common usage. If any definitions in this chapter conflict with definitions in other provisions of the Local Coastal Program, these definitions shall control for the purposes of this Land Use Plan. If a term is not defined in this chapter or in other provisions of the Local Coastal Program, definitions of the California Coastal Act and California Code of Regulations Title 14, Division 5.5 shall apply (if applicable based on the context and use of the term) or the city planner shall determine the most appropriate definition.



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8.1 Terms and Definitions

0.2-percent Annual Chance Flood: a flood event with a 0.2-percent chance of being equaled or exceeded in any given year. The 0.2-percent annual chance flood is also referred to as 500-year flood.

1-percent Annual Chance Flood: a flood event with a 1-percent chance of being equaled or exceeded in any given year. The 1-percent annual chance flood is also referred to as the base flood or 100-year flood.

Accommodations (visitor): overnight visitor lodging, such as hotels, motels, hostels, campgrounds, etc.

Active Recreation: recreation areas that typically provide for activities such as boating, water skiing and wake boarding, personal watercraft use, sailing, windsurfing, fishing, swimming, golfing, biking, ball/play fields, sports courts, skateboarding, etc.

Agriculture: the cultivation and tilling of the soil, dairying, the production, cultivation, growing and harvesting of any agricultural or horticultural commodities, the raising of livestock, bees, fur-bearing animals, or poultry, and the preparation of farm products for market.

Aquaculture: a form of agriculture devoted to propagation, cultivation, maintenance, and harvesting of aquatic plants and animals in marine, brackish, and fresh water. Aquaculture does not include species of ornamental marine or freshwater plants and animals unless utilized for human consumption or bait purposes and maintained in closed systems for personal, pet industry or hobby purposes. This definition specifically excludes hydroponics.

Armoring (shoreline): see “Shoreline Protective Device.”

Best Management Practices (BMPs): schedules of activities, prohibitions of practices, maintenance procedures and other management practices employed during construction activities to prevent or reduce pollution of the ocean, lagoons, lakes, streams and other sensitive water bodies and water courses.

Bikeway: includes class I bikeways (bike paths), class II bikeways (bike lanes) and class III bikeways (bike routes), as defined in this chapter.

Buildout: that level of development characterized by full occupancy of all developable sites in accordance with the Local Coastal Program Land Use Plan and General Plan; the maximum probable level of development envisioned by the Local Coastal Program and General Plan under specified assumptions about densities and intensities.

Campground: a plot of ground upon which two or more campsites are located, established or maintained for occupancy by camping units of the general public as temporary living quarters for recreation, education or vacation purposes.

Class I Bikeway (bike path): a separated bicycle corridor that is not served by streets and highways and is away from the influence of parallel streets. Class I bikeways are for non-vehicle use only with opportunities for direct access and recreational benefits, right-of-way for the exclusive use of bicycles and pedestrians, and cross flow conflicts are minimized.

Class II Bikeway (bike lane): a delineated right-of-way assigned to bicyclists to enable more predictable movements, accommodating bicyclists through corridors where insufficient room exists for side-by-side sharing of existing streets by motorists and bicyclists.

Class III Bikeway (bike route): a shared facility that serves either continuity to other bicycle facilities or designates preferred routes through high demand corridors.

Climate Change: a change in the average climate of the earth that may be measured by wind patterns, storms, precipitation, and temperature. The baseline by which these changes are measured originates in historical records identifying temperature changes that have occurred in the distant past, such as during previous ice ages.

Clustered (development): a development pattern that groups or “clusters” structures/uses rather than spreading them evenly across a development site.

Coastal Act: the California Coastal Act of 1976, as amended, and corresponding regulations codified at California Public Resources Code Section 30000 et seq. and California Code of Regulations Title 14, Division 5.5 Section 13001 et seq., respectively.

Coastal Commission: the California Coastal Commission, the state agency established by state law and responsible for carrying out the provisions of the California Coastal Act.

Coastal-Dependent Development or Use: any development or use that requires a site on, or adjacent to, the sea to be able to function at all.

Coastal Development Permit: a permit for any development within the coastal zone that is required pursuant to California Coastal Act Section 30600(a).

Coastal-Related Development: any use that is dependent on a coastal-dependent development or use.

Coastal Resource: a general term used to refer to those resources addressed in Chapter 3 of the California Coastal Act, including public access to and along the coastal shoreline (including facilities

that accommodate visitors, like hotels), recreation facilities, marine environment, and land resources (environmentally sensitive habitat, agriculture, and archaeological and paleontological resources).

Coastal Viewshed: the views that are visible from scenic public viewing areas of the ocean, beaches, coastal bluffs, lagoons and surrounding natural habitat and hillsides.

Coastal Zone: the area of California described in California Coastal Act Section 30103, and the portion of that area that is within Carlsbad's city boundary.

Compatible: capable of existing together without conflict or ill effects.

Complete Streets: see "Livable Streets."

Conservation: the management of natural resources to prevent waste, destruction, or neglect.

Consistent: free from variation or contradiction.

Cultural Resource: anything made, modified, or moved by a human in the past. Cultural resources can also be described in terms of time period (e.g., prehistoric and historic), culture (e.g., Native American or Euro-American), physical state (archaeological, built environment, landscape level, and sacred/religious), and significance, which is defined as meeting certain criteria and age thresholds specified in state and federal regulations.

Cumulatively (cumulative effect): the incremental effects of an individual development combined with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

Dedicate/Dedicated/Dedication: the commitment by an owner or developer of private land for public use, and the acceptance of land for such use by the governmental agency having jurisdiction over the public function for which it will be used. Dedications for roads, open space, parks, school sites, or other public uses often are required by the city as conditions of approval on a development.

Density: the number of people or dwelling units in a given area, typically expressed in dwelling units or people per acre.

Detention Basin: a facility classified according to the broad function it serves, such as storage, diversion or detention. Detention facilities are constructed to retard flood runoff and minimize the effect of floods.

Developer: an individual who, or business which, prepares raw land for the construction of buildings or builds or causes to be built physical building space for use primarily by others, and in which the

preparation of the land or the creation of the building space is in itself a business and is not incidental to another business or activity.

Development: 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 or intensity of use of land, including, but not limited to, subdivision pursuant to the Subdivision Map Act (commencing with Section 66410 of the California 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 of 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, and kelp harvesting. As used in this definition, "structure" includes, but is not limited to, any building, road, pipe, flume, conduit, siphon, aqueduct, telephone line, and electrical power transmission and distribution line (California Coastal Act Section 30106).

Easement: a right given by the owner of land to another party for specific limited use of that land. An easement may be acquired by a government through dedication when the purchase of an entire interest in the property may be too expensive or unnecessary; usually needed for utilities or shared parking.

Economy Scale: means accommodations identified by Smith Travel Research as part of the "economy" hotel segment in a hotel market area.

Endangered (species; California): a native species or sub-species of a bird, mammal, fish, amphibian, reptile, or plant, which is in serious danger of becoming extinct throughout all or a significant portion of its range, due to one or more factors, including loss in habitat, change in habitat, over-exploitation, predation, competition, or disease. The status is determined by the California Department of Fish and Wildlife together with the California Fish and Game Commission.

Endangered (species; federal): a species which is in danger of extinction throughout all or a significant portion of its range, other than the species of the Class Insect determined to constitute a pest whose protection under the provisions of the 1973 Endangered Species Act, as amended, would present an overwhelming and overriding risk to humans. The status is determined by the US Fish and Wildlife Service and the Department of the Interior.

Environment: the physical conditions that exist within an area, including land, air, water, minerals, flora, fauna, noise, and objects of historic or aesthetic significance.

Environmentally Sensitive Area: 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 development (California Coastal Act Section 30107.5).

Environmentally Sensitive Habitat Area (ESHA): see “environmentally sensitive area.”

Erosion: the process by which material is removed from the earth’s surface (including weathering, dissolution, abrasion, and transportation), most commonly by wind or water.

Existing Structure: a structure that existed prior to Coastal Commission certification of this Local Coastal Program Land Use Plan ([insert date after certification]). This definition is applicable only in the context of policy LCP-7-P.20; otherwise, common use of the term “existing” shall apply.

Feasible: capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors (California Coastal Act Section 30108).

Fault: a fracture in the earth’s crust forming a boundary between rock masses that have shifted. An active fault is a fault that has moved recently, and which is likely to again. An inactive fault is a fault that shows no evidence of movement in recent geologic time and little potential for movement.

Filling (fill): earth or any other substance or material, including pilings placed for the purposes of erecting structures thereon, placed in a submerged area (California Coastal Act Section 30108.2).

Greenhouse Gases: gases in the atmosphere that absorb and emit radiation within the thermal infrared range. This process is the fundamental cause of the greenhouse effect. Carbon dioxide, methane, and ozone are examples of greenhouse gases.

Groundwater: water under the earth’s surface, often confined to aquifers capable of supplying wells and springs.

Habitat: the combination of environmental conditions of a specific place occupied by a species or a population of such species.

Implementation (Implement; Implementing): actions, procedures, programs, or techniques that carry out policies.

Implementation Plan (IP): a component of the city’s Local Coastal Program consisting of zoning ordinances and other ordinances and regulations that implement the policies of the Local Coastal Program Land Use Plan.

Infrastructure: permanent utility installations, including roads, water supply lines, sewage collection pipes, and power and communications lines.

Land Use Plan (LUP): a component of the city’s Local Coastal Program that identifies the city’s policies for development and protection of coastal resources in the coastal zone, consistent with the California Coastal Act.

Lateral Pedestrian Access: an accessway that provides public pedestrian access along and parallel to the shoreline.

Limited Use Overnight Visitor Accommodations: Any hotel, motel, or other similar facility that provides overnight visitor accommodations where a purchaser receives the right in perpetuity, for life, or a term of years, to the recurrent, exclusive use or occupancy of a lot, parcel, unit, room(s), or segment of the facility, annually or on some other periodic basis, for a period of time that has been or will be allotted from the use or occupancy periods into which the facility has been divided; such facilities include, but are not limited to, timeshare, condominium hotel, fractional ownership hotel, or uses of a similar nature.

Liquefaction: a sudden large decrease in the shearing resistance of cohesion less soil, caused by a collapse of the structure by shock or strain, and associated with a sudden but temporary increase of the pore fluid pressure.

Livable Streets (Complete Streets): streets that are designed and operated to enable safe, attractive, and comfortable access and travel for all users, including motorists, pedestrians, bicyclists, children, seniors, individuals with disabilities, and users of public transportation.

Local Coastal Program: a land use plan and implementation plan for the portion of the Carlsbad located within the coastal zone.

Local government: any chartered or general law city, chartered or general law county, or any city and county (California Coastal Act Section 30109).

Lower-Cost Accommodations: accommodations available at an annual average daily rate that is equal to or less than the annual average daily rate provided by Smith Travel Research for the “economy” hotel segment within the hotel market area. The market area includes only the hotels in Carlsbad’s coastal zone. Unless, Smith Travel Research requires more economy hotels than are within Carlsbad’s coastal zone to identify the annual average daily rate; in which case, the market area may be expanded, to the extent necessary, to include economy hotels in Carlsbad outside the coastal zone and the nearest economy hotels in the coastal zones of adjacent cities.

Mean High Tide Line: the intersection of the tidal plane of mean high water with the shore. Mean high water is the average height of high waters that occur during the most recent National Tidal Datum Epoch, a 19-year period.

Mitigate/Mitigation: action taken to avoid, minimize, or eliminate impacts to the environment or other resource. Mitigation includes: avoiding the impact altogether by not taking a certain action or parts of an action; minimizing impacts by limiting the degree or magnitude of the action and its implementation; rectifying the impact by repairing, rehabilitating, or restoring the affected environment or resource; reducing or eliminating the impact over time by preservation and maintenance during the life of the action; and compensating for the impact by repairing or providing substitute environments or resources.

Mode/Modal (transportation): each form of transportation is a mode: vehicle (driving), bicycling, walking, and public transit.

Natural Resources: plant and animal habitat; nature preserves; beaches and bluffs; wetland and riparian areas; canyons and hillsides; and water features such as the ocean, lagoons and streams.

Non-Conforming Structure/Use (legal non-conforming structure/use): a structure or use that was lawfully established and maintained, but which, because of the application of current Local Coastal Program policies and standards, the structure or use does not conform to current policies and standards.

Open Space: any area of land or water that is devoted to an open space use and designated on the Local Coastal Program Land Use Map as open space or dedicated in fee title or easement for open space purposes. The open space may be in its natural state or modified.

Paleontological Resources: the mineralized remains of prehistoric plant and animal life, not including human remains or artifacts—also known as fossils.

Passive Recreation: recreation areas that provide minimal or no amenities associated with active recreation areas. The very nature of passive use implies quiet, contemplative, low impact activity, such as nature trails, walkways, picnic tables, benches, and small turf and/or landscaped areas.

Permit: means any license, certificate, approval, or other entitlement for use granted or denied by any public agency (California Coastal Act Section 30110.)

Prime Agricultural Land: those lands defined in paragraph (1), (2), (3), or (4) of subdivision (c) of Section 51201 of the Government Code (California Coastal Act Section 30113).

Public Facilities: uses or structures that provide services to the public such as a library, city hall, fire station, police station, park, trail, sidewalk, traffic signal or major street.

Public Scenic Viewing Area: areas identified and described in Chapter 5 of this Land Use Plan; these areas offer public views of a coastal viewshed from places on, along or within public streets, trails, and parks.

Public Trust Lands: all lands subject to the Common Law Public Trust for commerce, navigation, fisheries, recreation, and other public purposes. Public Trust Lands include tidelands, submerged lands, the beds of navigable lakes and rivers, and historic tidelands and submerged lands that are presently filled or reclaimed and which were subject to the Public Trust at any time (California Code of Regulations Section 13577(f)).

Public Views: views of a “coastal viewshed” as seen by the public from a “public scenic viewing area.”

Public Works: per California Coastal Act Section 30114:

- a) All production, storage, transmission, and recovery facilities for water, sewerage, telephone, and other similar utilities owned or operated by any public agency or by any utility subject to the jurisdiction of the Public Utilities Commission, except for energy facilities; or
- b) All public transportation facilities, including streets, roads, highways, public parking lots and structures, ports, harbors, airports, railroads, and mass transit facilities and stations, bridges, trolley wires, and other related facilities. For purposes of this division, neither the Ports of Hueneme, Long Beach, Los Angeles, nor San Diego Unified Port District nor any of the developments within these ports shall be considered public works; or
- c) All publicly financed recreational facilities, all projects of the State Coastal Conservancy, and any development by a special district; or
- d) All community college facilities.

Redevelopment: alterations to a structure including (1) additions to an existing structure, (2) exterior and/or interior renovations and/or (3) demolition or replacement of an existing principal structure, or portions thereof, which results in replacement (including demolition, renovation or alteration) of 50 percent or more of major structural components including exterior walls, floor, roof structure or foundation, or a 50 percent increase in gross floor area. Alterations are not additive between individual major structural components.

Scenic and Visual Resource: those resources identified in Chapter 5 of this Land Use Plan, such as the ocean, beaches, lagoons, natural open space surrounding the lagoons, and the city's Flower Fields, which are visible from public viewing areas.

Scenic Viewing Areas (public): areas identified and described in Chapter 5 of this Land Use Plan as "public scenic viewing areas;" these areas offer public views of a coastal viewshed from places on, along or within public streets, trails, and parks.

Sea: the Pacific Ocean and all harbors, bays, channels, estuaries, salt marshes, sloughs, and other areas subject to tidal action through any connection with the Pacific Ocean (e.g., lagoons), excluding nonestuarine rivers, streams, tributaries, creeks, and flood-control and drainage channels (California Coastal Act Section 30115).

Sea Level: the elevation of the ocean's surface relative to land – land that is above this elevation is higher than sea level and lower is below sea level.

Sea Level Rise: the average long-term global rise of the ocean's surface.

Sea Level Rise Hazard: hazards (inundation, erosion, flood) associated with current and future sea level rise, as identified in Local Coastal Program Land Use Plan Appendix B – City of Carlsbad Sea Level Rise Vulnerability Assessment.

Sea level rise hazard zone: the geographic areas identified as vulnerable to a sea level rise hazard (inundation, erosion, flood), as identified in Local Coastal Program Land Use Plan Appendix B – City of Carlsbad Sea Level Rise Vulnerability Assessment.

Seawall: a vertical or nearly vertical structure separating land and water areas, primarily designed to prevent erosion, flooding and other damage due to wave action, storm surge and currents. It is usually a vertical wood or concrete wall as opposed to a sloped revetment. See also "Shoreline Protective Device."

Seismic: caused by or subject to earthquakes or earth vibrations.

Shoreline Protective Device: a hard structure, such as a bluff retaining wall, breakwater, groin, revetment or seawall, that protects property, development and coastal resources from the impacts (erosion, flooding and inundation) of wave action, storm surge and currents.

Significant impact/effect (adverse): a substantial detrimental impact on the environment or resource. May include, but is not limited to, substantial changes in an area's air, water, and land resources.

Soft Shoreline Protection: a soft or natural method, such as beach/sand nourishment, dune restoration, horizontal levees, and living shoreline, that protects property, development and coastal resources from the impacts (erosion, flooding and inundation) of wave action, storm surge and currents.

Special Resource Areas: areas that offer opportunities for recreation and have citywide and potentially regional significance related to the quality of the site, such as a natural feature (geological, ecological, hydrological), historical resource (architectural, archaeological), or some combination thereof.

Submerged Lands: lands which lie below the line of mean low tide (California Code of Regulations Section 13577(d)).

Tidelands: lands which are located between the lines of mean high tide and mean low tide (California Code of Regulations Section 13577(d)).

Timeshare: see “Limited Use Overnight Visitor Accommodations.”

Tribal Cultural Resources: a resource that is considered sacred, religious, spiritual, or an object of cultural value to Native American tribes and meets California Register criteria, regardless of time period.

Vertical Pedestrian Access: an accessway that provides public pedestrian access to the shoreline from an inland public accessway, such as a public street.

View Corridor: an area of a development site that provides public views across a site of a coastal viewshed.

Watershed: the geographical area drained by a river and its connecting tributaries into a common source. A watershed may, and often does, cover a very large geographical region.

Wetland: 1) lands that 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 (California Coastal Act Section 30121); and 2) land where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes, and shall also include those types of wetlands where vegetation is lacking and soil is poorly developed or absent as a result of frequent and drastic fluctuations of surface water levels, wave action, water flow, turbidity or high concentrations of salts or other substances in the substrate. Such wetlands can be recognized by the presence of surface water or saturated substrate at some time during each year and their location within, or adjacent to, vegetated wetlands or deep-water habitats (California Code of Regulations Section 13577(b)(1)).